



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs

MNGHA

# ANNUAL REPORT

# 2023

Women's Specialized Hospital lunched in the 28th of September 2023

الاستاذ المساعد الدكتور  
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رقم ردمد : 2961-4457





صاحب السمو الملكي الأمير محمد بن سلمان بن  
عبدالعزیز، ولي العهد، رئيس مجلس الوزراء،  
ورئيس مجلس الشؤون الاقتصادية والتنمية



خادم الحرمين الشريفين الملك  
سلمان بن عبدالعزيز آل سعود





الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs

MNHGA



صاحب السمو الملكي  
الأمير عبدالله بن بندر بن عبدالعزيز آل سعود  
وزير الحرس الوطني

المستشفى التخصصي لصحة المرأة  
Specialized Hospital for Women & Health



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# MNGHA

## MISSION, VISION, OBJECTIVES & VALUES



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

To provide exceptional patient care, with the highest clinical and operational standards, delivered through a culture of excellence.

- Empathy and Compassion.
- Transparency and Accountability.
- Integrity and Respect.
- Collaboration and Excellence.

### Vision



To be a leading organization that is recognized for delivering excellent and compassionate healthcare.

### Mission



### Objectives



- Emphasize health promotion and prevention.
- Achieve excellence in military health services.
- Provide timely access to highly integrated care.
- Deliver high quality, safe, innovation care and exceptional patient experience.
- Promote substantiality, resilience and value.
- Implement large scale digital health.

### Values



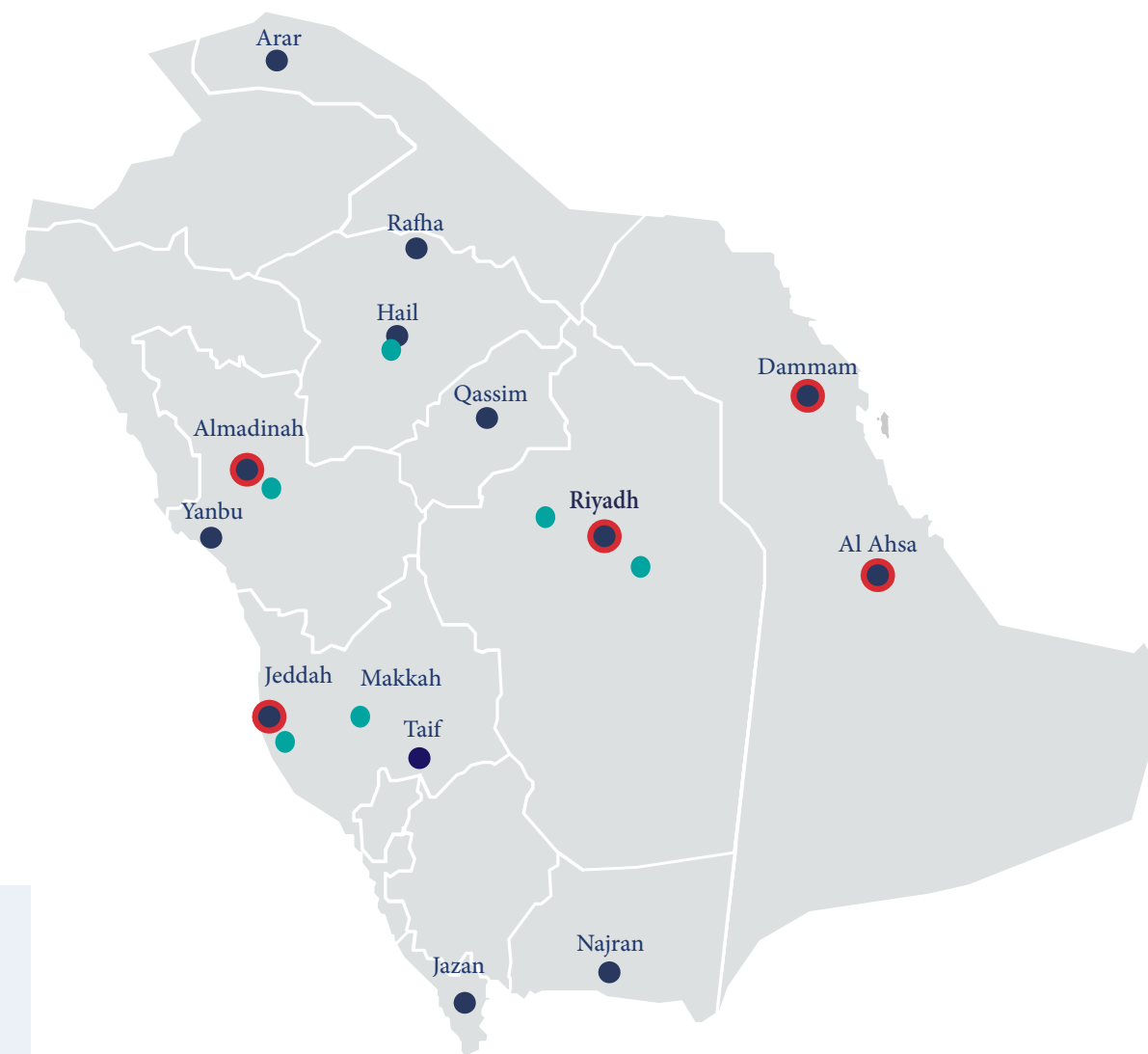
# MNGHA

## HEALTHCARE FACILITIES MAP



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs

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## Chief Executive Officer Statement

Ministry of National Guard Health Affairs  
(MNGHA)

His Excellency Dr. Bandar AlKnawy, MD, FRCPC



Dear Colleagues,

As we take on another exciting journey, allow me to extend a warm welcome to each and every one of you to the 2023 MNGHA Annual report unveiling.

The Year 2023 has been a testament to our collective resilience, creativity, and unwavering commitment to excellence. Despite all the challenges we faced, we emerged stronger, more agile, and more united than ever before.

The 2023 MNGHA Annual Report not only showcases our achievements and milestones but also reflects the dedication and hard work of every leader and member of this organization. I personally witnessed the countless hours spent exploring innovations & improvements and delivering exceptional results.

I know that these accomplishments and challenges will bring us all together to shape the future of the healthcare systems, making a positive impact not only in the Kingdom but throughout the world.

I invite you to peruse our annual report, celebrate our successes, and be proud of our shared planned vision for the future.

Thank you for your continued commitment to excellence to the better health of the future.





**Chief Medical Officer Statement**  
**Ministry of National Guard Health Affairs**  
**(MNGHA)**

Dr. Saad Al-Mohrij



Once again, we have proven our deep commitment to quality and service excellence in the healthcare industry showcasing significant achievements, great initiatives and expansion of our healthcare services across the region in this 2023 Annual Report of the Ministry of National Guard – Health Affairs. This report highlights remarkable successes and milestones in the field of health care services, operation and technological advancement.

The launching of the state-of-the-art Women's Health Hospital (WHH) and LEED (Leadership in Energy and Environmental Design) building boosts itself by meeting the international standards for sustainability design is one of the most notable projects that will greatly benefit our community. Other significant programs includes: Corneal Transplantation Program, Pancreas Transplant Program, and CAR-T Cell program. Furthermore, the adaptation of the new model of Outpatient Care that shows significant improvement in access to care across all MNGHA facilities since the year 2022.

The mega projects in the Western Region – the King Abdullah Specialized Children Hospital (KASCH) and Neuroscience and Trauma Center in addition to the King Abdullah Specialized Hospital in Al-Qassim and King Salman Specialized Hospital in Al -Taif will contribute to our commitment to deliver the best healthcare services in the kingdom.

I invite you to review the report and take pride in the exceptional work that we have accomplished together. Each achievement represents a step forward in our journey towards excellence, and I am truly grateful for your unwavering dedication and effort.

I would like to acknowledge His Royal Highness, Prince Abdullah bin Bandar bin Abdulaziz, Minister of National Guard Health Affairs for his exceptional leadership and steadfast support.

Lastly I would also like to express my heartfelt gratitude to His Excellency, Dr. Bandar Al Knawy, the Chief Executive Officer for being the beacon of inspiration and a pillar of support to the whole organization. And, to all the people behind the accomplishments- the administrative, allied health and healthcare professionals for their perseverance and full commitment working together to provide the highest quality of patient care.





## Chief Operating Officer Statement

### Ministry of National Guard Health Affairs (MNGHA)

Mr. Saad Al-Otaibi



MNGHA has seen a remarkable acceleration of innovation and development in 2023 as a testament to its steadfast commitment to achieving healthcare excellence and quality of patient care. With this in mind, I am truly honored to present the MNGHA Annual Report 2023 which highlights the tenacity, shared collaboration, and strength of the entire MNGHA workforce in one accord - building a strong foundation of healthcare excellence that will extend to the future generation. In line with the Organization's goal to expand its healthcare services, MNGHA has successfully launched the operation of multiple projects and new hospital facilities, magnifying the scope of its services through various infrastructures across the regions such as:

- Women's Health Specialist Hospital, Riyadh
- King Abdullah Specialized Children's Hospital, Jeddah
- Neuroscience and Trauma Care, Jeddah
- Toxicology Building in Jeddah

Alongside these milestones, MNGHA strengthened its foothold in digital technologies, innovation and digitalization due to the successful implementation and utilization of the Virtual Clinics either in ER or Outpatient Clinics, providing various medical services via audio-visual communications. MNGHA was at the forefront of Digital Transformation which was recognized by the Digital Government Authority, as seen in its integration with NAFATH which was accomplished to enhance the patient identification system and to ensure a unified patient record that can be accessed across the Kingdom and with NPHIES platform for health insurance exchange system.

Likewise, the Organization places the safety and security of the institution, staff and patients at the forefront of its priorities, thus Digital Transformation Program, Cybersecurity Department, Business Continuity Planning & Risk Mitigation Department were created and E-Facilities & Management & Risk Database System (FMRDS) application was launched to ensure the overall safety of the organization.

MNGHA is robustly raising its awareness and compliance to the government financial policies through collaboration with Expenditure and Projects Efficiency Authority (EXPRO) and by the implementation of Pharmacy Inventory Module to effectively manage the pharmacy inventory in the hospital, and the digitalization and automation of various logistics services to increase the spending efficiency of the organization while improving the quality of projects and services.

More importantly, the Program takes pride in its pool of brilliant manpower. There are remarkable success in filling manpower vacancies to support the expansion of services in the Kingdom. Staff Satisfaction Survey was facilitated to safeguard and promote the overall well-being of all employees. Similarly, the Program recognizes the significant role of its nurses. The Nursing Transformation Program was launched to further hone the skills and support the professional development of the nurses.

Indeed, these milestones were made possible through the collective efforts of the staff and their persistent commitment to pursue higher standards of quality patient care and healthcare services to the community. As such, I would like to convey my sincerest gratitude and appreciation to the entire workforce of MNGHA for their unified contributions and unrelenting support towards the Organization's consistent forward growth.





## Corporate Planning & Regulatory Affairs Preface

The Ministry of National Guard Health Affairs (MNGHA) has accomplished countless and exceptional achievements in the past year. Our organization took progressive steps to guarantee that our beneficiaries receive the best care that competes with international health institutes worldwide.

MNGHA has successfully launched and operated Women's Health Hospital (WHH) and King Abdullah Specialized Children's Hospital (KASCH) in Riyadh, and the Neuroscience Trauma Hospital in Jeddah. Having new specialized hospitals under the umbrella of MNGHA will enhance the provision of advanced medical and therapeutic services to patients.

In 2023, the transplant program showed massive achievements as MNGHA was able to perform more than 700 transplants in different specialties. Such as Stem Cells, Corneal (Corneal Transplantation program), Cardiac and the first lung transplant (Lung Transplantation program). Moreover, the establishment of the Pancreas Transplant Program. In addition, the Car-T Cell Therapy Program was Establishment of in 2023 at King Abdulaziz Medical City (KAMC) in Riyadh, and has so far served 24 patients.

Along with clinical advancement, technology thrived in 2023, with clear recognition at the national level. In the Qiyas Digital Transformation Report, MNGHA reached 90.37%, which is classified among the best organizations in measuring digital transformation. As we achieved the Ada'a Health Award 2023 in the Virtual Emergency Program. We, also, achieved a score of 98.17% on Essential Cybersecurity Controls compliance and 100% on Data Cybersecurity Controls compliance.

At MNGHA, we are proud to offer advanced healthcare and services every day and every year. Statistics and Achievement Reports Development would like to express their sincere gratitude to all those involved in the creation of this outstanding report.

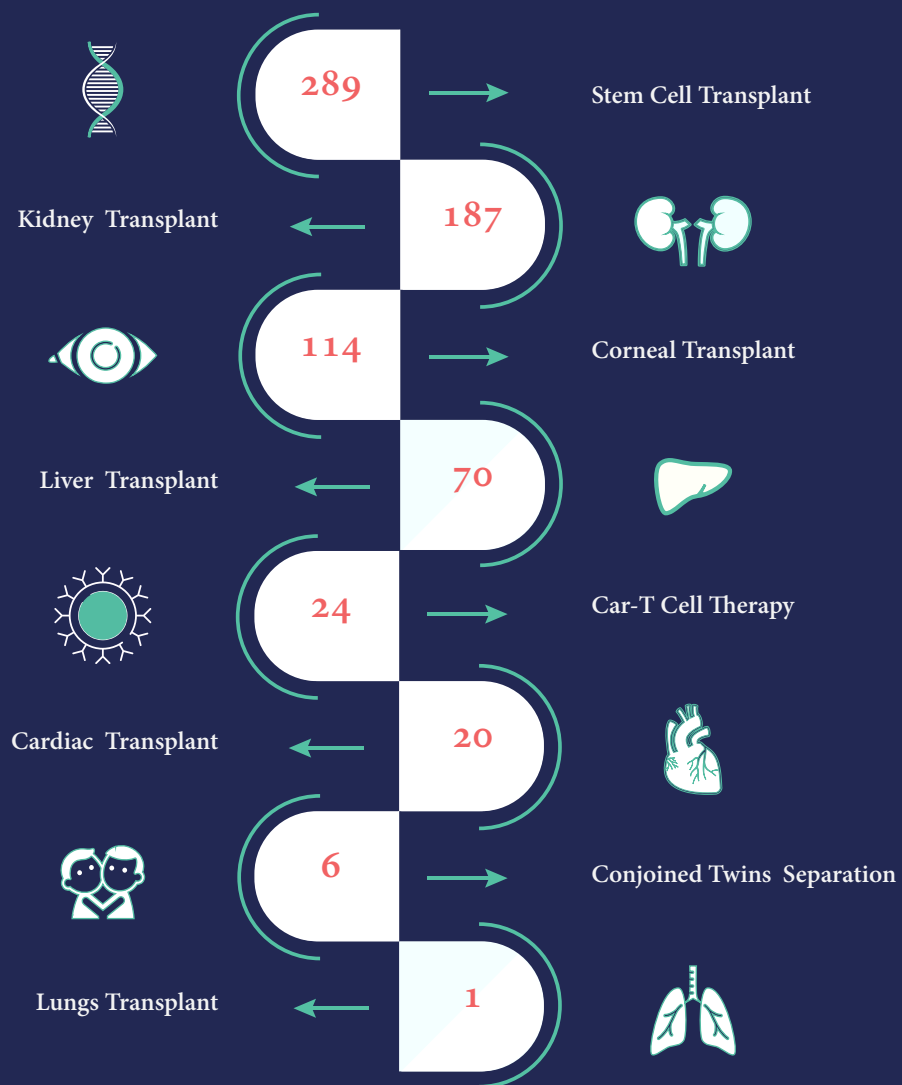
We look forward to the future successes we will accomplish in 2024.



# 2023

NGHA









## Advanced Clinical Programs 2023



Establishment of Lung Transplantation program and performance of the first successful lung transplantation at MNGHA



Establishment of corneal transplantation program in addition to eye bank.



Establishment of the Pancreas Transplant Program.



Establishment of CAR-T Cell therapy program under Adult and Pediatric SCT and Cellular Therapy divisions in MNGHA.



## Advanced Clinical Programs 2023

The establishment of the Lung Transplantation program in 2023 and the successful performance of the first lung transplantation at MNGHA.  
Received accreditation from the Saudi Center for Organ Transplantation (SCOT) on November 14, 2023.

1

Cases were performed by the Lung Transplantation program.



## Advanced Clinical Programs 2023

The establishment of the Corneal Transplantation program.  
The Saudi Center for Organ Transplantation (SCOT) granted accreditation to the program on  
November 14, 2023.

114

Cases were performed by the Corneal Transplantation program.





## Advanced Clinical Programs 2023

The establishment of The Pancreas Transplant Program as it was accredited by the Saudi Center for Organ Transplantation (SCOT) on November 14, 2023.

### 2

Cases were performed by the Pancreas Transplant Program in the first quarter of 2024



## Advanced Clinical Programs 2023

The establishment of the CAR-T Cell therapy under the Adult and Pediatric SCT and Cellular Therapy divisions, in MNGHA.

24

Cases were performed by the CAR-T Cell therapy program.



## Clinical Programs 2023



Establishment of the National Guard Spasticity program.



Establishment of the HIV Comprehensive Multispecialty program with the support of ID clinical pharmacy, Mental Health, Social Service and Public health nurse.



Establishment of Maternal Mental Health Program.



Home health care expanded services to include palliative home care, maternal , rapid response teams



Establishment of multiple rapid response teams (MEWS, PERT, PRRT, DART).



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## MNGHA Clinical Productivity/Efficiency 2023

## MNGHA Healthcare Activities 2023



Interventional  
Procedures

105,148



Emergency Room  
Visits

544,363



Outpatient Visits

2,443,220



Total Admissions

112,314



Operational Beds

4,344



Total No. of Hemodialysis  
Patients in all MNGHA

18,889



Total No. of Items  
per Prescription

3,386,198



Visits at PHCs

2,017,832



Total Radiology  
Investigations:

1,000,110



Virtual Care in  
MNGHA

223,167



Laboratory  
Investigations

44,464,915



Total No. of Hemodialysis  
Sessions in all MNGHA

274,483

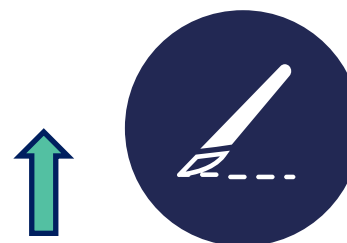


## MNGHA Healthcare Activities 2023



Average Length of Stay (MNGHA)

7.79%



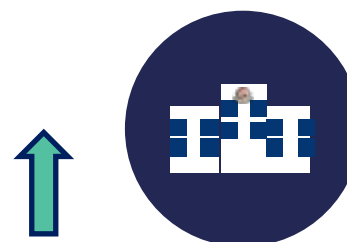
Surgical Operations (MNGHA)

17.07%



Hospital outpatients Visits (MNGHA)

41.68%

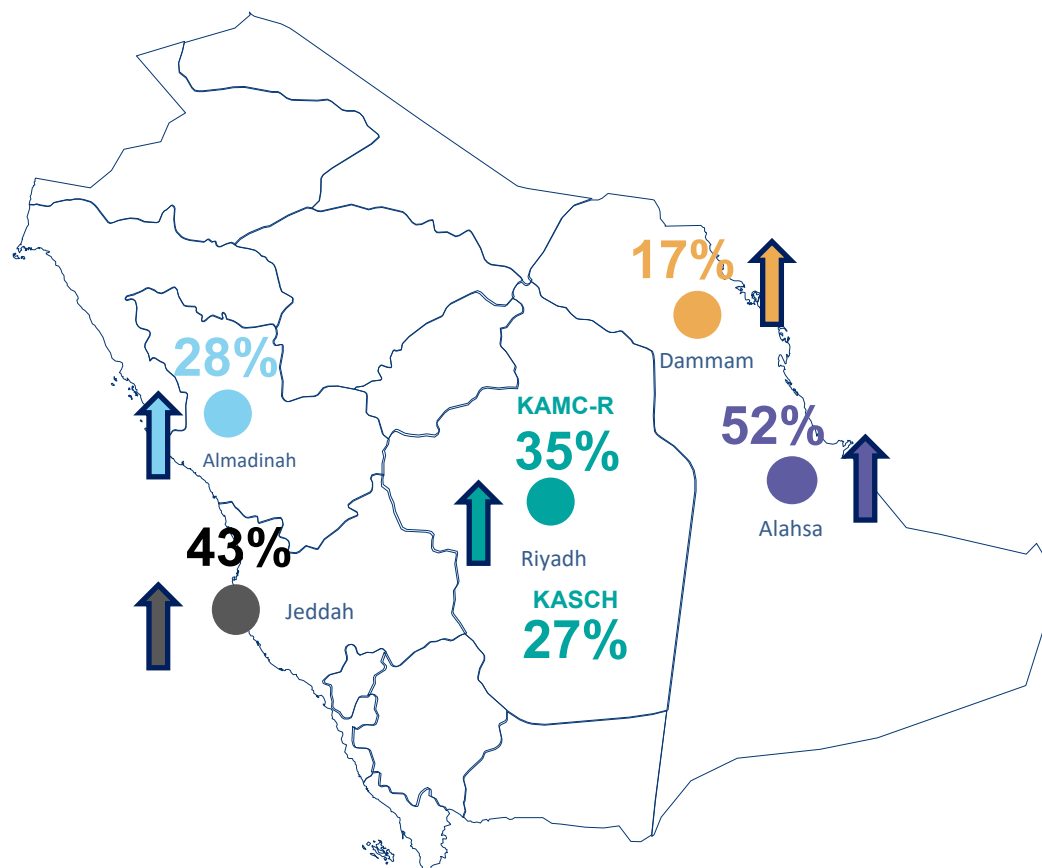


Primary Health Care Visits (MNGHA)

27.13%

## CLINICAL EFFICIENCY (Access to Care)

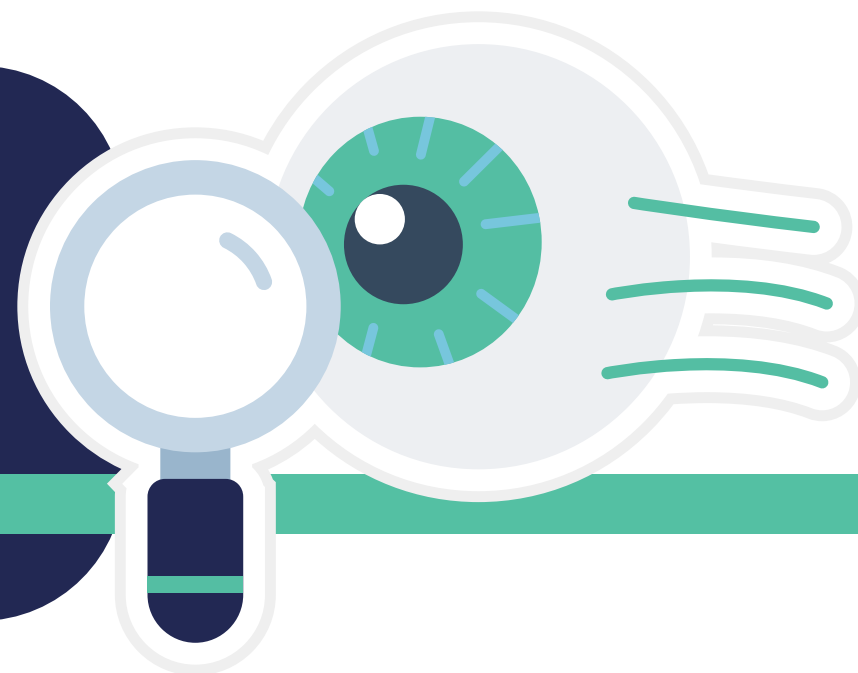
### Access to First Visit Appointment within 4 weeks



Clinical Strategy Dept.

## CLINICAL EFFICIENCY

Implementation of Tele Retinopathy OCT Screening program that served 90,000 appointments for 3 years, led to early identification of patients at risk and better service utilization of outpatient specialized clinics.





# MNGHA DIGITAL HEALTH

- King Abdulaziz Medical City-Riyadh has been ranked 189 in NewsWeeks Ranking for World's Best Smart Hospital.



- MNGHA's Digital Transformation Percentage %90.37 in Qiyas Digital Transformation Report of 2023 under Digital Government Authority.
- MNGHA was recognized for their creativity, achieving first place in the health sector, and being classified among the best organizations in measuring digital transformation in 2023.

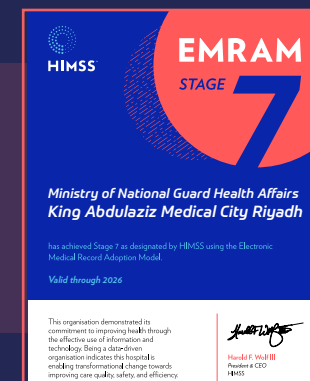


- Achieved of National Overall Reference Architecture (NORA) Certificate - level 3 - from Digital Governance authority (DGA).





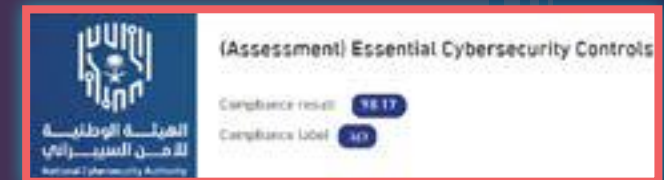
- King Abdulaziz Medical City in Riyadh KAMC-R Achieved HIMSS Electronic Medical Record Adoption Model EMRAM Stage 7 Revalidation”To be the first hospital in Europe, the Middle East and Africa to achieve a revalidation at Stage 7 on the HIMSS Electronic Medical Record Adoption Model under its new, modernized standards. And recognized as the world’s first system to earn a quadruple Stage 7 rating by HIMSS.



- MNGHA Achieved Ada’a Health Award 2023 for the Digital Enabled Care Category, in the Virtual Emergency Program at KAMC.



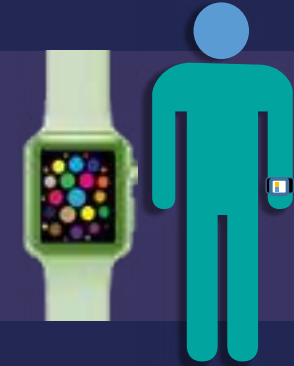
Ministry of national Guard Health Affairs achieved a score of 98.17% on Essential Cybersecurity Controls (ECC) compliance.



Ministry of national Guard Health Affairs achieved a score of 100% on Data Cybersecurity Controls (DCC) compliance.



Used IoT technology to enhance the healthcare (Wearable Devices) - Patient's personal health record available in the patient portal application has been linked to the smart watch's readings of vital signs, through which the user's health signs can be sent to their personal medical file. This service enables patients to communicate directly with their treating physician if their vital signs are above the normal range.



Implementation of Indoor Wayfinding (Dulani) Solution for Patients and Visitors that enables the patient to determine his destination and reach his appointment within the facilities of King Abdulaziz Medical City and King Abdullah Specialist Children Hospital in Riyadh.



# NEW MNGHA FACILITY



Commissioning Hospital  
(Neuroscience & Trauma –  
Jeddah).



Commissioning the Women's  
Specialized Hospital.



Commissioning the Heat  
Exhaustion Center in Arafat.





## Specialized Hospital for Women's Health in Riyadh

MNGHA Established the Specialized Hospital for Women's Health in 2023 to provide comprehensive Women's healthcare. Undergoing transformations since the launch of the country's 2030 Vision in 2016, the Kingdom of Saudi Arabia is actively progressing towards its set national vision plans.

The Specialized Hospital for Women's Health provides a full range of women's services including Obstetrics and gynecology with its sub specializations. In addition to Reproductive Endocrine & IVF, Breast Health, Women Mental Health as well as intensive and intermediate care services for neonate.

The Specialized Hospital for Women's Health is a LEED (Leadership in Energy and Environmental Design) building that meets the international standards for sustainable design. Aligning with National Vision for environmentally friendly facilities.

Total Beds=279



In-patient Beds

**170**

Critical Beds

**40**

Procedural Beds

**49**

Emergency Care Beds

**20**



## Neuroscience & Trauma Hospital – Jeddah

The Neuroscience and Trauma Care Center is a medical center specializing in Trauma care, neurology and neurosurgery. The facility is constructed at a location immediately to the north of the existing hospital. The location is nearby and can be linked to both the current hospital and King Faisal Cardiac Center. The hospital building is comprised of a ground floor and 5 typical floors.

MNGHA aims to improve the level of Trauma and neurological care in the Western Region following the latest technologies and methods, and to provide excellence in Patient care. Serving our military and the whole region in these vital Specialties

This hospital is a LEED (Leadership in Energy and Environmental Design) building that meets the international standards for sustainable design. Aligning with National Vision for environmentally friendly facilities.

Total Beds=364



In-patient Beds

176

Critical Beds

58

Procedural Beds

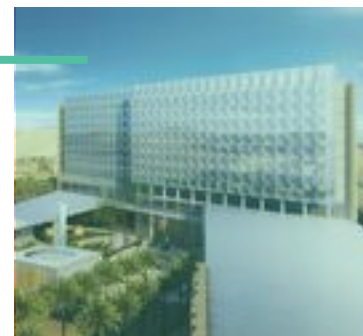
48

Emergency Care Beds

82



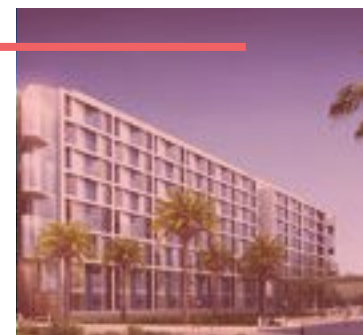
Leed Certificate for New Hospital (KASCH - Jeddah).



Leed Certificate for New Hospital (Women Health hospital – Riyadh).



Leed Certificate for New Hospital (Neuroscience & Trauma – Jeddah).



# MNGHA Accreditation 2023



American College of Radiology



CAP Accredited College of  
American Pathologists



HIMSS Analytics Stage 7



Joint Commission International  
(JCI)



World Health Organization  
Collaborating Centre for  
Infection Prevention and Control  
and Antimicrobial Resistance



American Association of Blood  
Banks



## MNGHA Accreditation 2023



The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI)



American College of Surgeons (ACS, NSQIP)



Human Research Protection Programs (AAHRPP)



Saudi Center for Organ Transplantation (SCOT)



European Association of Cardiovascular Imaging



Fact Foundation for Accreditation of Cellular Therapy



Geneva International Exhibition of Invention 2024





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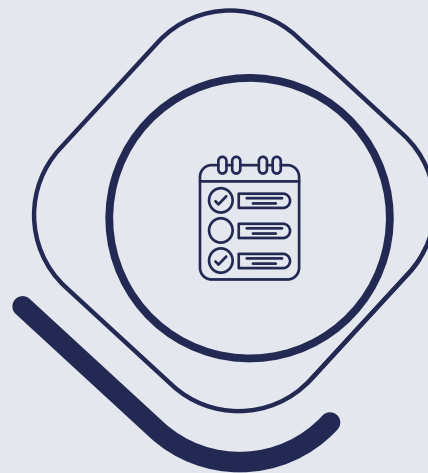
# Riyadh



## KAMC-CR & KASCH-CR

### ACCESS TO CARE

18% improvement 4-week access to care.



Campaign to Reduce Waiting List in the Operating Room (Friday and Saturday).



## KAMC-CR & KASCH-CR

### OPERATIONAL EFFICIENCY

Establishment of Patient Blood Management Program: aiming to better, safe utilization of blood product.

Establishment of Home Hospice program.



Home Health Care Project for Post-Partum: Home Health Care Visit for post-partum women after 72 hours of discharge to assess general health and provide necessary care.



Establishment of Paediatric Home Health Care Rapid Response Team (RRT).



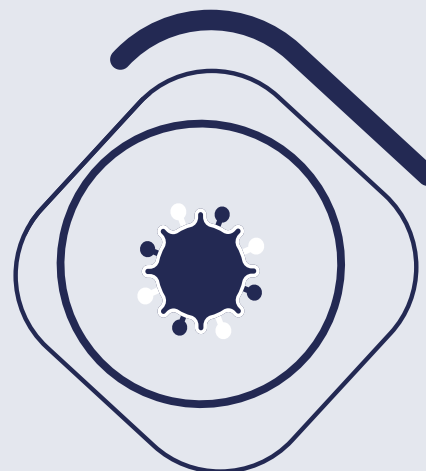
## KAMC-CR & KASCH-CR

### SERVICE EXCELLENCE

Rapid access to SEPSIS alert in  
BESTCARE Sepsis Alert Program.  
(Screen project).



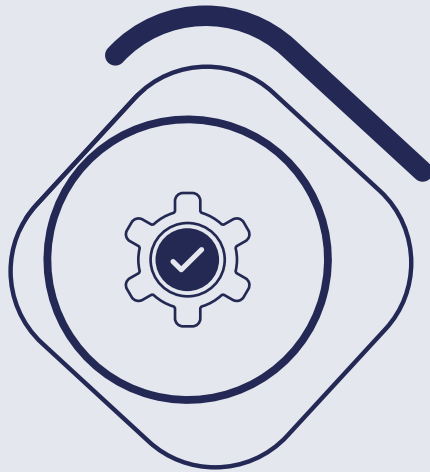
Establishment of Hyperthermic  
intrapertoneal chemo therapy  
(HIPEC) program.



## KAMC-CR & KASCH-CR

### SERVICE EXCELLENCE

Establishment of Pulmonary Embolism Rapid Response Team (PERT) program.



Neonatal Rapid Response Team (NRRT).



Establishment of DART (Difficult Airway Response Team).



## KAMC-CR & KASCH-CR

### SERVICE EXCELLENCE

Hail PHC obtained UNICEF  
Re-accreditation as a Baby friendly  
center on August 2023.



Hail PHC obtained CBAHI  
Accreditation on October 2023.



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# Medical Services





## Anesthesia Department

### Introduction:

Anesthesia Department focused on establishing excellence in patient care, medical education and clinical research to meet the strategic plan of the National Guard Health Care System and our staff rendered their service with patient, working as expert in providing the Anesthesia in Pre-operative Program, in the main Operating Theatres, Caesarean Specialty Theatres and in Day Surgery Unit.

Our primary goal is to serve the patients with the finest care through collaboration with all the members of the healthcare team and utilization of continuous quality improvement principles. To achieve these goals, Anesthesiology Department is a key partner in providing evidenced based in clinical care for the post-operative patient, effective pain management for all the patients. To Provide education for the young men and women seeking a challenging and outstanding. Anesthesiology Residency Program and we are committed to the full integration of our interests in clinical practice, medical education and research.

### King Abdulaziz Medical City- RIYADH-KAMC

#### Provide:

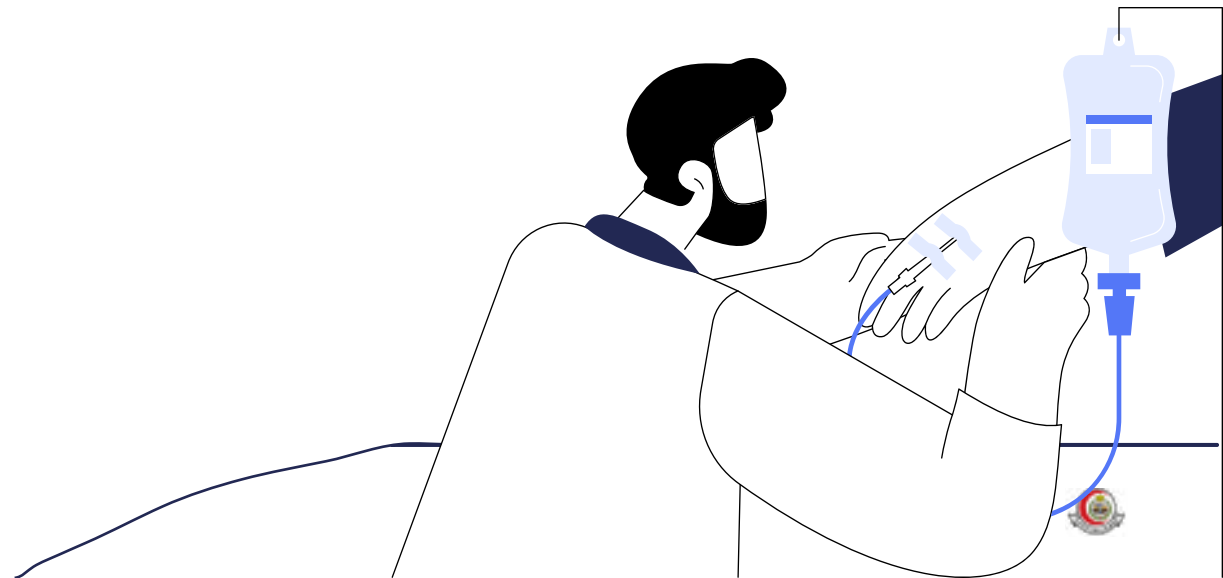
- Pain Management Clearance for their Waiting List Procedures.

#### Deliver:

- Establishment of Mid-Line Service.

#### Promote:

- Anesthesia Residency Programs, Fellowship Programs and Technology Program.
- Fellowship Program in Regional Anesthesia and in Obstetric Anesthesia.
- Fellowship in Chronic Pain Management.



# Anesthesia Department

King Abdullah Specialized Children's Hospital – Riyadh

## Emphasize:

- Participated in public broadcast about pain.
- Created a short educational film about peri-operative journey for Pediatric patients and broadcasted it on social media.

## Provide:

- Succeeded in boosting OR utilization by 80% as it increased number of daily OR from 4 to 7.
- Managed to reduce MRI GA waiting list from 63 weeks to 8 weeks.

## Deliver:

- Expanded its paediatric acute pain service to include new modules such as patient-controlled analgesia (PCA) and epidural analgesia.
- Introduced paediatric blood transfusion clinical pathway.

## International awards, recognition, contributions:

- Center of excellence in anesthesia for conjoined twin's separation.
- First independent training program for Pediatric Anesthesia Fellowship the Middle East.

## National awards, recognition, contributions:

- First and only exclusive pediatric anesthesia service in the Kingdom.
- First Pediatric Acute Pain Service in the Kingdom.

## Implement:

- Implemented automated intra-operative recording system (Diane Anesthesia).

## Promote:

- Launched aero-digestive program in the institution.
- Increased training seats in Pediatric Anesthesia Fellowship from 6 to 10.
- Conducted simulation and mock oral sessions for fellows and residents.
- Medical Education/Training:

| Ped Anes. Fellows | Anesthesia Residents | Non-anesthesia Rotators | Interns |
|-------------------|----------------------|-------------------------|---------|
| 3                 | 24                   | 30                      | 21      |

- Scholarly Activities:

| Weekly Lectures | Workshops | Publications | Abstracts |
|-----------------|-----------|--------------|-----------|
| 30              | 01        | 01           | 01        |

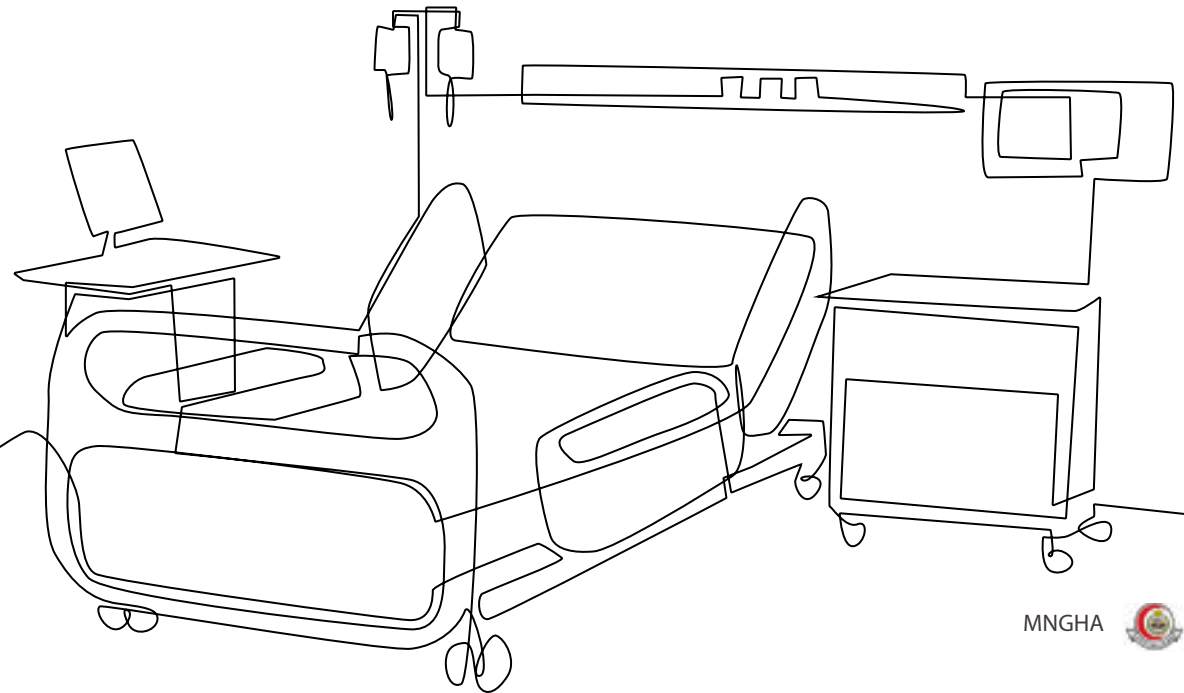


# Bed Management

## Introduction:

Bed Management Department is leading a collaborative process of assessment, planning, facilitation and care coordination to meet individual patients/families' needs through a comprehensive communication with different departments and services to promote a cost-effective discharge process while maintaining high quality standards of clinical care.

The bed management operationally is organized into seven main sections that work cooperatively and effectively to achieve the department's goals.

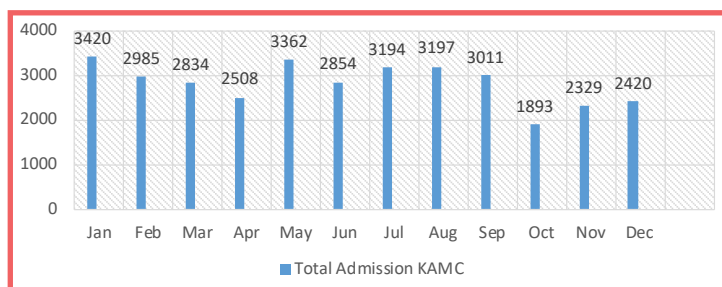


# Bed Management

King Abdulaziz Medical City- RIYADH-KAMC

## Statistical Information:

Total Admission Jan – Dec



Total number of Chronic Vent Discharges from Jan 2023 up to Dec 2023

|           |     |
|-----------|-----|
| Long Term | 19  |
| Home      | 68  |
| IHALA     | 9   |
| Morgue    | 16  |
| Total     | 112 |

Special Program

| Special Programs            |     |
|-----------------------------|-----|
| Heart Transplant            | 3   |
| Lung Transplant             | 3   |
| Bone marrow Transplant      | 46  |
| Liver and Kidney Transplant | 20  |
| Acute Lukemia Program       | 14  |
| Royal Court                 | 81  |
| SCOT                        | 5   |
| Total                       | 172 |

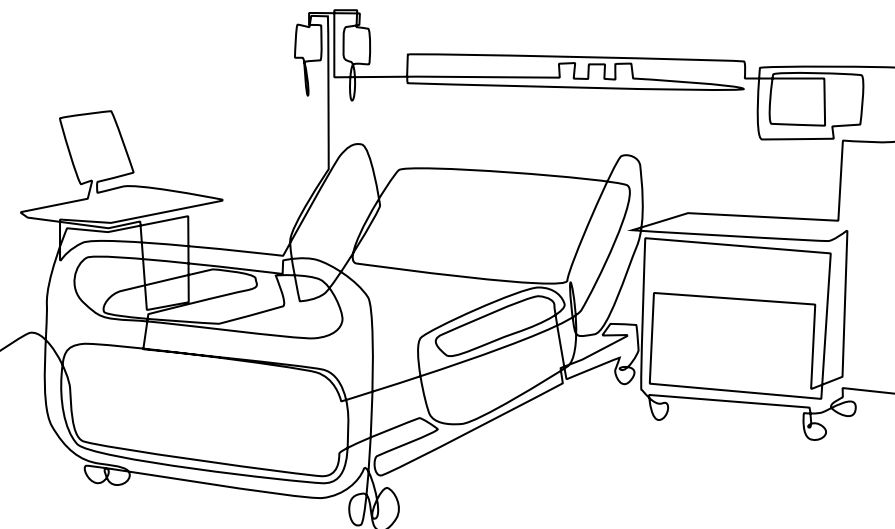
## Team 1 EMS Report:

Establishment of a partnership with Team 1 to provide a comprehensive ambulance service. This service offers efficient patient transportation from hospitals to their homes, other medical facilities, and even airports. This accomplishment highlights our commitment to enhancing healthcare services and meeting the diverse needs of our patients.



# Bed Management

King Abdullah Specialized Children's Hospital – Riyadh



## Deliver:

- Commissioned the epilepsy-monitoring unit (EMU) in Ward A6o with 2 rooms in order to provide an optimal service for epilepsy patients who need EEG.

## Promote:

- Establishment of new collaborative Training program with nursing department for patients and their family in (Simulation lab) for home care. i.e. (tracheostomy care, home Vent.) where dummies are used ease training in quite area.
- Coordinated with respiratory companies to conduct educational sessions for home used respiratory machines (CPAP, BIPAP).

## Implement:

- Command centre hotline (ext.54444).
- Post discharge support hotline (ext.51717).

## Statistical Information:

| Characteristics        | Source | Q1 - 2023 | Q2 - 2023 | Q3 - 2023 | Q4 - 2023 |
|------------------------|--------|-----------|-----------|-----------|-----------|
| Operation bed - KASCH  | BMD    | 277       | 277       | 277       | 277       |
| Average LOS - KASCH    | BMD    | 6.06      | 7.7       | 6.2       | 6.2       |
| Occupancy rate - KASCH | BMD    | 91%       | 80%       | 86%       | 90%       |
| Bed Blockers - KASCH   | BMD    | 39        | 40        | 41        | 43        |
| Admissions - KASCH     | BMD    | 3,634     | 2,881     | 3,095     | 3,567     |
| Discharge - KASCH      | BMD    | 3,651     | 2,900     | 3,027     | 3,569     |

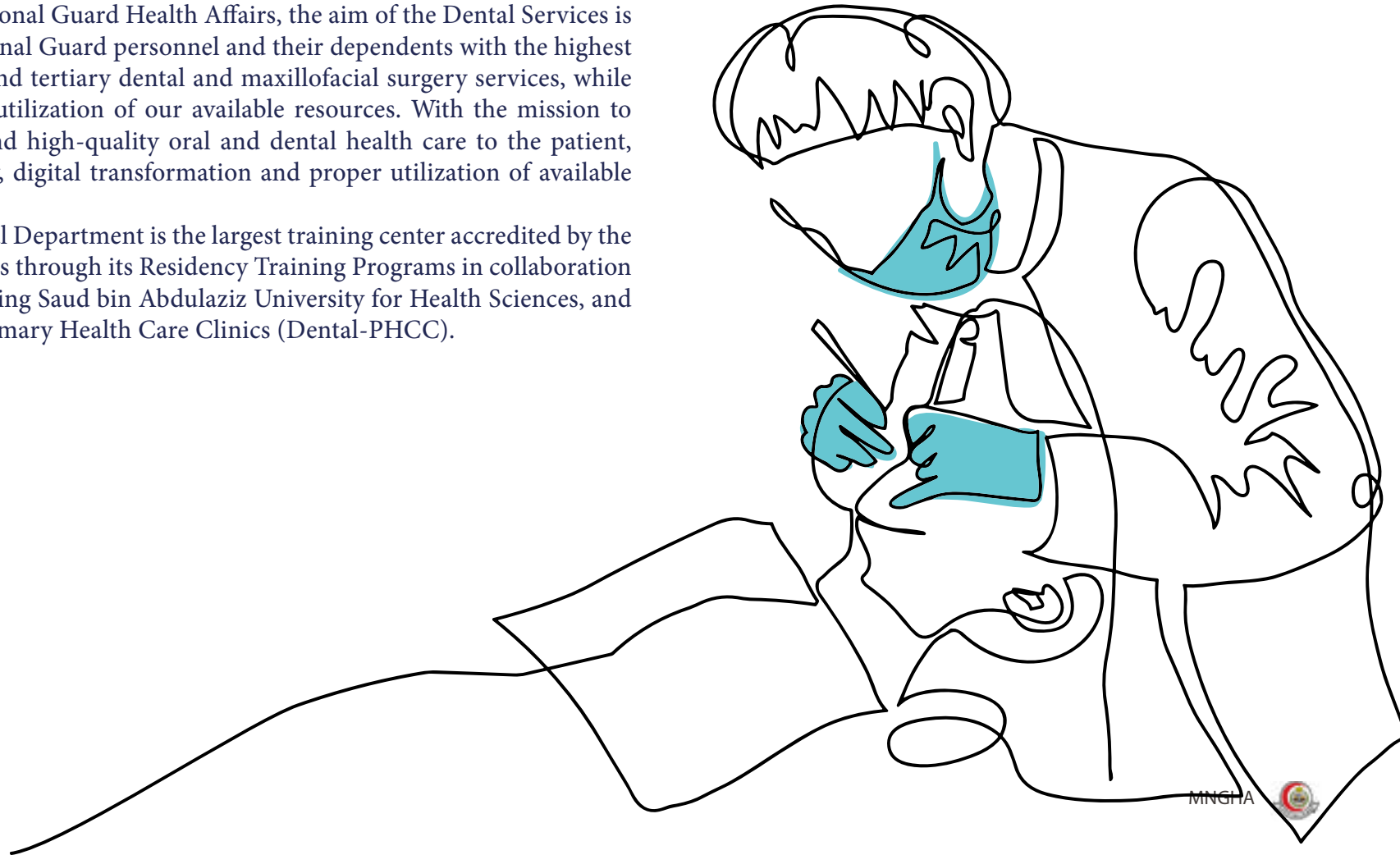


## Dental Services

### Introduction:

As a part of the Ministry of National Guard Health Affairs, the aim of the Dental Services is to provide the Ministry of National Guard personnel and their dependents with the highest quality of primary, secondary and tertiary dental and maxillofacial surgery services, while ensuring accuracy and proper utilization of our available resources. With the mission to ensure accessible, innovative and high-quality oral and dental health care to the patient, while ensuring efficiency, safety, digital transformation and proper utilization of available resources.

In the academic front, the Dental Department is the largest training center accredited by the SCFHS to educate young dentists through its Residency Training Programs in collaboration with the College of Dentistry, King Saud bin Abdulaziz University for Health Sciences, and the Dental-Family Medicine Primary Health Care Clinics (Dental-PHCC).



## Dental Services

King Abdulaziz Medical City – Riyadh

### Emphasize:

- Educational and oral health promotion activities / MNGHA schools includes lectures, oral hygiene instructions, gifts for students. Academic year 2023.
- Organized Education & prevention event July 2023.
- Bone health awareness day event/ KASCH, 18 October 2023.
- World diabetic day event / KASCH, November 2023.
- Organized World Children's Day "صُنَاعِ الْإِبْتِسَامَةِ" event (November 2023).

### Achieved:

- Three Dentists are contributing in the Medical Field Military Hospital.

### Provide:

- Reduced the delivery time of dental fixed prosthesis to 72 hr.
- Reduced the number of conventional dental impression to 20%.
- Board Eligible residents were extended their service (6 months), which contributed to the decrease in the number of the individual waiting lists.

### Promote:

- Obtained the top Chair side CAD/CAM machines (intra oral scanners 3shape).
- Obtained the top Lab side CAD/CAM machines (milling machines, MP7 ivoclar & imes-icore 350i).
- Provided digital dentistry training to all divisions' employees before and during the digital implementation.

### Implement:

- Implemented digital transformation in dental fixed restorations.
- Implemented digital planning & printing for oral surgery.
- Launched Virtual 1st Visit clinic.
- A new Advance digital implant technology: long spans (phase 2).
- Amplified the dental lab 3D printing to include complicated cases with full planning tools.

### Statistical Information:

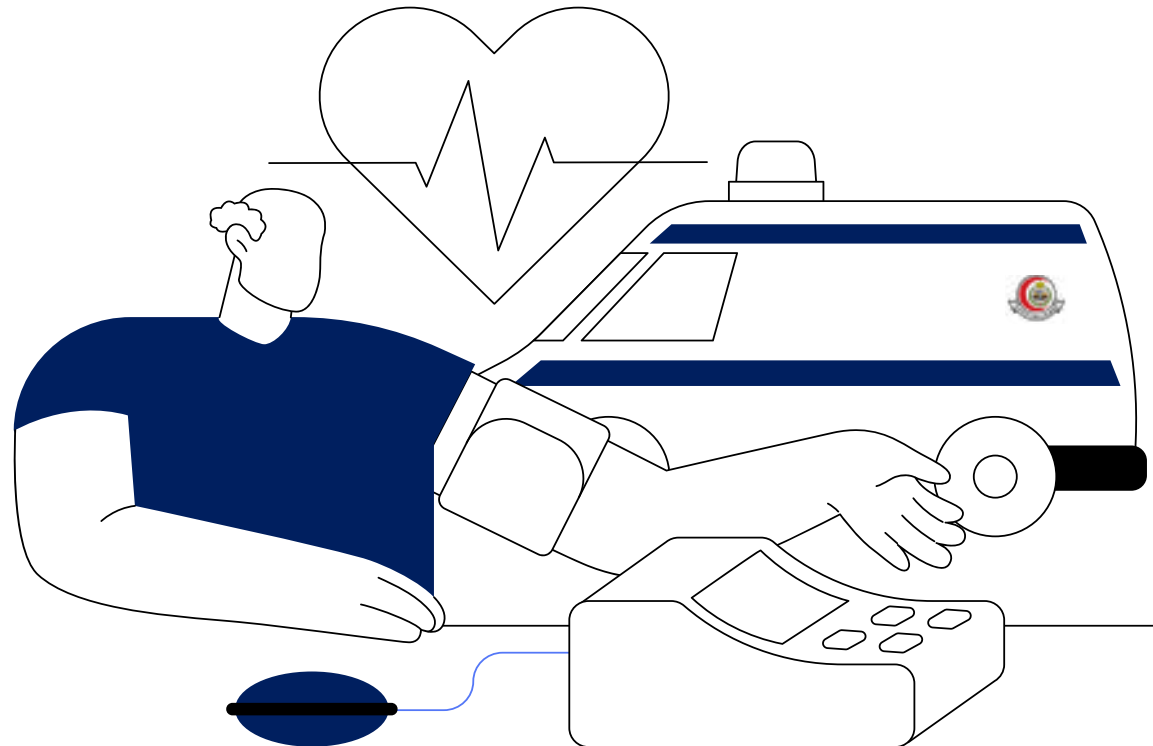
Total dental scheduled appointment =  
172,056 patients



## Emergency Medicine

### Introduction:

The Emergency Medicine Department provides care to all eligible patients who is presented to the department. Our state-of-the-art facility continued to experience developmental and expansion changes, which are best summarized by the continued ongoing restructuring efforts and the successful operations of our services. The Emergency Medicine Department provides education to Residents, Interns from several universities, medical students, EMS Students and Nurses.





# Emergency Medicine

King Abdulaziz Medical city – KAMC-Riyadh

## Emphasize:

- Fall prevention project to reduce risk of harm, aiming to ZERO injury falls by end of 2023.
- Nursing had taken an active lead in vaccination for influenza campaign.
- Nursing champions for pain, patient experience, and sepsis.
- Improved health care of psychiatric patients in ECC-ACU.
- Effective health education campaign in the community level to be initiated by PHU's.
- Contributed to public education through Learn to Rescue campaign.

## Achieve:

- Secondment of nursing staff to support military missions.
- Provided preceptor-ship to military students in their clinical rotations.
- Soldier Medics Education and Training.

## National awards, recognition, contributions :

- Contributed for Infection Control & Prevention in the Management of Patients with MERS CoV, COVID-19, Monkeypox and Influenza.
- MNGHA Telemedicine have won the Ada'a Health Award for Digitally Enabled Care 2023.
- Resident's 2nd & 3rd Place Winner in the Riyadh Research Day.
- Resident's 3rd Place Winner in the Academic Excellence Day.

## Deliver:

- Expansion of ECC RAM to enhance patient flow and facilitate efficient bed utilization with high turnover to see patients' waiting in RAM.
- Comprehensive campaign to public on using Tele-health medicine to reduce patient's visit in ED.
- new expansion area with treatment & nebulization room
- Nursing Documentation for Patient Handover to ensure that all necessary information is being documented in the BestCare System.
- To develop links with other MNGHA facilities, acquire staffing & equipment needed to operate the Emergency Command Center: ED Improved communication and coordination with other MNGHA facilities and external public agencies.
- Approved new scope of service as ACU-C since April 2023 and implemented the new Triage Flowchart from November 2023.

## Promote:

- Establishment of a comprehensive Disaster Management Program that meets international (JCIA) and national (CBAHI) standards.
- Saudi Emergency Nursing Diploma Program – Reaccreditation achieved for MNGHA Center CBAHI Reaccreditation.

## STATISTICS information - KAMC -ED VISITS

|  |         |
|--|---------|
| Total ED visit   | 150,961 |
| Total Number of Patient seen in Acute CARE A               | 17,546  |
| Total Number of Patient seen in Acute CARE B               | 16,318  |
| Total Number of Patient seen in Resuscitation Unit         | 9,791   |
| Total Number of Patient seen in RAM                        | 116,734 |
| Total Number of Patient seen in FLU clinic                 | 27,628  |
| Total Number of Patient seen in CDU                        | 8,757   |
| Total Number of Patient Received from Ambulance Checkpoint | 11,352  |

## Total Number of Patients Received from Ambulance Checkpoint:

| Code                  | June | July | August | September | October |
|-----------------------|------|------|--------|-----------|---------|
| Code Blue             | 29   | 98   | 89     | 102       | 64      |
| Code Red              | 1    | 14   | 4      | 11        | 19      |
| Code Pink             | 2    | 0    | 9      | 6         | 1       |
| CCRT                  | 66   | 199  | 193    | 165       | 196     |
| PRRT                  | 5    | 32   | 29     | 36        | 36      |
| Code White            | 4    | 9    | 10     | 16        | 15      |
| Trauma Team           | 5    | 14   | 21     | 36        | 32      |
| Stroke Team           | 16   | 53   | 60     | 67        | 50      |
| Overcapacity          | 1    | 21   | 24     | 29        | 33      |
| Overhead announcement | 31   | 157  | 258    | 397       | 457     |
| Code Yellow           | 0    | 0    | 0      | 0         | 0       |
| Code Orange           | 0    | 0    | 0      | 2         | 0       |
| Code Black            | 0    | 0    | 0      | 0         | 0       |
| Code Silver           | 3    | 0    | 0      | 0         | 0       |
| Total Call-911-88     | 175  | 491  | 509    | 644       | 859     |
| V-ED                  | 4    | 387  | 560    | 497       | 427     |
| Coronal Call-1115     | 12   | 120  | 201    | 449       | 207     |
| EMS Transfer Call     | 4    | 5    | 7      | 26        | 16      |
| Total                 | 358  | 1600 | 1974   | 2483      | 2400    |



# Emergency Medicine

King Abdullah Specialized Children Hospital – Riyadh



## Deliver:

- Priority pass for exceptional cases (autism, cerebral palsy, bed/chair bounded, and psychiatry Patients, old parents) to facilitate their pass to the clinical area; in the next phase, we will also focus on how to expedite their care (lab, radiology, and discharges).
- Point of care testing at the time and place of patient care.
- Clinical design unit to extend emergency care.

## Promote:

- Safe ER documentation to standardize safe clinical notes.
- The PEM department in 2023 developed a strategic and operational plan for the coming five years.

## Implement:

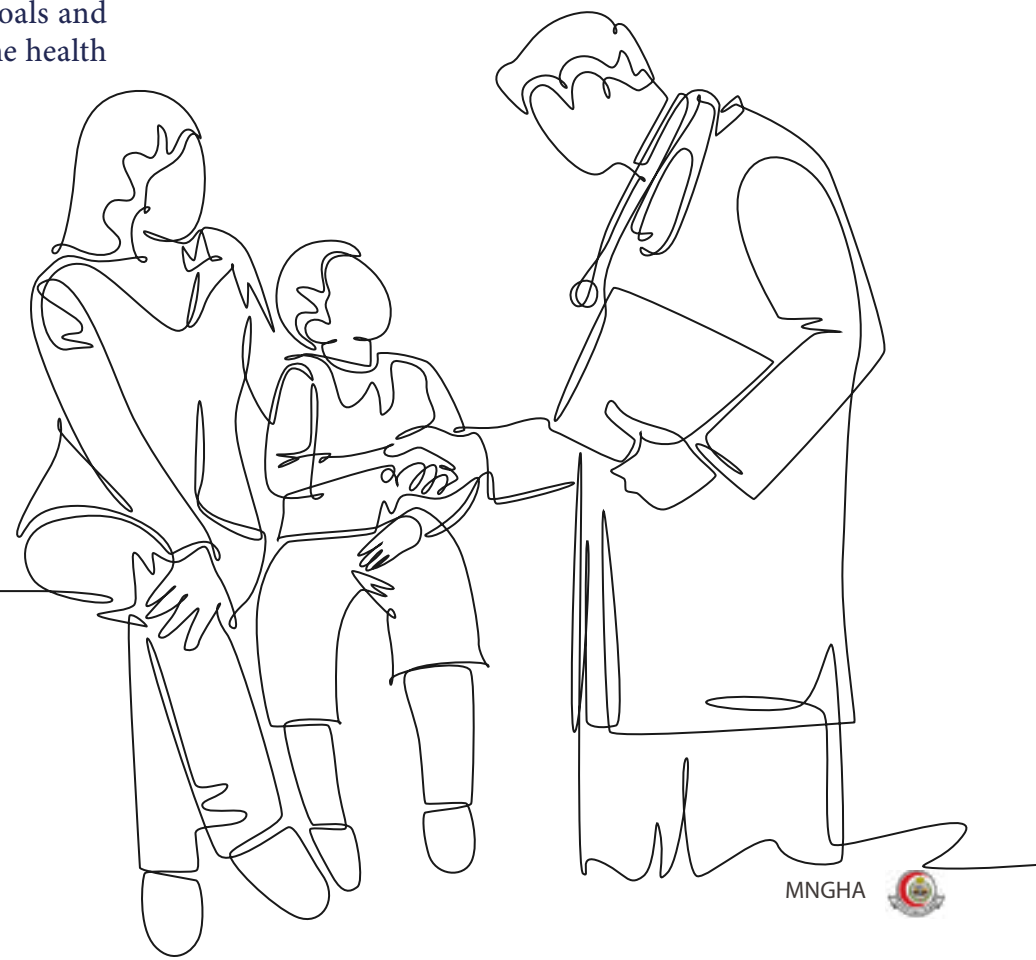
- Right click right now.
- Sepsis alert.
- Door to vitals.
- QR scan code to educate patient.



## Family Medicine & Primary Healthcare Centers

### Introduction:

The Family Medicine and Primary Healthcare Department provides preventive, therapeutic and rehabilitative care to Ministry of National Guard population, through primary care centers placed in Central, Western, and Eastern Regions. Further, to achieve the goals and strategies of health affairs, which confirm that primary health care is the basis of the health system.



# Family Medicine & Primary Healthcare Centers

King Abdulaziz Medical City – Riyadh

## Emphasize:

- Effective immunization for adults & children in order to promoting the preventive role of Hail PHCC through high commitment to Vaccinate Adult & children with all required vaccine.
- Celebrated the followings:
  1. Asthma world awareness Day - May 2023, HTN world awareness Day - May 2023, Food safety awareness Day - May 2023, Hepatitis B awareness Day - July 2023 and world diabetes day – Nov. 2023.
  2. World immunization Week – Apr-2023, breastfeeding awareness week – Aug. 2023, Radiation safety week – Nov. 2023, Antibiotics resistance week – Nov – 2023, Infection prevention & control awareness Week – Jan-2023.

## Provide:

- Increased the no. of portal general clinics to accommodate all walk-in patient.
- Implemented turnaround time KPIS as:
- % Compliance to 15 mins. Waiting time for blood withdrawal at phlebotomy.
  1. % Compliance to 15 mins. Waiting time for dispensing of medications at pharmacy.
  2. % Compliance to 15 mins. Waiting time for plain X-ray procedures at radiology.
  3. % Compliance to 24 hr. for availability of radiological reports.
  4. % Availability of CBC Lab. results within TAT.
  5. % Compliance to panic values Acknowledgment & reporting within TAT.

## Deliver:

- Optimized the quality & safety of the health care services introduced to our patient through:
- Decreased the burden of chronic diseases as DM, HTN & obesity through Activation of chronic disease clinic that covered by a well-trained health care team on the latest national & international management standards.
- Eliminated waste through one point care model at chronic disease clinic, which had been equipped with all diagnostic equipment as point of care Glucometer, Hg A1C testing Machine & urilyzer machine.
- Establishment of a one-point care model at chronic disease clinic.

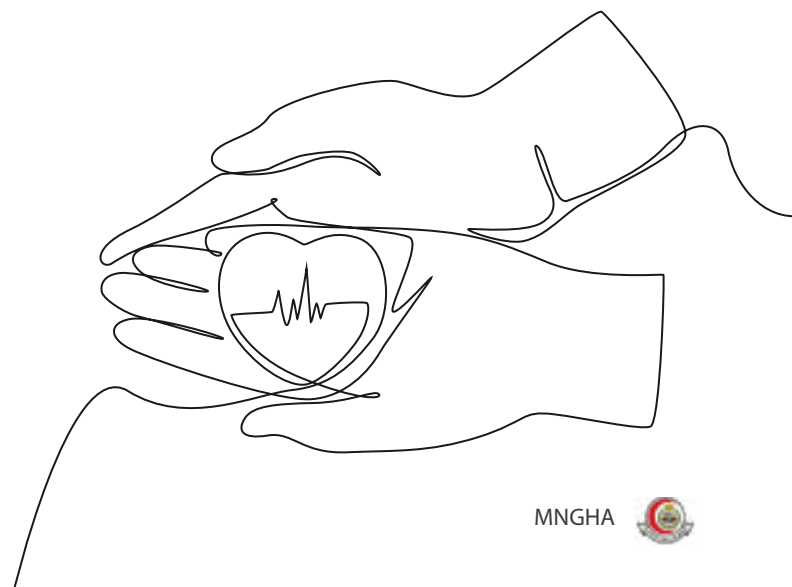
## Promote:

- Urilyzer 100 pro Machine.
- Point of care Hg A1C Testing machine.
- Point of care Glucometers.



## Implement:

- Improved effectiveness of patient referral through implementation of E-consultation project & Activated of Hail PHCC Referral committee to assure appropriateness of all referral.
- Implemented of Massarat & Mawad Applications for online referral of patients to Hail Cluster hospitals at Hail Region.
- Implemented electronic consent.

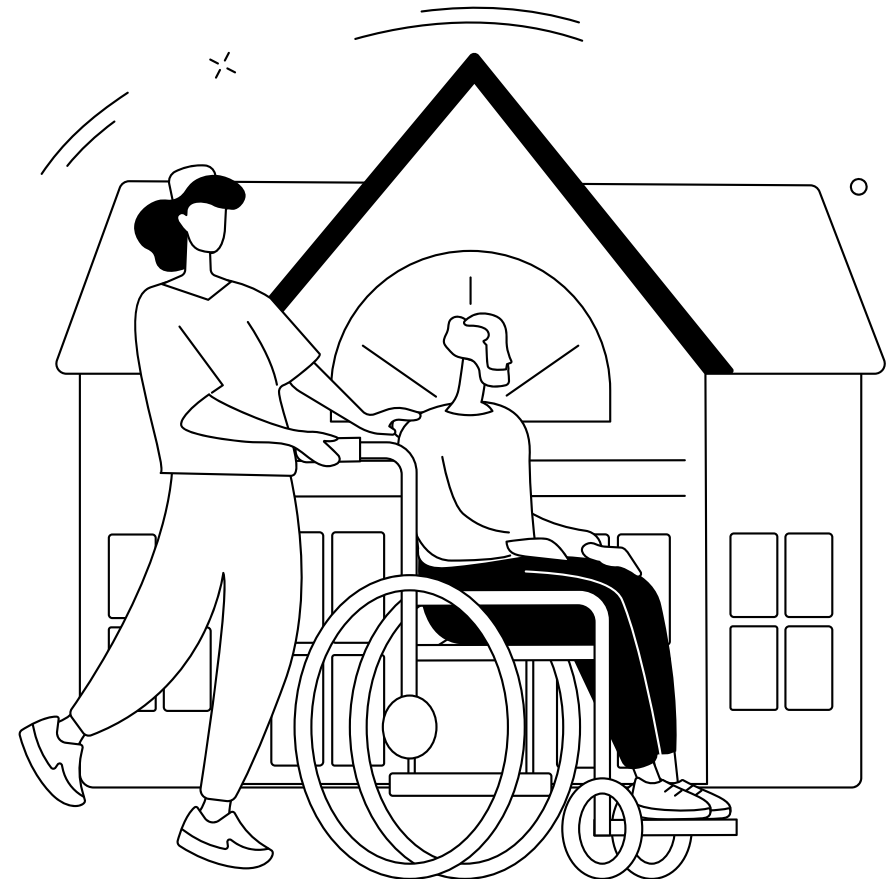


## Home Health Care

### Introduction:

The Home Health Care Program is a program that is based on a hospital and aims to facilitate patient discharges and maintain patient care. It was developed to include as goals, not only to decrease hospital length of stay but also to reduce patient's visits to E.R., re-admission to hospital, visits to outpatient clinics and laboratories and also as an alternative to hospitalization, i.e., palliative care and IV therapy.

Patients and their families receive a multi-national and multidisciplinary service from the service. Services include nursing, respiratory therapy, occupational therapy, clinical nutrition, and social work. A full-time palliative care doctor is available for consultations and home visits. A clinical pharmacist for patients on Warfarin and for consultation: When patient develop new symptoms, the patient is referred to HHC physicians & nurses to eliminate emergency visits to the hospital. Patient Representatives/Interpreters (Saudi nationals) accompany Nursing and Respiratory staff to help with translation, social and cultural matters.



# Home Health Care

King Abdulaziz Medical City – Riyadh

## Provide:

- Referral team consists of (Referral nurse, social worker, HHC Dr, HHC OT, and the case management) make sure patients receive the right care at the right time in their home by assessing patient needs to HHC services within 4h from the referral, in a way facilitating early hospital discharge.

## Deliver:

- Geriatric collaboration (Direct Admission): In reference to PEG, tube newly insertion, IV antibiotic for the first dose with multi comorbidities diagnosis.
- Mental health collaboration (Direct consultation and follow up).
- Tracheostomy care and management.
- Negative pressure wound dressing.
- Palliative Pain management (narcotic administration).
- Midline access for IV antibiotic purposes.
- Implemented Chemotherapy Administration (Phase 1: Subcutaneous) in order to provide a seamless continuum of care and support to patients throughout their treatment journey.
- Home Health Care Expansion (Phase 2: Palliative): this will be Improving access and Quality health Care for the patients on all different Riyadh regions that enhance patient experiences.
- Ambulatory care Phase 1: ER early discharge for IV antibiotic treatment for Utilizing the most cost-effective approaches, treatment modalities, and diagnostic modalities to patients.

## Promote:

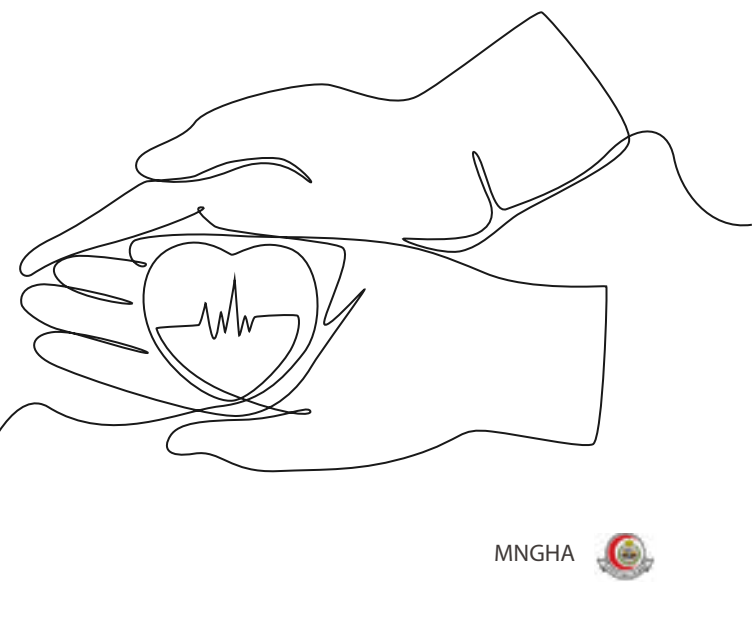
- HHC nurses have undergone rigorous training and possess the required expertise to:
  - Administer subcutaneous chemotherapy. Experienced in managing the administration process, monitoring patients for potential side effects, and providing comprehensive care during and after treatment.
  - Competent in negative pressure wound therapy. It is primarily utilized to treat complex wounds which are non-healing or at risk of non-healing.
- Issued guidelines on the prevention and management of pressure ulcers; Recommendations for prevention included the following : ( Implement measures to reduce the risk of developing pressure ulcers, Screen for nutritional deficiencies, Debridement, Competent staff).
- Saudi Diploma for physicians in order to Develop and Improve Home Medical Services.

## Implement:

- SMS visit notification.
- Virtual Clinic has been implemented.

## Statistical Information:

- Patients visit Total numbers: **39349**.



## Home Health Care

King Abdulaziz Medical City – Riyadh

### Home Health Care total service visit number:

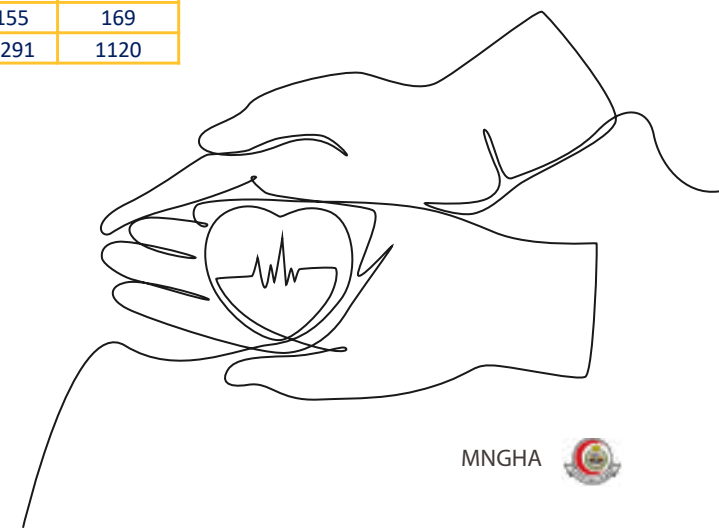
|  |      |
|--|------|
| Foley and SPC care   | 929  |
| NG tube  | 638  |
| Tracheostomy care  | 227  |
| TPN as daily dose  | 365  |
| W/C  | 2294 |
| IV Hydration and electrolyte replacement                           | 190  |
| Blood Draw   | 1949 |
| IV antibiotic  | 2128 |
| ATC Team   | 283  |
| palliative team  | 764  |
| RRT via phone  | 1972 |
| Ordered Supplies   | 4254 |
| OB   | 2032 |
| Patient been (O2/WEANING) DECANULATED                              | 39   |
| Vaccination  | 230  |
| College and SCFHS trainee's Narcotic S/C therapy (Pain management) | 175  |

### Home Health Care total service visit number:

| Group/Visits Numbers | Jan   | Feb   | Mar   | Apr   | May   | Jun   | July  | Aug   | Sept  | Oct   | Nov   | Dec   | Total  |
|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| NURSE                | 2,031 | 2,070 | 2,207 | 1,505 | 2,037 | 1,492 | 2,051 | 2,156 | 1,912 | 2,408 | 2,196 | 2,253 | 24,318 |
| OCCUPATIONAL THERAPY | 146   | 141   | 128   | 42    | 128   | 110   | 107   | 143   | 112   | 131   | 86    | 96    | 1370   |
| RESPIRATORY          | 196   | 227   | 272   | 144   | 201   | 168   | 218   | 256   | 158   | 166   | 192   | 200   | 2398   |
| DIETITIAN            | 131   | 103   | 116   | 78    | 139   | 158   | 105   | 164   | 102   | 140   | 161   | 151   | 1548   |
| PHYSICIAN            | 418   | 422   | 358   | 194   | 296   | 496   | 863   | 863   | 565   | 802   | 646   | 623   | 6546   |
| SOCIAL WORKER        | 186   | 115   | 151   | 73    | 207   | 322   | 533   | 476   | 113   | 128   | 123   | 93    | 2520   |
| MEDICAL ASSISTANT    | NEW   |       |       | 105   |       | 89    |       | 290   |       | 193   |       | 677   |        |

### Home Health Care total patients' numbers 2023:

| Month                 | Jan | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sept | Oct  | Nov  | Dec  | Average |
|-----------------------|-----|------|------|------|------|------|------|------|------|------|------|------|---------|
| Patients # without OB | 839 | 842  | 863  | 864  | 918  | 939  | 936  | 940  | 999  | 1056 | 1080 | 1136 | 951     |
| OB Patients #         | 116 | 166  | 170  | 179  | 223  | 127  | 185  | 178  | 181  | 154  | 198  | 155  | 169     |
| TOTAL                 | 955 | 1008 | 1033 | 1043 | 1141 | 1066 | 1121 | 1118 | 1180 | 1210 | 1278 | 1291 | 1120    |



# Home Health Care

King Abdullah Specialized Children's Hospital

## Emphasize:

- Participated in Bone Health Awareness Day and Respiratory Therapy Day.
- Flu vaccine campaign.

## Deliver:

- Independent heroes project to improve the quality of life and patients care.
- Expanded IV antibiotic service utilizing (home easy pump machine).
- Oxygen Wean off from Respiratory Services.
- Pediatric Home TPN Service (Total Parenteral Nutrition).
- Improved patient care, post GT insertion by development of special caregiver education methods: (procures/ vides/ frequent patient F/u post GT insertion).
- Home IV antibiotic pump (easy flow) to expand IV antibiotic home services.
- Expanded the following services:
  1. Paediatric Home TPN Service (Total Parenteral Nutrition).
  2. Home IV antibiotic.

## Promote:

- Involved in HHC Diploma training.
- Memorandum of cooperation was signed between KAMC and Saudi Scientific Society for Home Health Care in field of logistics services, medical care training programs, awareness and education.
- TPN Wean off from our TPN Program.

## Implement:

- Tele-health consultation and follow up implementation and HHC Portal applications.

## National awards, recognition, contributions:

- Booklet of "guideline for training Home Health Care Patients' Caregivers" second Edition that includes Pediatric section, Saudi Heath Council website in Arabic and English versions has been published in Saudi Heath Council website.
- Contributed as a member in Saudi Scientific Society for Home Health.
- Contributed in National Guidelines with Saudi Health Council.

## International awards, recognition, contributions:

- Contributed in the First Annual International Conference of Saudi Scientific Society for Home Healthcare in Madinah.

## Statistics information:

No. of visits and referrals:

| 2023         | No. of visit | REFFERALS |
|--------------|--------------|-----------|
| <b>TOTAL</b> | 7492         | 188       |

2023 total number of specialty team visits:

| Specialty Team              | 2023 Total No. |
|-----------------------------|----------------|
| <b>NURSE</b>                | 3916           |
| <b>OCCUPATIONAL THERAPY</b> | 463            |
| <b>RESPIRATORY</b>          | 469            |
| <b>DIETITIAN</b>            | 734            |
| <b>PHYSICIAN</b>            | 1237           |
| <b>SOCIAL WORKER</b>        | 549            |
| <b>Total</b>                | 7368           |

Rapid Response Team (RRT)"

| Month  | No. Of calls | No. Of visits |          | ER visits | Admission | Total Visits |
|--------|--------------|---------------|----------|-----------|-----------|--------------|
|        |              | Virtual       | Physical |           |           |              |
| Jan    | 3            | 3             | 0        | 1         | 1         | 3            |
| Feb    | 5            | 3             | 2        | 0         | 0         | 5            |
| Mar    | 7            | 5             | 2        | 1         | 1         | 7            |
| April  | 3            | 3             | 0        | 1         | 0         | 3            |
| May    | 4            | 4             | 0        | 2         | 0         | 4            |
| June   | 4            | 3             | 1        | 1         | 1         | 4            |
| July   | 8            | 6             | 2        | 3         | 2         | 8            |
| August | 6            | 4             | 2        | 3         | 2         | 6            |
| Sep    | 6            | 1             | 5        | 1         | 3         | 6            |
| Oct    | 11           | 4             | 7        | 0         | 0         | 11           |
| Nov    | 2            | 1             | 1        | 0         | 0         | 2            |
| Dec    | 10           | 7             | 3        | 2         | 0         | 10           |

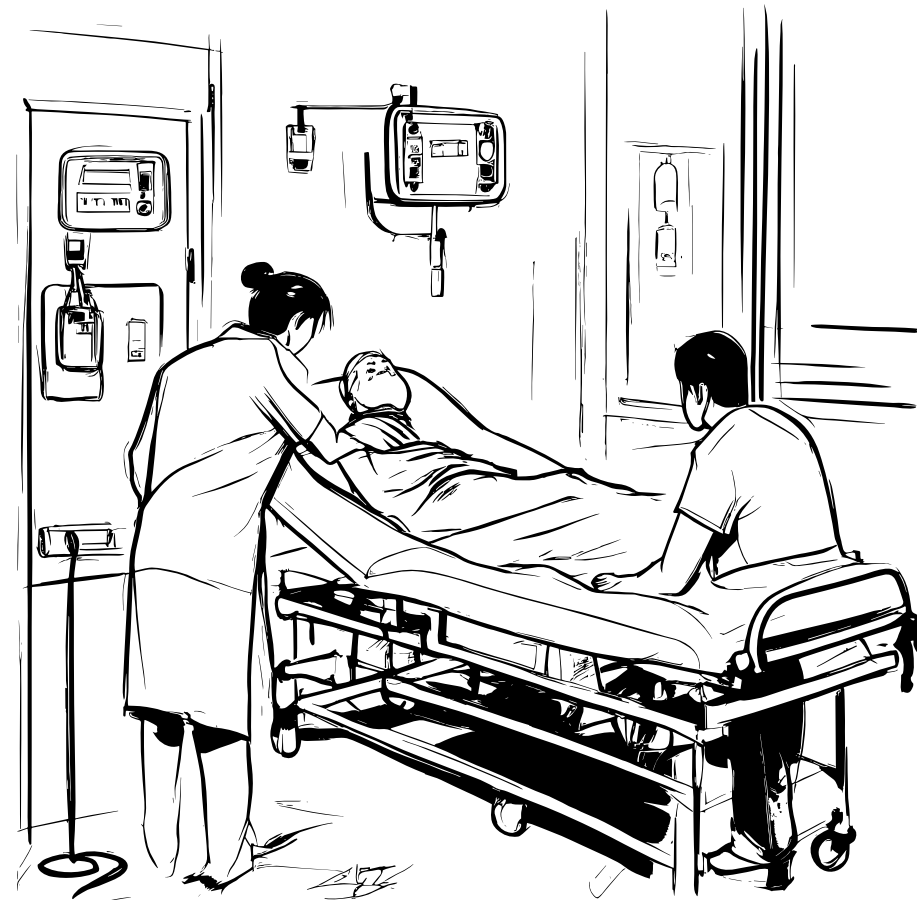




## Intensive Care Unit (ICU)

### Introduction:

The Intensive Care Department admits critically ill patients from the emergency room, operating rooms and other ward areas. It is committed to provide the highest level of care according to international standards, ensuring optimal use of its beds and promoting evidence-based practice in all aspects of Intensive Care, in order to provide exemplary safe and high-quality care for critically ill patients, utilize cutting-edge innovation and research to improve patients' outcome. Intensive Care Unit educate tomorrow's leaders in the management of acute life-threatening illnesses, and promote critical care profession locally and worldwide.



## Intensive Care Unit (ICU)

King Abdulaziz Medical City – Riyadh

### Deliver:

- Improved patient care delivery with the highest quality by working on different Critical Care Initiatives for patients safety including: (I-protect, ICU Early Mobility Program, , ICU Daily Goal Sheet, Simulation and Patient Safety Project, Improving the care of ventilated patients NASAM Bundle.
- Mortality Rate is the lowest compared to the last two consecutive years (in 2023 10%, 2022 11.1% & 2021 12.6 %).
- Continued to have low readmission rate (1.4 %in 2023).

### Promote:

- Subarachnoid hemorrhage project, Safe Tracheos to my Care, Critical Care Family Support Program.
- Simulation for patient safety: (Facilitate the training of clinical skills through deliberate practice rather than an apprentice-style of learning, a trainee can make mistakes and learn from them without the fear of harming the patient, a monthly schedule is being arranged with different learning topics for ICU multidisciplinary team members).
- ICU Fellows & Resident Engagement of the ICU Quality Project.

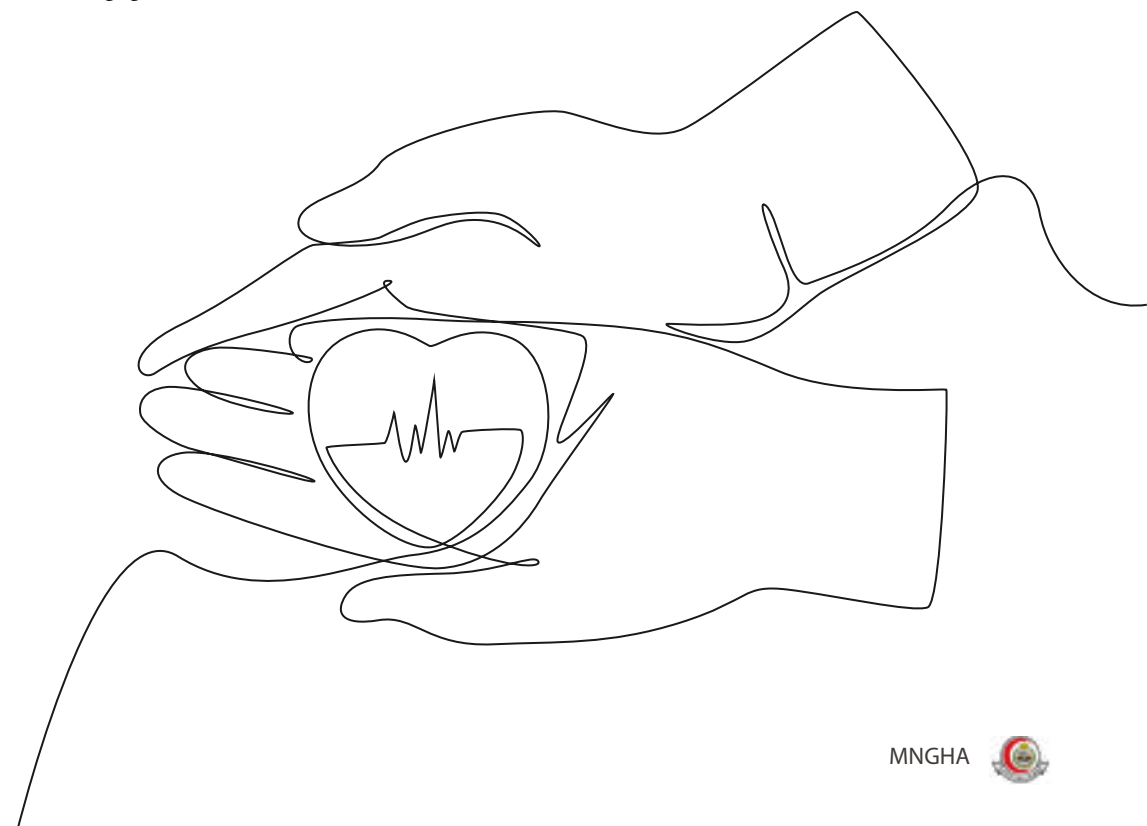
### Statistics information:

Total admission number in 2023:

4567

Mortality rate in 2023:

10%



## Medicine Department

### Introduction:

The Department of Medicine support the organizational vision and mission statements encompassing quality, education, research and leadership. Also provides outpatient, inpatient, consultation services, and additional supporting services including day case diagnostic and interventional procedures. Medicine Department provides training and education of medical students, interns, residents and fellows from various specialties in order to provide timely, patient-centered collaborative care, and to be leading the best Health Community Welfare and Customer satisfaction to Ministry of National Guard employees and dependents through providing best patient quality of care, enhancing health providers' health education, and research promotion.



## Emphasize:

- **Endocrinology:**
  1. Participated in national event and education for HCP.
- **Pulmonology:**
  1. Asthma awareness day May 2023, Lung fibrosis awareness day Sep 2023, COPD awareness day Nov 2023.
- **Rheumatology:**
  1. Conducted an event in coincidence with World Arthritis Day, which include awareness event in the ACC and educational lectures through MT platforms to the community.

## Promote:

- **Internal Medicine:**
  - iM Guides is a project that aims to design internal medicine guides in each internal medicine service to standardize our care with retained flexibility. Internal medicine consults patient (iMCP).
- **Physical Medicine:**
  - Utilized scholarship program. We are able to cover the following Physiatry speciality/subspecialty available in the division:
    - o General rehabilitation.
    - o Musculoskeletal medicine.
    - o Spasticity & Multiple sclerosis.
    - o Paediatric Rehabilitation.
    - o Spinal Cord injury Rehabilitation
- **Endocrinology:**
  - Has two fellowship training programs with 20 fellows during training. Finished diagnostic protocol to Improve patient safety.
- **Geriatrics:**
- **Nephrology Section:**
  - Trained 10-12 rotating non-dermatology doctors per month including other specialties residents, interns, medical students and clinical attachments.

## Provide:

- **Internal Medicine:**
  - Average length of stay (ALOS) was reduced to 8.3 days in comparison to last year 9.1 days, 1-day improvement.
  - 30-day readmission rates were reduced from 22.3% to 16.2 % this year, 6% improvement.
  - Defined the clinic referral criteria to ensure timeliness of our services and reduce redundancy.
- **Physical Medicine:**
  - All consultations and referrals have been attended in less than 12 hours.
  - The MNGHA goals and objective on 4 weeks access to care initiatives of targeting 100% has been successfully achieved.
  - The clinics booking ceiling for adult Physiatry, spasticity, and multiple sclerosis increased to 18 patients.
  - Paediatric Physiatry clinic increased from one clinic per week to four clinic per week with a ceiling of 18 patient patients.
  - The average transfer of care time under Physiatry service from the time of formal acceptance is 4 days also dependent on hospital bed situation as directed by bed management.
- **Endocrinology:**
  - The access to care in outpatients' services is 100% within 4 weeks and no waiting list.
- **Rheumatology:**
  - The access to care in outpatients' services is 100% within 4 weeks and no waiting list.
- **Nephrology:**
  - Enhanced the short referral time to be acceptable to patients and referring staff.
- **Rheumatology:**
  - Standardized the inpatient service, one MRP covering the inpatient service to guarantee consultant-based service.
  - Applied a standardized international infusion protocol in the bestcare to all medications used by rheumatology in the day care unit.
- **Neurology:**
  - Additional NCS clinics once request for additional rooms have been approved.

- **Infectious Diseases:**
- **Physical Medicine:**
  - Launched speciality rehabilitation clinic. Creation of two teams:
    - o Neurorehabilitation Team (covering consultations and inpatient with 13 beds capacity).
    - o Stroke Rehabilitation Team (covering consultations and inpatient with nine beds capacity).

## National awards, recognition, contributions:

- **Geriatrics:**
  - Participated in the Division Consultants in local Conferences.
  - Contributed in the Second Annual Saudi Geriatric Society Conference.
  - Saudi Member of National Home Health Care Committee.
  - Scientific Committee of Saudi Alzheimer Association.
  - Quality improvement project: CAUTI prevention.
  - Quality improvement Project: Shingles Vaccination in older adults.
  - Preventive Health Care guidelines for older adult.
  - Board Member of Saudi Geriatrics Society.
- **Infectious Diseases:**
  - ID division members continue to be permanent members in the advisory boards/scientific committee and peer reviewers in medical journals.
  - Consultants of the division contribute in many lectures, workshops in the largest national medical conferences such as SSMID (Jeddah)-KSA ID Week (Riyadh), GC CMID (Manama-Bahrain), AIDS DAY (MOH-MNGHA) and many others.
- **Rheumatology:**
  - World Arthritis Day in collaboration with Saudi Society of Rheumatology, the event conducted at KAMC Riyadh.
  - World Arthritis Day, organized by SSR in Riyadh Park.
  - Ninth Saudi Society of Rheumatology annual conference Riyadh 2023, chairperson and speaker.
  - Winner the best abstract at ninth Saudi Society of Rheumatology annual conference- Riyadh 2023.
  - The third Qassim Conference for Updates in Rheumatology, speaker.
  - We have five publications this year and almost 10 projects in progress, few of them are multi-center projects.

## Medicine Department

King Abdulaziz Medical City – Riyadh

### INTERNATIONAL AWARDS, REGOGNTION, CONTRIBUTIONS:

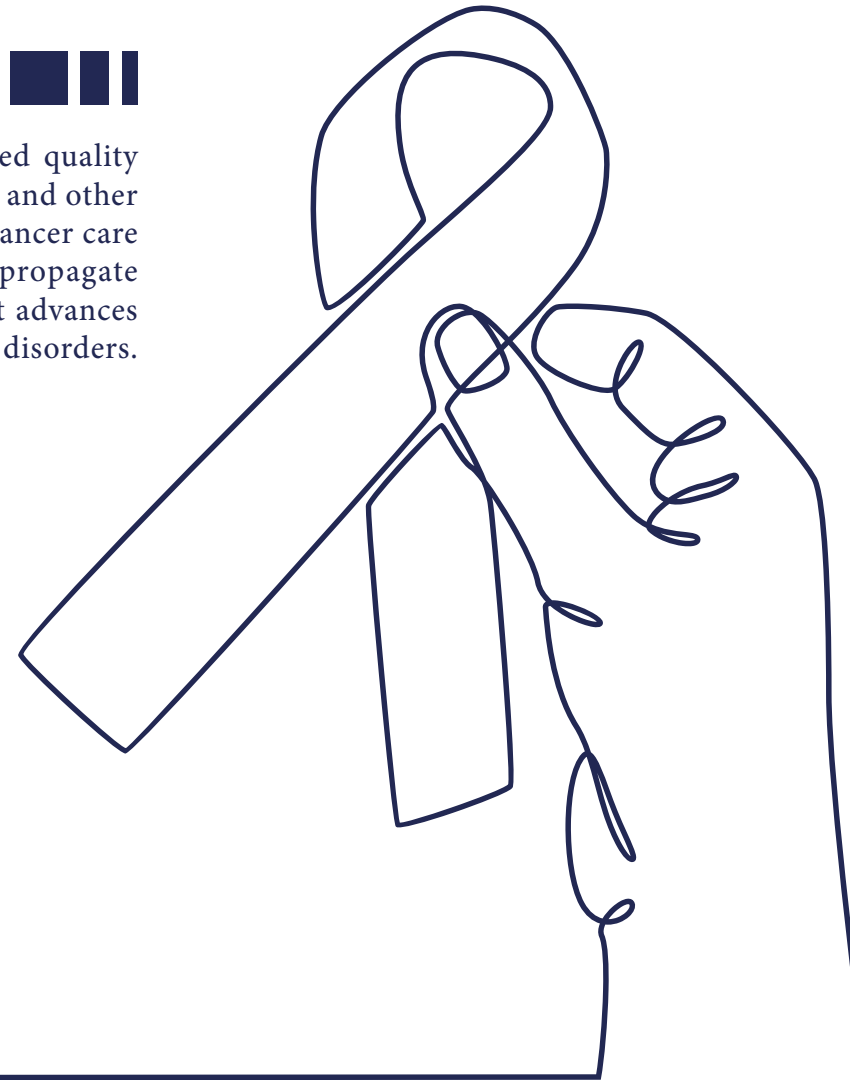
- Geriatrics
  - Speaker in MEAMA, Middle East Academy for Medicine of Ageing.
  - International Elderly Day.
  - Introduction to Medicine of Older Adults for Healthcare Professional in Kuwait.
  - 2nd Annual KSA ID week.
- Infectious Diseases
  - Published 31 articles including major clinical trial in reputable Journals by ID division members as first authors>10, co-investigators, including supervised projects with trainees (under and postgraduate). See publication list.
- Neurology
  - Four research projects were published.
- Pulmonology
  - Adult Pulmonary Fellow, submitted poster presentation and case report, and accepted to American Thoracic Society 2023 International Conference, held in May 2023, Washington, DC.



## Oncology

### Introduction:

Oncology Department is providing personalized patient and family centered quality care to patients with cancer and blood disorders for the MNGHA population, and other eligible patients all over the Kingdom. To improve and pursue excellence in cancer care through evidence, research, and quality improvement. To promote and propagate education and research and to discover and implement innovative treatment advances and laboratory research aimed at curing and preventing cancer and blood disorders. Pediatric Cellular therapy (CAR-T cell).



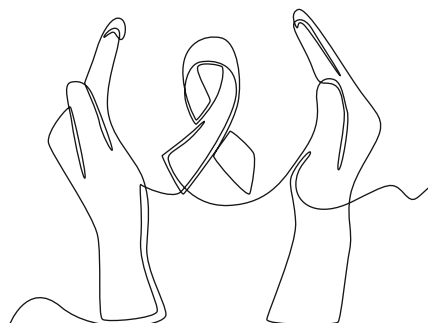
## Provide:

- **Radiation Oncology-KASCH:**
  - Streamlined Patient Pathways:
    1. highly integrated care model (Radiotherapy Volume system) was put in place to insure quick access to radiation oncology services shortening the wait times for clinic and treatment.
  - Clinic waiting time – 14 minutes (Average for 2521 appointments).
  - Radiotherapy Treatment waiting time – 24 minutes (Average for 7415 appointments).
  - Patient Turnaround time from Simulation to treatment (Target < 15 days): > 94% pts achieved the target each month.
  - Radiation Oncology access to care (Target < 4 weeks): >99% pts achieved the target each month. Enhance patient's access to care within 4 weeks.
  - Ensured that all clinicians have access to XVI images in their station for treatment verification.
- **Gynecology Oncology-KASHC:**
  - Two clinics for first visit - Gynecology Oncology – this clinic is intended for new patients and referrals. To ensure that patients will have an access to care within short period (2 weeks).
  - Same day admission. Extra OR Day- to reduce the number of patients in the waiting list.
- **Palliative Care-KASHC:**
  - Started palliative care helpline covering all patients across the Kingdom 24/7.

- Integration with Oncology: Early integration with oncology team is one of the main goals of palliative care to be more effective and easily accessible by cancer patient whether inpatients or outpatients.
- Introduced 3 integrated clinics this year with thoracic, GI and breast clinic as a part of multidisciplinary team; more clinics will be cover in the future.
- Increased Access to Palliative Care by (Home Health Care pain & symptom management clinic, availability utilization of Telemedicine through Virtual Clinic).
- **Adult Medical Oncology:**
  - Added medication refill request clinic (15 slots per AM session only – from Sunday to Wednesday).
- **Adult Stem Cell Transplant and Cellular Therapy:**
  - Unstable adult SCT patients can access ER beds in C65 directly instead of proceeding to main ER. Adult SCT Day care unit delivers services until midnight.
  - Department QIP: Optimize chair utilization time for the Oncology Infusion Unit from by reduce the patient waiting time to less than 30 minutes from check in time.
  - Department QIP: Reduce the time between the patient's arrival to the outpatient chemotherapy suite (Unit 62) and the administration of medication to 1 hour.
- **Gynecology Oncology:**
  - Gynecology Oncology Nurse Specialist Clinic (physical and virtual).
  - Zero Medications Error for category (> = C).
  - Achieved 90% rate in suspected cancer patients seen by specialist within 2 weeks from referral to suspected cancer program.
  - Reduce unnecessary blood test requested by physician in ward 64 Adult SCT to 50% By implementing standard lab works order set in electric medical record for all patients admitted to stem cell transplant.

## Deliver:

- **Adult Stem Cell Transplant and Cellular Therapy-KASCH:**
  - New SCT Clinics: (CAR-T Therapy clinic) with aim to provide the best timely services for transplant patients.
  - Initiated CAR-T Clinic to accommodate CAR-T referrals on timely manner.
  - Haploidentical SCT in Sickle Cell Patients.
  - Autologous SCT in autoimmune disease.
- **Adult Medical Oncology-KASHC:**
  - Oncology fertility clinic, Precision oncology clinic, Genetic clinic, combined GI clinic and HIPEC.
- **Pediatric Oncology:**
  - Increased in the number of cases accepted by pediatric department /pediatric surgery.
  - the establishment of a quick access to care for all newly referral child with suspected cancer.
- **Pediatric Hematology:**
  - More than 1500 hematological consultations were provided for all pediatrics specialties for patients with blood disorders to continue providing state of art patients' health care.
  - 17 hematological Clinical sessions per week to provide hematological services for patients with blood, In addition to a designated clinic for transfusion every Thursday.
  - More than 500 new hematological referrals were encountered in 2023 and more than 2000 visits to the hematologic clinics were encountered in year 2023.
  - Access to Care: Pediatric Hematology/Oncology scores 100% access to care for year 2023. Received Highest Rank for year 2022-2023.





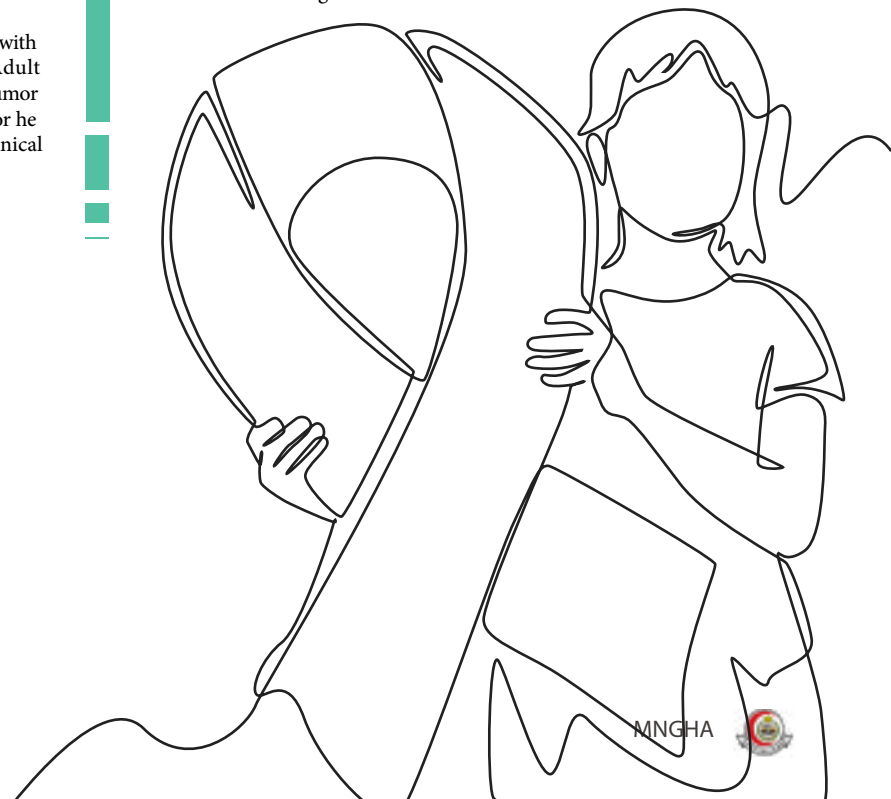
## Promote:

- **Adult Medical Oncology-KASCH:**
  - Initiated the International Foundation Medicine (FM) Tumor Board Expanded the Suspected Cancer Program Clinic.
- **Radiation Oncology:**
  - Developed comprehensive patient education programs focusing on radiation therapy's role in cancer treatment and prevention.
  - Innovative Research Initiatives: Our commitment to research and innovation in radiation oncology has led to pioneering studies (three full manuscripts published) and advancements.
  - These initiatives aim to improve treatment outcomes, minimize side effects, and explore novel approaches to cancer care specific to our military population.
  - Continuous Technological Upgrades: Commitment to innovation includes on-going technological upgrades (such as new linear accelerators, MRI and CT imaging) to ensure the equipment remains at the forefront of advancements in radiation oncology, providing our patients with the best possible care.
- **Adult Stem Cell Transplant and Cellular Therapy:**
  - SCT patient and family education and release of 4 new educational materials (Allogeneic stem cell transplant, CAR-T Therapy, TBI, VOD). EBMT 2023 benchmarking report.
  - Launched CAR-T Therapy Program.
- **Palliative Care:**
  - Online cancer pain management educational course for medical doctors (oncology department). Online nursing educational program (palliative care nurses).
  - Participation in Health Educators Education Workshop.
- **Adult Medical Oncology:**
  - Initiated the Neuroendocrine Tumor Board.
- **Pediatric Hematopoietic Stem Cell Transplant:**
  - Expanded and facilitated the CAR-T cell therapy program.
  - Initiated Gene therapy project for Sickle Cell Anemia and Transfusion Dependant Thalassemia.

- **Pediatric Hematology:**
  - Hemoglobinopathies programs, Hemostasis and thrombosis program, Packed Red Blood Transfusion (PRBC) Program, Bone marrow failure program.
  - Set of Management Guidelines were developed in 2023 to standardized the practice and to optimize the standard of care for children with hematological disorders.
    1. Practical approach for children with thrombocytosis.
    2. Guidelines for Childhood Vascular Anomalies (on progress).
    3. Guidelines for thrombosis and direct oral anticoagulant in children.
    4. Emicizumab guidelines for children with hemophilia A.
    5. Implementation of Deferoxamine Subcut. PUMP project.
    6. Iron overload management guidelines.
    7. Sirolimus guidelines.
- **Pediatric Hematology/Oncology Tumor Board:**
  - Gene therapy for Sickle cell and thalassemia project with cooperation Adult Hematology Division from Adult Oncology Department. Formalize guidelines for all tumor types and Hematological Disorder. Referral center for hemoglobinopathy Transplant program. Research (clinical trials): Recruit in clinical trials:
    1. Participated in international clinical trials.
    2. Haploidentical transplantation sickle cell study.
    3. Continued leukemia BMT study.
    4. UMBRELLA trial for Childhood Renal Tumor.

## Implement:

- **Palliative Care:**
  - Follow up of community by phone (with HHC nurse and directly with family) during working hours.
- **Adult Medical Oncology:**
  - Expanded the Middle East & North Africa - National Comprehensive Cancer Network (MENA-NCCN) Center.
- **Adult Stem Cell Transplant and Cellular Therapy:**
  - Launched patient/ family support group, virtual meetings with stem cell patients and candidates.
  - SCT TABS electronic documentation for CAR-T therapy.
- **Radiation Oncology:**
  - Barcode based appointment system.
- **Pediatric Oncology:**
  - Activated involvement of the department in the national Ithala system for newly diagnosed cancer and hematological disorder.



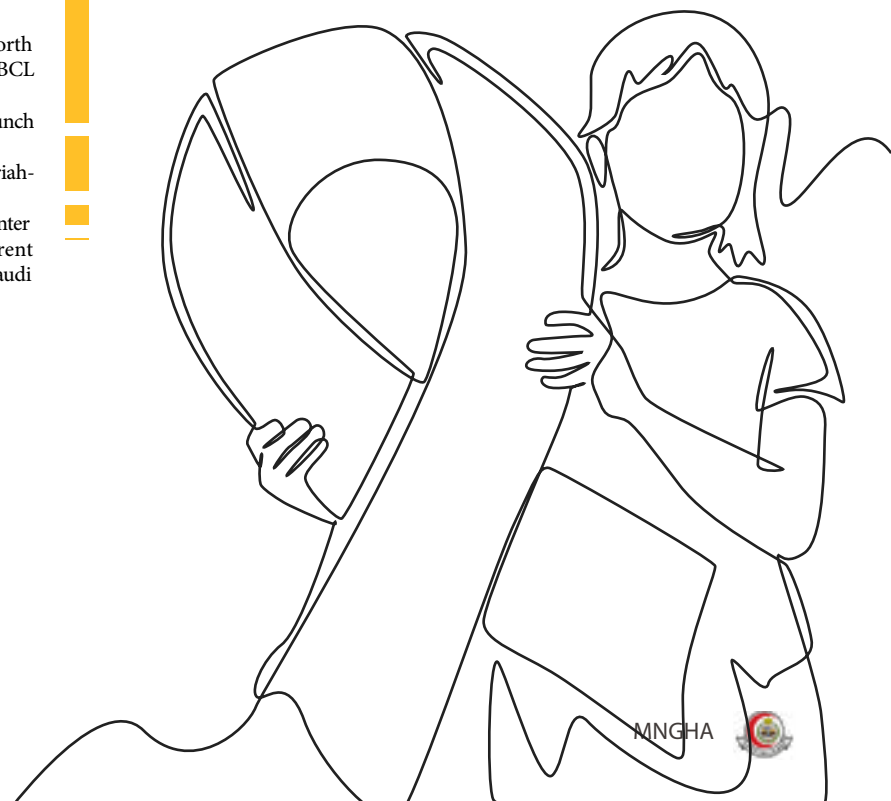
## International awards, recognition, contributions :

- **Radiation Oncology:**
  - International Atomic Energy Agency (IAEA) audited the department linear accelerators and the results were well within their international tolerance that ensures the high standard maintained in MNGHA.
  - Three full manuscripts have been published this year:
- 1. Re-irradiation Using Stereotactic Radiotherapy: A Bibliometric Analysis of Research Trends. Cureus 2023 May.
- 2. Effectiveness of Robotic Stereotactic Radiotherapy in Patients Undergoing Re-irradiation: A Review. Cureus 2023 Aug.
- 3. Investigation of Intra-fraction Stability and Inter-fraction Consistency of Active Breathing Coordinator (ABC)-Based Deep Inspiration Breath Holds in Left-Sided Breast Cancer.
- **Pediatric Hematology/Oncology Tumor Board:**
  - IRB approval for UMBRELLA trial for Childhood Renal Tumor (in partnership with Princess Maxima Center, Netherlands).
  - Quarterly Joint Tumor Board Video Conference with Children's Hospital of Philadelphia, USA
  - CT20/021/R - Phase 3, Randomized, Double-Blind, Placebo-Controlled Study of Voxelotor (GBT440) in Pediatric Participants with Sickle Cell Disease (HOPE Kids 2) in hematology division
  - Best paper of the year : in the annual Saudi Hematology Congress 2023 ( by Saudi society of blood disorders – KFSHRC) : Human leucocyte antigen-matched related haematopoietic stem cell transplantation using low-dose cyclophosphamide,fludarabine and thymoglobulin in children with severe aplastic anaemia Alsultan, A., Abujoub, R., Alsudairy, R., Memon, S., Jarrar, M. S., Alafghani, S., Aldaama, S., Ballourah, W., Almanjomi, F., & Essa, M. F. (2023).British journal of haematology, 203(2), 255–263. <https://doi.org/10.1111/bjh.19004>.

- Clinical Trials in Pediatric Hematopoietic Stem Cell Transplant and cellular division:
- 1. SCT22R/01612/ Interfant 21 –Phase III - International collaborative treatment protocol for infants under one year of age with KMT2A rearrangement ALL - with participation more than 26 countries.
- 2. HLA-Haploidentical Stem Cell Transplantation in Children with Inherited Bone Marrow Failure Syndromes: A Retrospective Analysis on Behalf of EBMT Severe Aplastic Anemia Working Party.
- 3. NRC23R/242/03 - Optimizing fludarabine exposure during lymphodepletion as conditioning improve outcome of CAR-T cell therapy: Single center experience.
- **Ault Stem Cell Transplant and Cellular Therapy:**
  - The first center to achieve site certification in intercontinental region, outside North America and Europe for CAR-T therapy for YesCAR-T cella– Gilad/kite product.
  - The first center in intercontinental region, outside North America and Europe to infuse CAR-T therapy for DLBCL YesCAR-T cella– Gilead/kite product.
  - The first center in Saudi Arabia and Middle East to launch the nursing CAR-T therapy preceptorship program.
  - The second center to qualify for CAR-T therapy Kymriah- Novartis product.
  - Processed the stem cell donation from Saudi donor to inter national patients (more than 100 donors) in different countries. Those donors were recruited through the Saudi Stem Cell Donor Registry.

## National awards, recognition, contributions:

- **Radiation Oncology:**
  - Training students and Interns from Princess Norah University, Riyadh.
  - Training students and Intern from King Saud Bin Abdulaziz University for Health Sciences (KSAU-HS), Riyadh.
- **Pediatric Hematology/Oncology Tumor Board:**
  - Work on progress in running UMBRELLA trial through KAIMRC as National Coordinator.
  - 2nd center to initiate CAR-T cell-therapy.
  - Accredited by Saudi Commission for Health Sciences for 5 New Fellow, as all Specialty is available in the Department including Radiation Oncology.



## Statistics information:

Division of Pediatric Oncology:  
Hematology/Oncology have 2 dedicated floors Ward 62 and Ward 63 with a round of 44 beds operating (16 under Pediatric Stem Cell Transplant and 28 under pediatric hematology/oncology).

Total number of Admissions (2021-2023):

| 2021 | 2022 | 2023 |
|------|------|------|
| 837  | 1072 | 1122 |

Pediatric Newly Diagnosed Patient:

| 2021 | 2022 | 2023 |
|------|------|------|
| 95   | 91   | 130  |

Division of Pediatric Hematopoietic Stem Cell Transplant  
Newly Diagnosed Patient 2021-2023 (SCT/CAR-T):

|           | 2021 | 2022 | 2023 |
|-----------|------|------|------|
| SCT/CAR-T | 69   | 62   | 80   |

Transplant Activity (2021-2023):

| CAR-T Therapy for Refractory /relapse B ALL |         |
|---|---------|
| Collected                                   | Infused |
| 8   | 5       |

| Department                              | Month | Total Referral | Total Accepted Referral (with fixed date) | Appointments within 4 Weeks | Appointments within 4 Weeks |
|---|-------|----------------|---|-----------------------------|-----------------------------|
| Pediatric Hematology and Oncology KASCH | Jan   | 44             | 35  | 35                          | 100%                        |
|   | Feb   | 53             | 41  | 41                          | 100%                        |
|   | Mar   | 45             | 33  | 33                          | 100%                        |
|   | Apr   | 19             | 17  | 17                          | 100%                        |
|   | May   | 45             | 45  | 45                          | 100%                        |
|   | Sep   | 45             | 45  | 45                          | 100%                        |
|   | Oct   | 45             | 45  | 45                          | 100%                        |
|   | Nov   | 54             | 54  | 54                          | 100%                        |
| Year 2023                               |       |                |   |                             |                             |

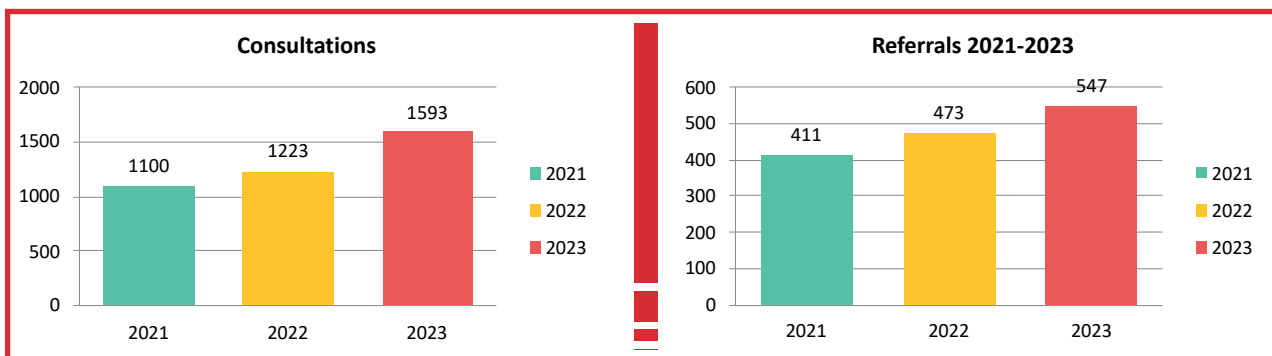
# Oncology

King Abdullah Specialized Children's Hospital –Riyadh

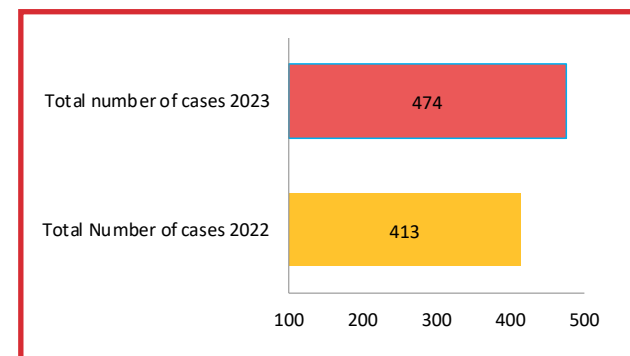
## Statistics information:

Pediatric Hematology, Oncology and Stem Cell Transplant

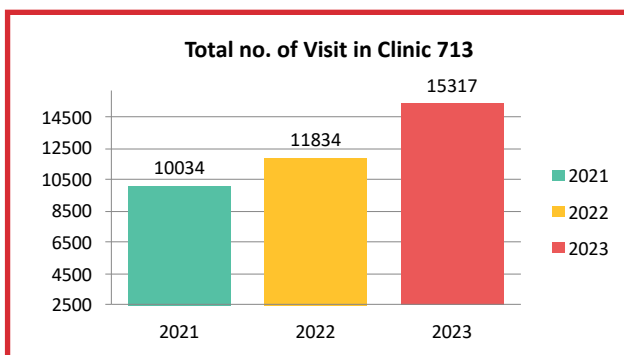
Table below showing total number of Consultations over the last 3 years.



## PEDIATRIC HEMATOLOGY/ONCOLOGY TUMOR BOARD

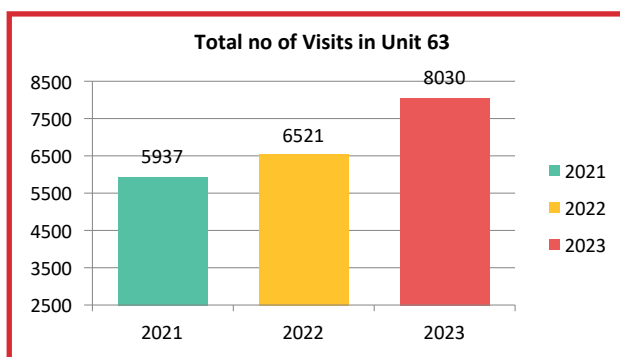


## Pediatric Hematology, Oncology and Stem Cell Transplant OUTPATIENT CLINIC:



## Infusion Unit 63

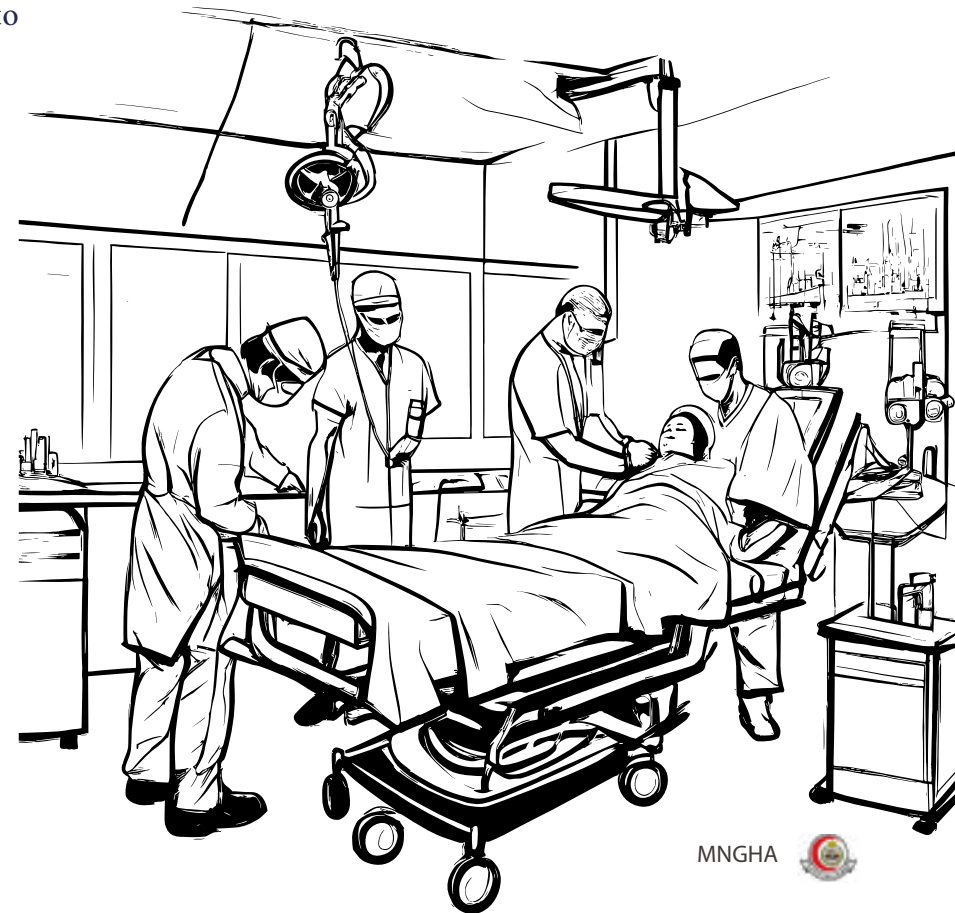
Unit 63 has a capacity of 24 beds, 2 quick procedure chairs, 1 physician room, and 2 triaging rooms. The patient's census is documented in Chart 1. Procedures conducted in the facility include chemotherapy infusions, blood products + IVIG administration, IV medications, IV fluids, electrolyte replacements, blood sampling, central line dressing and care, NPA swap, and culture swap. The quality project being undertaken is the Chemo panel Project, which aims to enhance the oncology patient experience by ensuring blood test extractions are completed within a maximum of 1 hour.



## Surgery Department

### Introduction:

Surgery Department is obliged to deliver the best possible comprehensive and sustainable surgical service for all patients eligible for treatment. Also, to provide the Saudi Arabian National Guard and eligible dependents with the highest quality of surgical care and to provide care to eligible patients suffering from diseases requiring tertiary care, and to promote medical education, training and research.



## Emphasize:

- General Surgery: Participation in different awareness activities and programs

## Achieve:

- ENT:
  1. Newborn hearing screening program along with military annual hearing check & aviation medicine services all aim to identify the early stages of congenital or occupational hearing loss and interfere early to prevent progression.

## Promote :

- General Surgery: Colorectal Fellowship. Acute Care and Trauma Fellowship approved by SCFHS.
- Thoracic Surgery: Increased the weekly educational sessions. Surgical stabilization of multiple ribs fractures.
- Neurosurgery:
  1. Transformation of neurosurgery residency program from a joint program to an independent program.
  2. Increased the weekly educational sessions covering various topics.
  3. Became the leading center in the Middle East treating complex Craniocervical disorders.

## Deliver:

- Neurosurgery:
  1. All Tertiary cases of neuroaxis tumors are done in the CR- hospital with outstanding results.
- Thoracic Surgery:
  1. Expanded robotic thoracic surgery to reinforce our minimal invasive procedures.
  2. Hospital referral for chest wall deformities procedure (Nuss Procedure).
  3. Increased number of OR Slot to 3 full day per week instead of 1 and ½ day in the past.
  4. Increased number of accepting thoracic surgical Saudi patients from outside of National Guard hospital.
  5. All complex and major airway injuries are done in the hospital with outstanding results.
- ENT:
  1. Determined to provide a timely service to all referred patients, therefore, more clinics were open to achieve this goal.
  2. The division is running 10 OR sessions per week with 2 OR rooms during weekend in-order to eliminate the waiting time for surgery.
- Neurosurgery: Started National Guard spasticity program.

## International awards, recognition, contributions:

- ENT: The ENT members have participated in many recognized & reputable national & international conferences, workshops & seminars.
- Plastic Surgery:
  - International ambassador to the world society for reconstructive microsurgery for the year 2023 (Dr. Feras Alshomer).
  - A US office registration and grant of a patent titled: A Low-Cost 3D-Printed Tool with Multiaxial/Angular Vessel Orientation for Microvascular Anastomosis Training. U.S. Patent Office. Status: Granted. Patent number: US11617585B2. United States of America.
  - Four recognition certificates for the scientific publications done thought the fellowship period by Dr. Sami Alsahdan the Saudi Ambassador in South Korea. Received during the annual Saudi Cultural bureau ceremony. Seoul, South Korea.
  - Two publications in the most prestigious international journal related to plastic surgery. The journal title is (Plastic and reconstructive surgery journal) in the year 2023.
  - The selection and appointment as an associate editor to one of the prestigious journals related to the field of 3D printing in medicine by the world most recognized published (Springer nature).
  - Our book titled (Soft Tissue Reconstruction of the Hand: Loco-regional and Distant Flaps Selection and Approach) has been used and accessed by 17,000 readers internationally by the year 2023.
  - Vascular surgery: Pan Arab Vascular Society Symposium 2023.



## National awards, recognition, contributions :

- General Surgery:
  - Breast Cancer in Special situation Conference, 10-11th March 2023, Riyadh, KSA (Dr. Lolwah Alriyees/ Moderator/Speaker).
  - Multidisciplinary breast cases discussion, the 17th Middle East best of San Antonio, 27-28th Jan 2023, Khobar, KSA (Dr. Lolwah Alriyees/Moderator).
  - Breast Cancer awareness day at WHH, NGHHA, 31 Oct 2023 (Dr. Lolwah Alriyees, Dr. Huda Alnomani, Dr. Meaad Alromaihi, and Dr. Ohoud Alamer).
  - Breast Cancer awareness day, Tahor Organization in Onaiza in Affiliation with Qassim University, Oct. 26 2023.
- ENT:
  - The division of Otolaryngology has organized courses to enhance the surgical skill of residents in training, Otolaryngology fellows & practicing otolaryngology staff:
  - Pediatric airway cadaveric dissection course.
  - Temporal bone & middle ear microsurgery course.
- Neurosurgery:
  - Establishment of our annual professorship visit with visit of Prof. Badih Adada chairman of Neuroscience center and chair of Neurosurgery department in Cleveland Clinic, USA.
  - Hosted the annual Riyadh Neuroscience meeting.
  - Organized the 7th annual meeting of the Arabspine Association, 2023, (9-10 Nov. 2023).
  - Conducted the 1st National Guard Neurosurgical cadaveric course, on complex crainocervical disorders (Nov. 9th, 2023).
- Plastic surgery: Organizer and chairmen for the 1st Saudi Lymphedema surgical management conference with live surgery.

- Urology surgery: Awards: Saudi Urological Association.
- Vascular surgery: Lymphedema Symposium Riyadh 2023.

## Statistical Information:

### 1st Quarter 2023

| Division         | Number of Operations |          |          | Operation Duration (min) |          |          |
|------------------|----------------------|----------|----------|--------------------------|----------|----------|
|                  | Regular              | Emergent | Subtotal | Regular                  | Emergent | Subtotal |
| General Surgery  | 1059                 | 274      | 1333     | 147020                   | 34616    | 181636   |
| ENT              | 642                  | 42       | 684      | 75845                    | 2879     | 78724    |
| Plastic Surgery  | 445                  | 143      | 588      | 63123                    | 17169    | 80292    |
| Urology          | 719                  | 50       | 769      | 57466                    | 4035     | 61501    |
| Neurosurgery     | 127                  | 42       | 169      | 31291                    | 6089     | 37380    |
| Vascular Surgery | 109                  | 24       | 133      | 15117                    | 3699     | 18816    |
| Thoracic Surgery | 65                   | 12       | 77       | 14024                    | 2346     | 16370    |
| Total            | 3166                 | 587      | 3753     | 403886                   | 70833    | 474719   |

### 2nd Quarter 2023

| Division         | Number of Operations |          |          | Operation Duration (min) |          |          |
|------------------|----------------------|----------|----------|--------------------------|----------|----------|
|                  | Regular              | Emergent | Subtotal | Regular                  | Emergent | Subtotal |
| General Surgery  | 950                  | 271      | 1221     | 128168                   | 32285    | 160453   |
| ENT              | 598                  | 43       | 641      | 58620                    | 3237     | 61857    |
| Plastic Surgery  | 335                  | 155      | 490      | 49281                    | 17986    | 67267    |
| Urology          | 597                  | 62       | 659      | 47957                    | 4683     | 52640    |
| Neurosurgery     | 95                   | 41       | 136      | 24612                    | 6705     | 31317    |
| Vascular Surgery | 89                   | 32       | 121      | 12855                    | 3992     | 16847    |
| Thoracic Surgery | 58                   | 9        | 67       | 12074                    | 2138     | 14212    |
| Total            | 2722                 | 613      | 3335     | 333567                   | 71026    | 404593   |

## Statistical Information:

### 3rd Quarter 2023

| Division         | Number of Operations |          |          | Operation Duration (min) |          |          |
|------------------|----------------------|----------|----------|--------------------------|----------|----------|
|                  | Regular              | Emergent | Subtotal | Regular                  | Emergent | Subtotal |
| General Surgery  | 1214                 | 260      | 1474     | 168771                   | 32784    | 201555   |
| ENT              | 447                  | 21       | 468      | 57224                    | 1583     | 58807    |
| Plastic Surgery  | 366                  | 94       | 460      | 46641                    | 11774    | 58415    |
| Urology          | 734                  | 53       | 787      | 57172                    | 3838     | 61010    |
| Neurosurgery     | 138                  | 26       | 164      | 31898                    | 4797     | 36695    |
| Vascular Surgery | 107                  | 23       | 130      | 14088                    | 3790     | 17878    |
| Thoracic Surgery | 75                   | 8        | 83       | 14752                    | 1830     | 16582    |
| Total            | 3081                 | 485      | 3566     | 390546                   | 60396    | 450942   |

### 1 to 3rd Quarter 2023

| Division         | Number of Operations |          |          | Operation Duration (min) |          |          |
|------------------|----------------------|----------|----------|--------------------------|----------|----------|
|                  | Regular              | Emergent | Subtotal | Regular                  | Emergent | Subtotal |
| General Surgery  | 3223                 | 805      | 4028     | 443959                   | 99685    | 543644   |
| ENT              | 1687                 | 106      | 1793     | 191689                   | 7699     | 199388   |
| Plastic Surgery  | 1146                 | 392      | 1538     | 159045                   | 46929    | 205974   |
| Urology          | 2050                 | 165      | 2215     | 162595                   | 12556    | 175151   |
| Neurosurgery     | 360                  | 109      | 469      | 87801                    | 17591    | 105392   |
| Vascular Surgery | 305                  | 79       | 384      | 42060                    | 11481    | 53541    |
| Thoracic Surgery | 198                  | 29       | 227      | 40850                    | 6314     | 47164    |
| Total            | 8969                 | 1685     | 10654    | 1127999                  | 202255   | 1330254  |

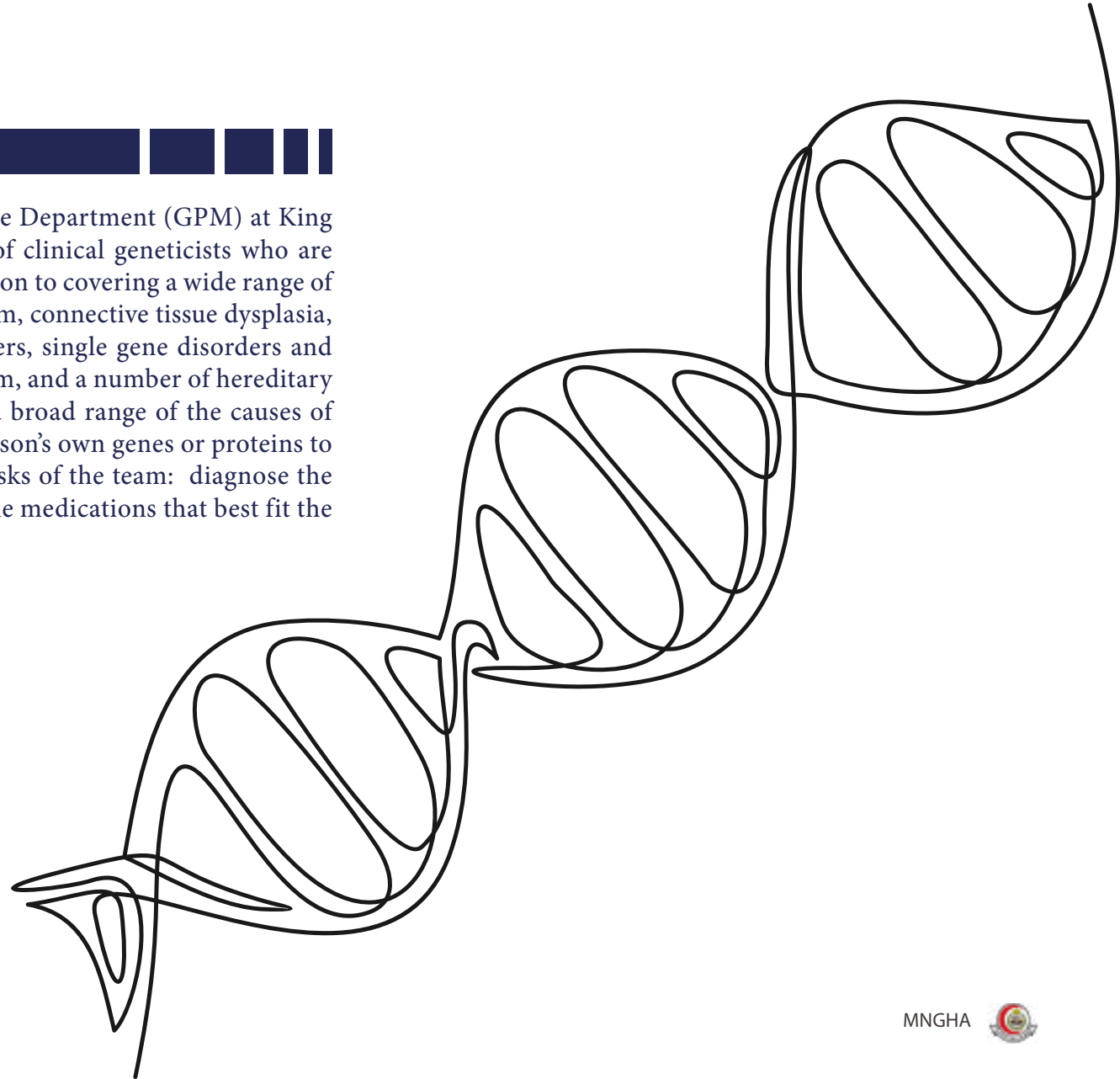




## Genetics & Precision Medicine Department

### Introduction:

The scope of service of the Genetics and Precision Medicine Department (GPM) at King Abdulaziz Medical City in Riyadh, Saudi Arabia consists of clinical geneticists who are certified physicians in multiple medical specialties. In addition to covering a wide range of patients' cases, some of which are inborn errors of metabolism, connective tissue dysplasia, developmental delay, birth defects, neurometabolic disorders, single gene disorders and syndromes, skeletal dysplasia, chromosome disorders, autism, and a number of hereditary disorders, our physicians conduct research studies across a broad range of the causes of many of these conditions. They use information about a person's own genes or proteins to prevent, diagnose, or treat diseases. The following daily tasks of the team: diagnose the patients precisely based on specific genotyping and select the medications that best fit the patients based on their underlying the genetic makeup.



# Genetics & Precision Medicine Department

King Abdulaziz Medical City/ King Abdullah Specialized Children's Hospital –Riyadh

## Provide:

- Continuity to achieve more than 90% patient access of care.

## Promote:

- Academically increased number of Geriatric Medicine Fellows to 4 per year.

King Abdullah Specialized Children's Hospital  
–Riyadh

## Provide:

- 0% waiting list
- Achieved the target above 75% appointment within 4 weeks.

## Deliver:

- Expanded NBS to include some treatable lysosomal storage diseases, additionally we did advanced molecular genetic testing more than 5000 whole exome sequencing and more than 2000 whole genome sequencing which help in improving the diagnosis of genetic disorders at molecular level by 50%.
- One of the few centers over the world who is doing Genetics disorders prevention program practicing precision medicine in this field.

The overall KPI for October 2023 NBS Program meet the standard target of MNGHA

| KPI#1: (Newborn Screening Coverage)   |  |  |               | Remarks             |
|---|--|--|---------------|---------------------|
| (The proportion of newborns who have had Metabolic newborn screening)   |  |  |               |                     |
| Standard  | 95% of newborns are screened.  | 95% على الأقل من المواليد يتم فحصهم.                                       | المعيار       |                     |
| Green Zone  | At least 95% of newborns are screened  | 1% على الأكثر من عينات فحص المواليد في حالة غير قابلة للفحص.               | النطاق الأخضر | Achieved Green Zone |
| KPI#2: Time of Newborn Screening Sampling   |  |  |               | Remarks             |
| (The proportion of babies who have a newborn screening sample taken between 24 and 72 hours of birth)               |  |  |               |                     |
| Standard  | 95% of first NBS samples are taken between 24 and 72 hours of birth.                   | 95% على الأقل من عينات الفحص الأولى تؤخذ بين 24-72 ساعة من الولادة.        | المعيار       |                     |
| Green Zone  | At least 95% of newborns are screened  | 95% على الأقل من عينات الفحص الأولى تؤخذ بين 24-72 ساعة من الولادة.        | النطاق الأخضر | Achieved Green Zone |
| KPI#3: Quality of newborn screening blood samples   |  |  |               | Remarks             |
| Standard  | 1% of blood spot samples are of unsatisfactory quality                                 | 1% من عينات فحص المواليد في حالة غير قابلة للفحص.                          | المعيار       |                     |
| Green Zone  | Not more than 1% of blood spot samples are of unsatisfactory quality                   | 1% على الأكثر من عينات فحص المواليد في حالة غير قابلة للفحص.               | النطاق الأخضر | Achieved Green Zone |
| KPI#4: Sample Transport to the NBS laboratory   |  |  |               | Remarks             |
| (Samples are received by the laboratory within two calendar days of being taken)                                    |  |  |               |                     |
| Standard  | 95% of samples are received by the laboratory within two calendar days of being taken. | 95% على الأقل من العينات تصل إلى المختبر في مدة أقصاها يومان من وقت سحبها. | المعيار       |                     |
| Green Zone  | 95% of samples are received by the laboratory within two calendar days of being taken. | 95% على الأقل من العينات تصل إلى المختبر في مدة أقصاها يومان من وقت سحبها. | النطاق الأخضر | Achieved Green Zone |
| KPI#5: Laboratory Testing Turnaround Time   |  |  |               | Remarks             |
| (The time taken by the NBS laboratory to test each sample for all of the 19 disorders specified in the NBS Program) |  |  |               |                     |
| Standard  | 100% of samples meet the turnaround time of 2 working days.                            | نتيجة الفحص متوفرة خلال يومي عمل لكل العينات (100% من العينات).            | المعيار       |                     |
| Green Zone  | 100% of samples meet the turnaround time of 2 working days.                            | نتيجة الفحص متوفرة خلال يومي عمل لكل العينات (100% من العينات).            | النطاق الأخضر | Achieved Green Zone |

| KPI#6: Time of notification of positive results  |   |  |               | Remarks             |
|--|---|--|---------------|---------------------|
| (time taken for a baby with a positive screening result to be referred for diagnostic testing)       |   |  |               |                     |
| Standard   | 95% of samples are received by the laboratory within two calendar days of being taken.  | 95% على الأقل من العينات تصل إلى المختبر في مدة أقصاها يومان من وقت سحبها.               | المعيار       |                     |
| Green Zone   | 95% of samples are received by the laboratory within two calendar days of being taken.  | 95% على الأقل من العينات تصل إلى المختبر في مدة أقصاها يومان من وقت سحبها.               | النطاق الأخضر | Achieved Green Zone |
| KPI#7: Time of Commencement of Treatment   |   |  |               | Remarks             |
| (Time that is required for the commencement of treatment for babies with positive screening results) |   |  |               |                     |
| Standard   | 100% of babies with positive screening are commenced on treatment by 10 days of age.  | كل المواليد (100%) الذين تبين أن فحوصاتهم إيجابية يتلقون العلاج خلال 10 أيام من ولادتهم. | المعيار       |                     |
| Green Zone   | 100% of babies with positive screening are commenced on treatment by 10 days of age.  | كل المواليد (100%) الذين تبين أن فحوصاتهم إيجابية يتلقون العلاج خلال 10 أيام من ولادتهم. | النطاق الأخضر | Achieved Green Zone |
| KPI#8: Professional and Public Educational Activities  |   |  |               | Remarks             |
| (Organize professional and public educational activities in each MNGHA Hospital)                     |   |  |               |                     |
| National Target (Green Zone)   | Organize – at least – one professional educational activity and one public awareness activity in the supervisory regional center of NBS in the Health Directorate within a maximum of 12 months |  |               | Achieved Green Zone |

## Statistical Information

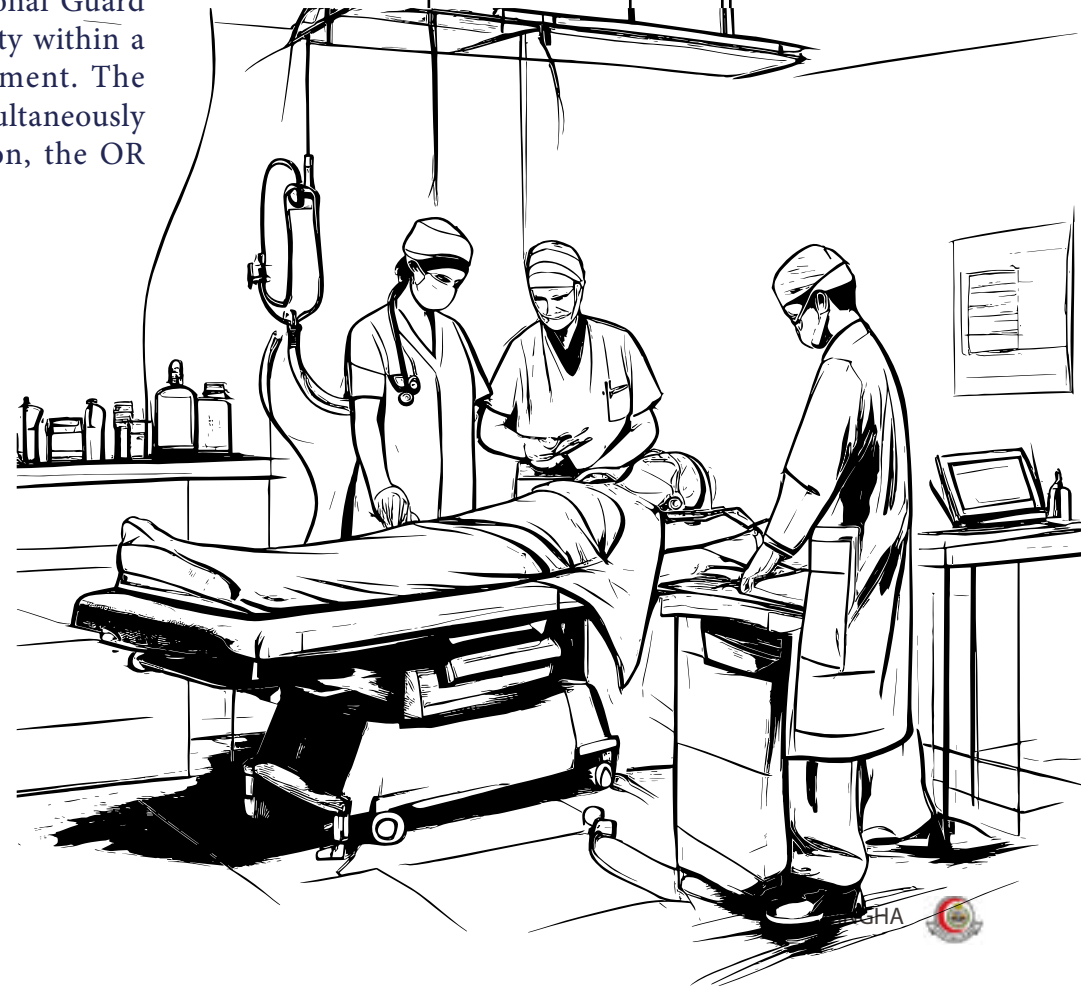
| Activities              | 01 January – 31 December 2023 |
|-------------------------|-------------------------------|
| Outpatient              | 9,933                         |
| Inpatient Consultations | 298                           |
| Inpatient Admissions    | 1,032                         |



# Operating Room

## Introduction:

Operating room is designed and committed to the mission of the National Guard Health Affairs, which is to promote the highest quality of surgical care to the National Guard Personnel, eligible dependents and other patients. Operating room is a facility within a hospital where surgical operations are carried out in an aseptic environment. The operating room (OR) setting, typically with multiple functions occurring simultaneously is a demanding environment in which to both work and learn. In addition, the OR environment is highly regulated with an intense focus on patient safety.



# Operating Room

King Abdulaziz Medical City – Riyadh

## Emphasize:

- Implemented wellness programs, provide access to health screenings, and offer resources for stress management, and mental health support for hospital employees.

## Deliver:

- Achieved and maintained low infection rates, reduce medication errors, and create a culture of safety through staff training and protocols.
- Implemented systems for collecting and acting upon feedback, initiating quality improvement projects, and setting benchmarks for ongoing enhancement in care delivery.

## Promote :

- Source supplies and equipment with eco-friendly certifications, promoting sustainability in purchasing decisions.
- Procured state-of-the-art imaging equipment, surgical technology, or diagnostic tools to elevate the hospital's diagnostic and treatment capabilities.

## Statistical Information for CR region:

| Operation Type | Total  |
|----------------|--------|
| Elective       | 42,248 |
| Emergency      | 9,938  |
| Day Surgery    | 18,103 |

## King Abdullah Specialized Children's Hospital – Riyadh Promote:

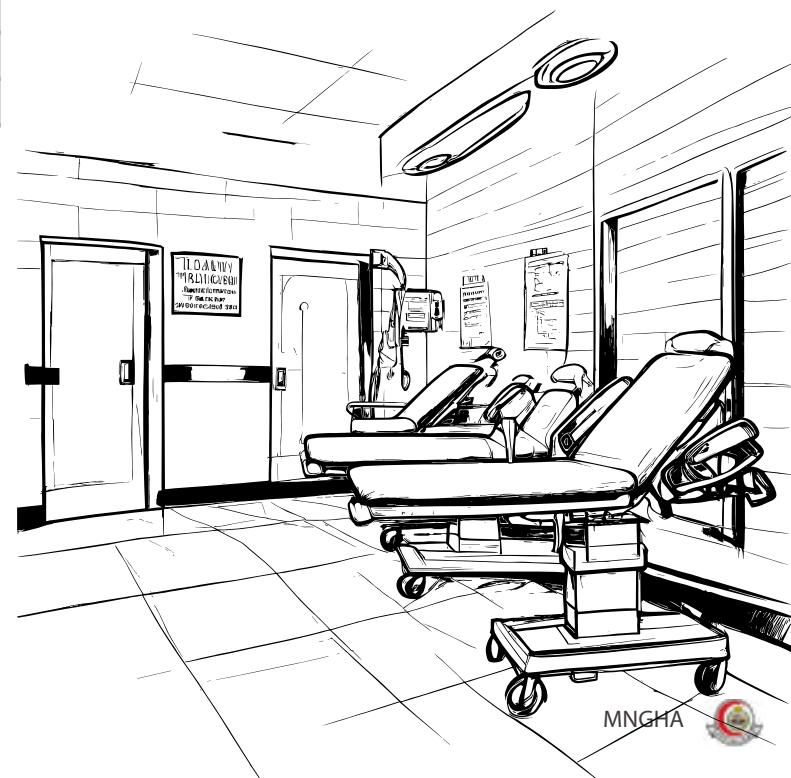
- Launched screen for BESTBOARD programme to monitor status of patient in OR (for patients' family) Adult Day care waiting area and Pediatric day care waiting area.

## Implement:

- The hospital runs a program called i-Surge, All OR patients care in timely manner based on the scores.

## Statistical Information:

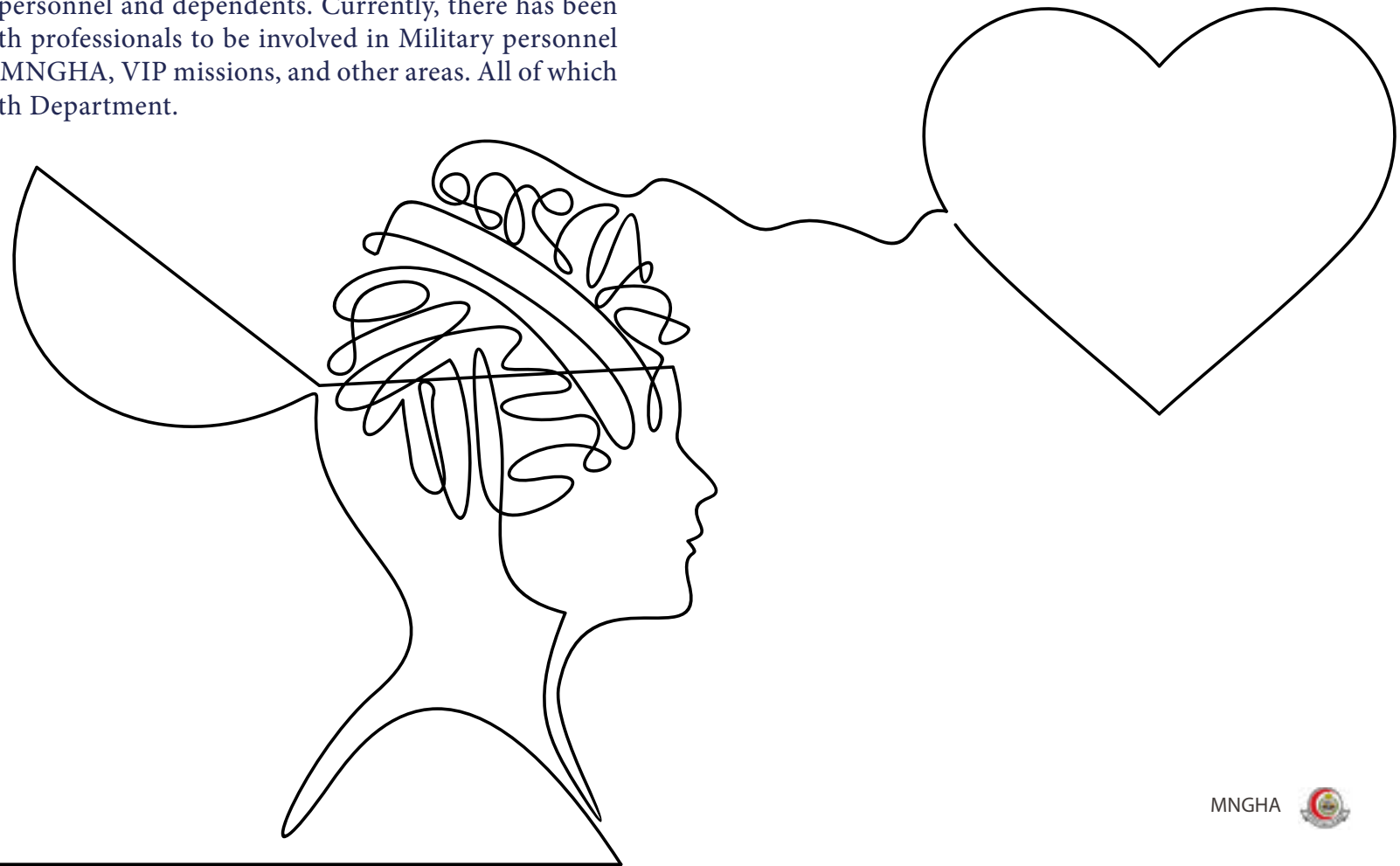
|                          |       |
|--------------------------|-------|
| OR- total adult done     | 6,981 |
| OR- total Pediatric done | 2,299 |
| Total cases done         | 9,280 |



## MENTAL HEALTH DEPARTMENT

### Introduction:

Mental Health is as significant as Physical Health. It serves the KAMC-CR population and all Ministry of National Guard personnel and dependents. Currently, there has been a huge demand for the Mental Health professionals to be involved in Military personnel selection, and Employee selection at MNGHA, VIP missions, and other areas. All of which is directed to the Adult Mental Health Department.



# MENTAL HEALTH DEPARTMENT

King Abdulaziz Medical City – Riyadh

## Emphasize:

- Organized Adult clinical Psychology the 7th Psychotherapy Conference since September 2023. This marks a significant accomplishment for our department this year.
- 5th Multidisciplinary Burn Awareness Day.
- Lecture on Empathy and stress management for KAIMRC staff.
- A lecture for Psycho oncology and burn victims for junior clinicians in Academy of psychology.
- Infertility group counseling workshop for Staff and Nurses.
- A lecture at the Conference of family therapy for special needs groups and their families.
- A Lecture on Ethics of completion of therapeutic relationships (SANAD Association for Cancer Patients).
- A lecture at NGHHA Annual Dialysis conference.
- A lecture on How to manage work stressors at the department of HCSC.

## Deliver:

- Adult Clinical Psychology Section has also increased significantly the number of the clinics for all of the psychologists this year that in turn accommodated more space for f /new patients and us.
- Created Women's Mental Health Section: Women psychosomatic medicine and women psychotherapy clinics started in Women's Hospital: As a newly Establishment of section, Women's Mental Health Section has been gradually progressing for building women mental health division to appetizing the health care services.
- Developed Comprehensive Suicide / Self-harm risk assessment and reassessment tool for Mental Health Patients.

## Promote:

- Increased the capacity of psychiatry residents training number from 2 to 3 per year and was applied in 2023-2024.
- Created (Hand in hand program) which is an educational and personal experience aims to extend the hand of a seasoned psychologist to the hand of a joiner psychologist and go on a journey of deep learning. The senior psychologist's role is to provide a space of education, guidance, reflection, increasing insight and awareness of the joiner, shaping their career and personality.
- Completed two advanced courses in Acceptance and Commitment Therapy, and enrollment in the Applied Behavioral Analysis program at the University of Nevada Reno. These accomplishments are specifically geared towards addressing the needs of adolescents and young adults in the National Guard Health Affairs. Recognizing the importance of catering to this particular age group, the knowledge and skills gained from these courses will be implemented in the department in the near future.
- Establishment of MNGHA Blog Page. Task force started October 2023 to collect relevant content from sections.
- Development including brief manual and creating assessment tool for family therapy training to these trainees.
- Developed the Edinburgh Postnatal Depression Scale (EPDS) for OBGYN Department.
- Psychiatry Residency Training Program and Psychosomatic Medicine Fellowship Training Program.

## Implement:

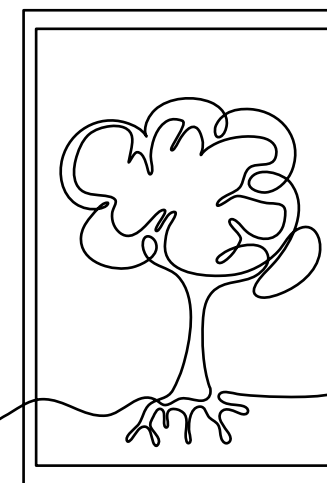
- All the Adult Clinical Psychology Section staff have opened virtual clinics that also increased significantly the capacity of accommodating larger number of patients.
- Creation of the department website.

## Achieve:

- Military mental health services, a community service program, which covers all military unit in Riyadh on a daily basis.
- Najran military mental health team, psychiatry staff assigned in Najran.
- Liaison with SANG headquarter- mental health clinic onsite.
- Drug control administration in SANG liaison.
- Military recruitment and King Khalid Academy.
- Created a psychology assessment exam for military applicants.

## Provide:

- Accommodate and facilitated the 1st visit for the patient within the 4 weeks period, by opening more 3 intake clinics. One of them called Single Session Intervention Clinic, which is an effective method to serve as more patients and aim to shorten the waiting time for the patients at the same time providing them with effective intervention within a short time.



MNGHA



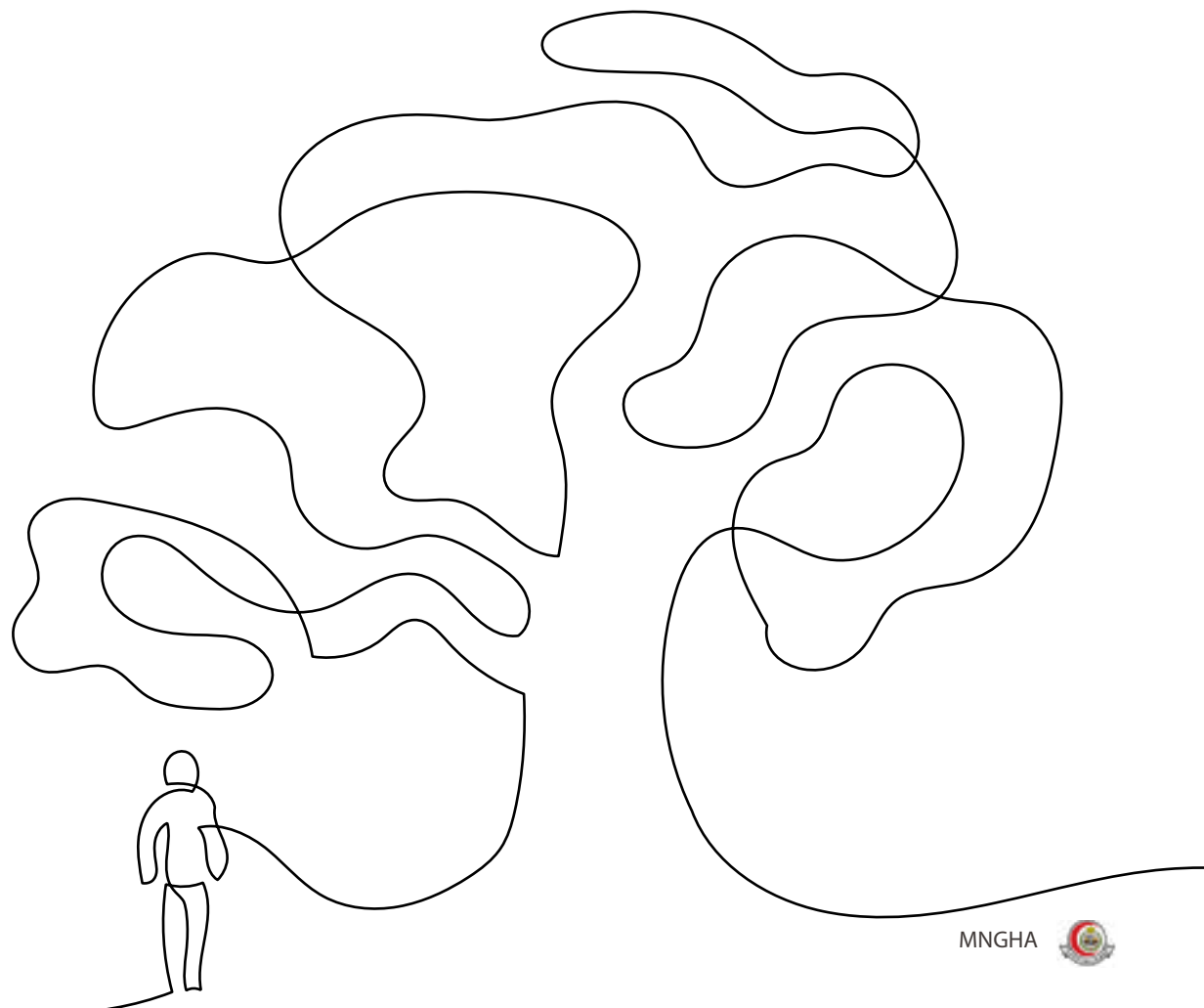
# MENTAL HEALTH DEPARTMENT

King Abdullah Specialized Children's Hospital – Riyadh

## International awards recognition, contributions:

### Consultants for Adult Mental Health – List of Publications for the year 2023:

- Exploration of Psychiatry Residents' Attitudes toward Patients with Substance Use Disorder, Bipolar Disorder and Schizophrenia in Saudi Arabia. Behavioral Sciences, 2023.
- The Prevalence and Characteristics of Physical Violence against Married Women in Saudi Arabia: A Cross Sectional National Study. Published in Majmaah Journal of Health Sciences, January 2023.
- Monkey pox stigma and risk communication; Understanding the dilemma. Published in Journal of Infection and Public Health, March 2023.
- The Barriers to Seeking Mental Health Services at King Saud Bin Abdulaziz University for Health Sciences. Published in Cureus journal, September 2023.
- Distribution of perceived weight stigma and its psychological impact on obese people in Saudi Arabia. Published in Saudi Pharmaceutical Journal, October 2023.
- Knowledge, perception, and beliefs of Saudi physicians at King Abdulaziz Medical City, Riyadh related to medical cannabis: Literature review and a cross-sectional survey. Journal of family medicine and primary care, 2023.
- The Prevalence and Characteristics of Physical Violence against Married Women in Saudi Arabia: A Cross Sectional National Study. Majmaah Journal of Health Sciences, 2023.
- Exploration of Psychiatry Residents' Attitudes toward Patients with Substance Use Disorder, Bipolar Disorder and Schizophrenia in Saudi Arabia.

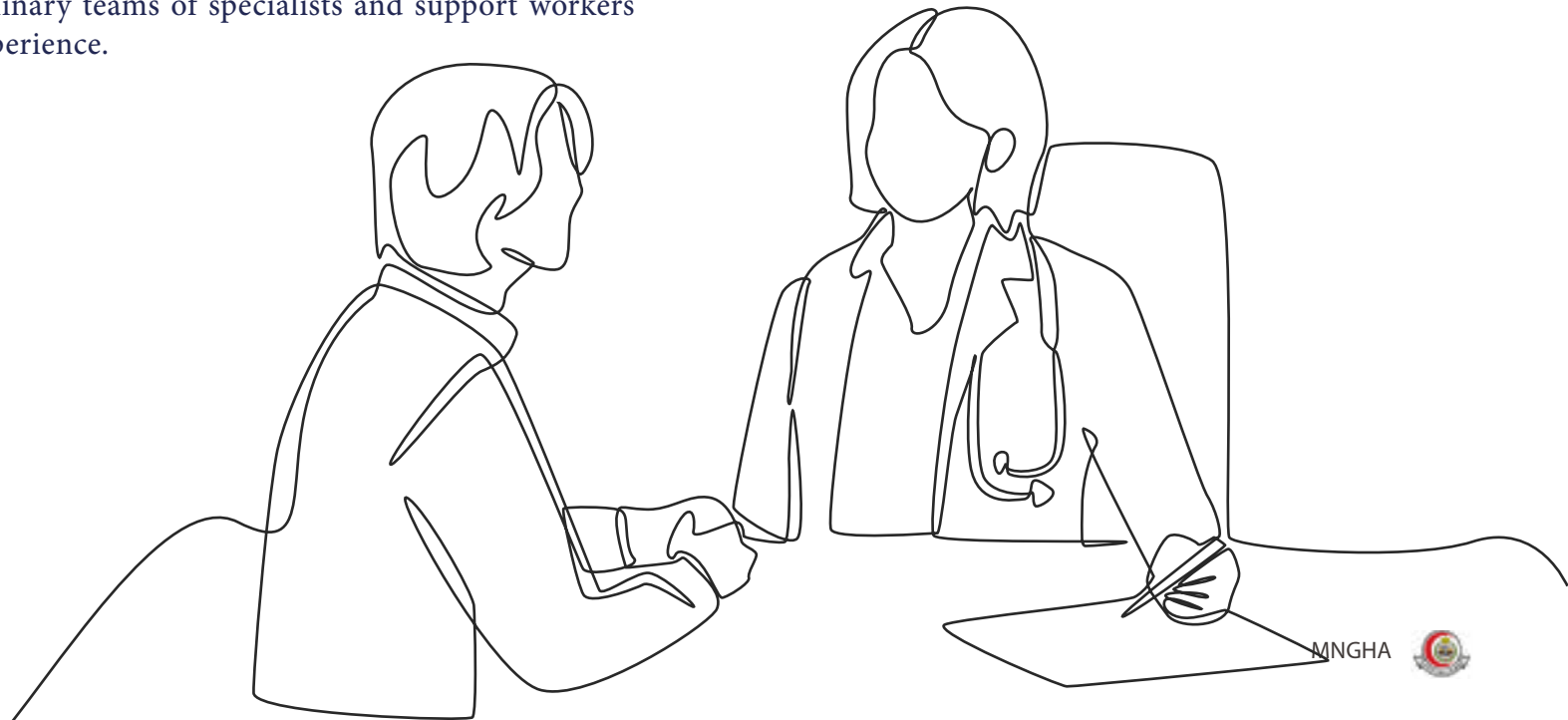


## OUTPATIENTS DEPARTMENT

### Introduction:

The Outpatient Center is a major component of the Ministry of National Guard Health Affairs organization, providing specialized medical care.

The operation of the Outpatient Clinics is a shared effort among three major departments. The first is medical staff, the second is nursing services, and the third is patient services. Because each of these specialties falls under a separate department, some issues are not a part of any of these departments. Patient care is greatly impacted by these matters. Since the HAC Resolution (ACC Efficiency: Change Model), Outpatient has been in charge of Appointment and Customer Service for ACC Nursing Operations and Patient Services. Quality care is provided by multi-disciplinary teams of specialists and support workers who are dedicated to their efforts and experience.





# OUTPATIENTS DEPARTMENT

King Abdulaziz Medical City / King Abdullah Specialized Children's Hospital – Riyadh

## Emphasize:

- Celebrated and raise awareness in the followings:
- 1. Saudi Social Responsibility Day (22 March 2023), Asthma Awareness Day (25 May 2023) & Anti-Smoking Awareness Day (31 May 2023).
- 2. Dental Hygiene Awareness program (16-17 July 2023).
- 3. Hidradenitis Suppurativa Awareness Campaign (1 June 2023) & Brucellosis Awareness Campaign (18 June 2023), Hepatitis Day 2023 Awareness Campaign (14 September 2023) & Saudi National Day (25 September 2023) & Diffuse Parenchymal Lung Disease (27 September 2023) & Alzheimer Awareness Day (28 September 2023).
- 4. World Mental Health Day (10 October 2023) & World Sight Day 2023 (12 October 2023) & Diabetes Day (19 October 2023) & World Arthritis Day 2023 (26 October 2023) & Stroke Awareness Week (30-31 October 2023) and How to Protect Your Liver (2 November 2023).

## Provide:

- Improved IVR Service to Limit the No-Show rate.

## Deliver:

- The lab has been expanded to provide more services and enough space for both female and male patients.

## Statistical Information :

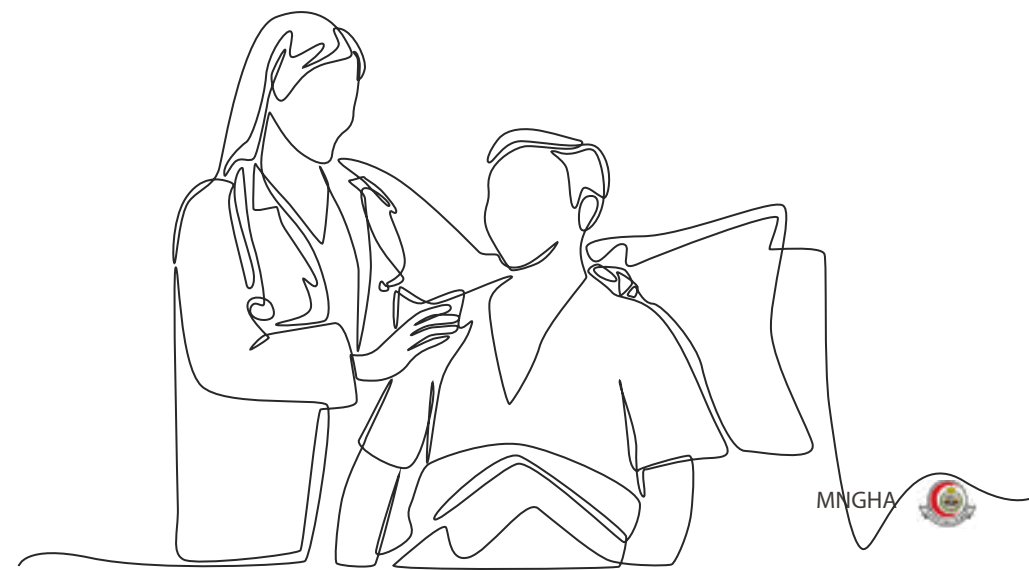
| Scheduled | Seen Physical | Seen Virtual | Walk-In | No-Show | Total Seen |
|-----------|---------------|--------------|---------|---------|------------|
| 490,660   | 320,580       | 24,076       | 151,495 | 146,005 | 344,656    |

## King Abdullah Specialized Children's Hospital – Riyadh Provide:

- For the 4<sup>th</sup> Year, KASCH continued to have low waiting list (patients due for appointment)
- KASCH continuously improving the 4 weeks access to care in most of our departments with approaching 100% of referral received appointment within 4 weeks from the referral date.
- Deliver
- KASCH Best in the Ambulatory Care Services in across MNGHA facilities by Patient Experience.

## Statistical Information:

|       | Seen Physical | Virtual |
|-------|---------------|---------|
| Total | 500,576       | 25,897  |



## Medical Eligibility

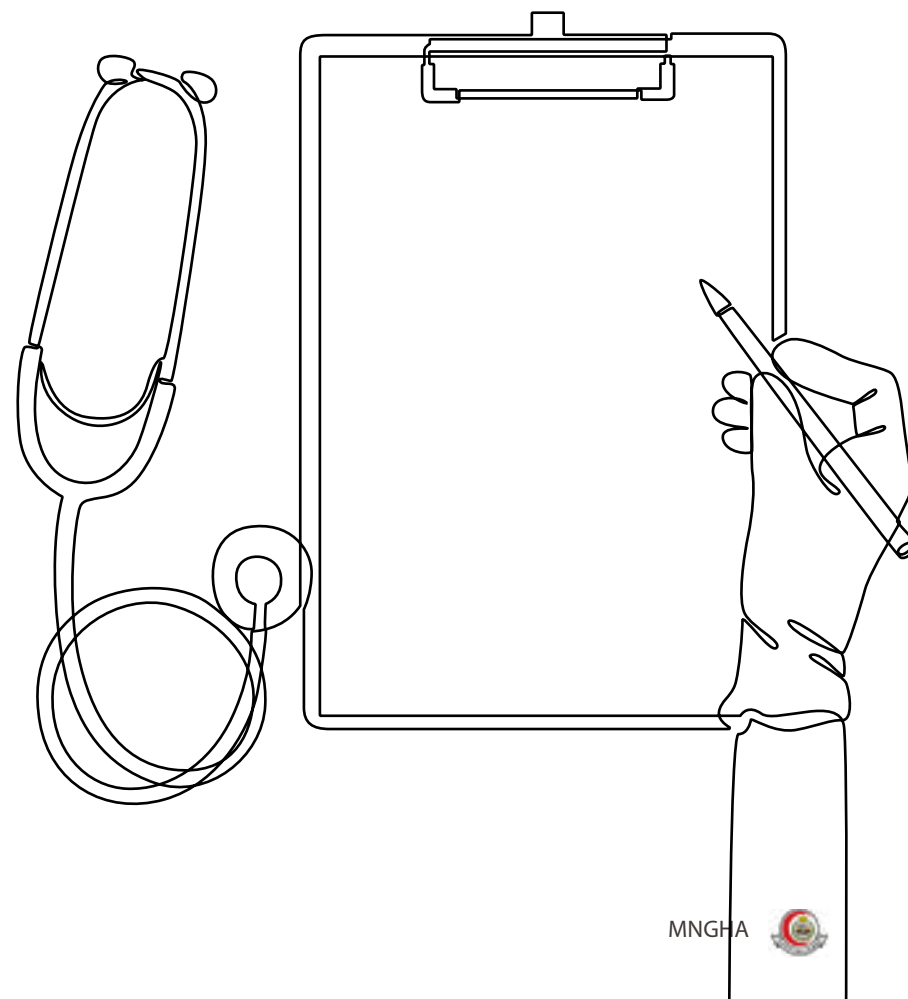
### Introduction:

Medical Eligibility Department was Establishment of to facilitate the process of accepting referred non-National Guard patients for tertiary medical care based on clinical criteria and according to hospital capacity to ensure that priority is given to those patients that are of greater need for our expertise and resources and maintain their eligibility as long as their medical condition require tertiary care. Recently, Medial Eligibility uses Ministry of Health (Ehalah) System to process MOH referred cases, both eligibility and coordination governed by MNGHA administrative policies and procedures.

#### Statistical Information :

Total Number of Non-National Guard New Patient Request for Treatment for the Month of 1 January to 31 December 2023.

|             | Approved | Disapproved | Total |
|-------------|----------|-------------|-------|
| Grand Total | 7679     | 3271        | 10950 |



# HEPATOBIILIARY SCIENCES AND ORGAN TRANSPLANT CENTER

## Introduction:

This annual report reflects a significant and sustainable >50% increase in the number of liver transplants in our department, as well as a >25% increase in the number of kidney transplants. The efforts of the Organ Transplant Board to support the development of this complex clinical microsystem through patient recruitment and the increment of operative days have had an immediate positive impact on our productivity. In addition, quality parameters shown in this report are benchmarked with international centers of excellence.

Areas of opportunity include:

- Restructuring our anesthesia team as a separate section and recruitment of more anesthesia consultants dedicated to transplant surgery, as this is the pillar for further improvement of our liver transplant program.
- Manpower recruitment of assistant consultants, o4 associate consultants and o2 transplant surgery consultants.
- Removing non-transplant consuming efforts from transplant-dedicated units to non-transplant units, avoiding bed-capacity difficulties.
- Further increment in the number of operating rooms dedicated to organ transplantation to accommodate for o4 surgical days for liver transplant (o2 rooms per day) and o4 surgical days for kidney transplant (o2 rooms per day), leaving o1 surgical day (o1 room) for non-transplant surgeries performed by our department (hepatopancreatobiliary and portal hypertension surgery).
- Dedicated slots for imaging studies scheduling (CT and MR), as well as transthoracic echocardiogram and myocardial perfusion scans.
- Improvement of our unrelated undirected living donor work-up. During 2023, we had a ~100% increase in this type of donors and many patients in our waiting list do not have potential directed living donors, particularly blood type o group candidates.



# HEPATOBIILIARY SCIENCES AND ORGAN TRANSPLANT CENTER

King Abdulaziz Medical City – Riyadh

## Deliver:

- Liver Transplant & Hepatobiliary Division:
  1. Same Day Admission for all organ donors.
  2. Enhanced Recovery after Surgery Program (ERAS) for all organ donors.
- Transplant Nephrology Division:
  1. Establishment of 740-infusion clinic last December to serve our patients timely and to offload our busy floor.
- Implemented Process of Pancreatic Transplant Program.

## Promote:

- 1-Day kidney donation program and HCV Eradication Program.
- Part of the Liver Transplant Immediate Extubation Program.
- Part of The Liver Transplant Zero Blood Transfusion Program.
- Outreach program.
- Implemented Same Day Admission (SDA) Projects.

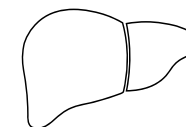
## Implement:

- Liver Transplant & Hepatobiliary Division:
  1. Dashboard of KPIs and Outcomes.
  2. Virtual clinics.
- Transplant Nephrology Division:
  1. Utilizing our transplant module in BESTCare to achieve easy to access data for periodic KPI.

## National awards, recognition, contributions Patient Experience Awards:

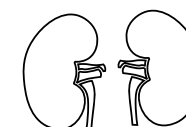
- Best Inpatient Ward – C74 Hepatobiliary Sciences and Organ Transplant Center.
- Best Physician – Dr. Nasser Al Nazari, Consultant Transplant Nephrology Division.

## Statistical Information:



**TOTAL LIVER TRANSPLANT =  
70 Patients**

- Adult liver transplant – **58**.
- (from deceased donor and living related and unrelated donors)
- Deceased donor liver transplant – **24**.
- Pediatric liver transplant – **12**.
- (from living related and unrelated donors)
- Total living unrelated liver transplant – **6**
- Total living Related liver transplant – **46** (Adult and pediatric)
- Combined (liver kidney) – **2**



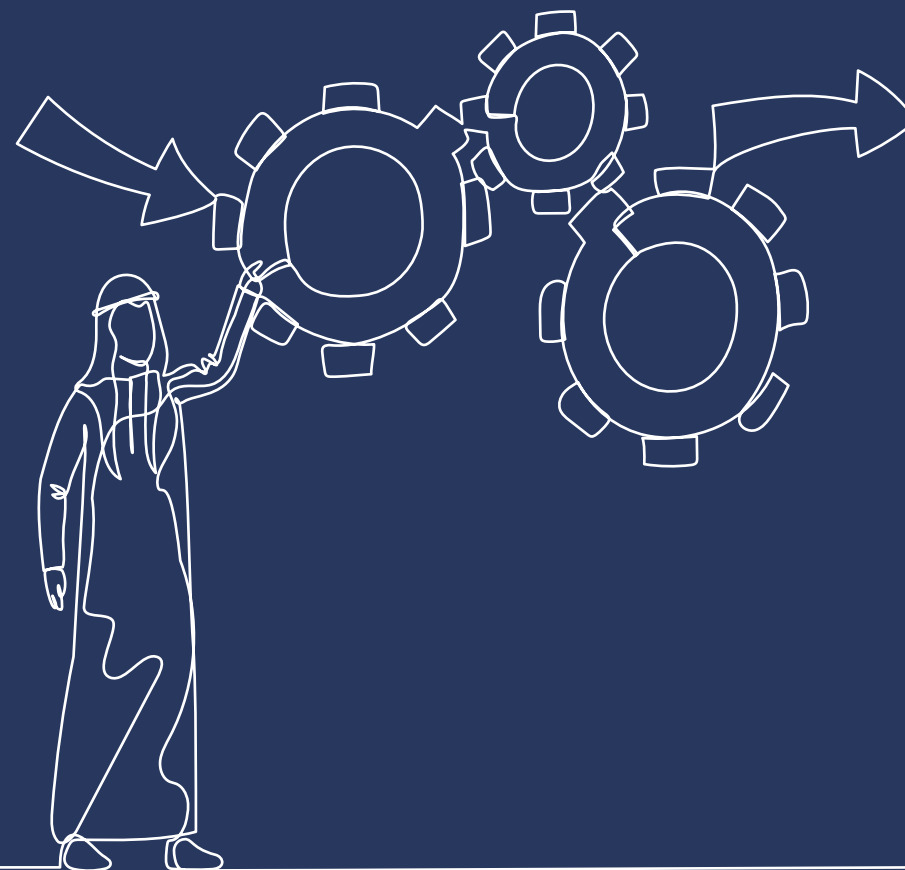
**TOTAL KIDNEY TRANSPLANT =  
175**

- (Paediatric kidney transplant – 7 Adult kidney transplant – **168**)
- Total living related kidney transplant – **98**
- Total living unrelated kidney transplant – **37**
- Diseased donor kidney transplant **26** adult and 2 paediatrics) – **28**
- KPD (adult and peds) – **12** pairs



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Operations

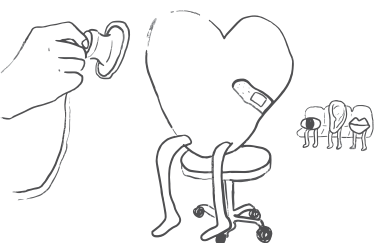


# Clinical Nutrition Services

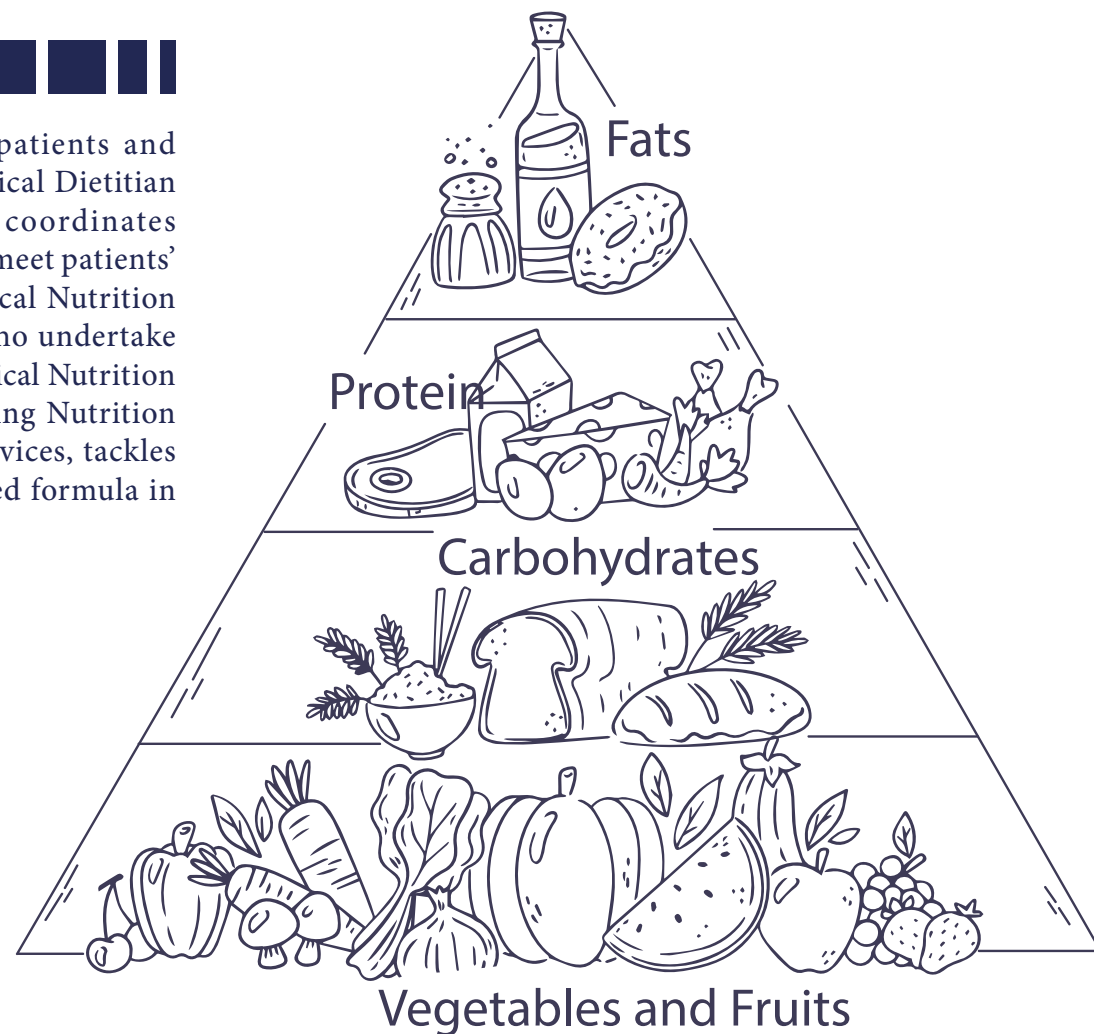
## Introduction:

Nutrition Services provides specific nutritional services for both inpatients and outpatients. A multidisciplinary healthcare team is comprised of the Clinical Dietitian and Specialty Dietitian Technician. A clinical dietitian frequently coordinates interactions between a doctor, a patient, and other healthcare provider. To meet patients' nutritional needs, clinical dietitians offer counseling and education. Clinical Nutrition Services provides guidance and oversight for staff, SCDPs, and trainees who undertake clinical nutrition research for evidence-based strategies and publication. Clinical Nutrition Services with the collaboration of Food Services Observing and monitoring Nutrition Formula stock and ordering required supplies, aside from distribution services, tackles errors, corrects them, and monitors the quality and safety of the prescribed formula in cooperation with logistics.

Don't get sick!



Monitor your health and signs of illness.



# Clinical Nutrition Services

King Abdulaziz Medical City – Riyadh

## Emphasize:

- Participated in 17 International Awareness Days with other departments, such as Breast Cancer Awareness Day, Stroke Awareness Week, and International Childhood Cancer Day.
- World Nutrition Day on 29 and 30 May 2023.
- Clinical Nutrition First International Conference from 21 – 23 November 2023.

## Achieve:

- Collaboration with Military Field Medicine Services to provide military students with nutrients that match their training.

## Provide :

- In KAMC, the number of patients who received Nutrition assessment was (6351) and received reassessment was (4638), which indicates that (41 %) have served patients, was visited with full service two to three times per admission.
- In KASCH, the number of patients who received Nutrition assessment was (3721) and received reassessment was (2847), which indicates that (76%) have served patients, was visited with full service two to three times per admission.
- The total number served by Clinical Nutrition Services is over 35000, which is 70% of the total admitted.
- 92% of high-risk patients have been provided nutrition assessments within 24 hours of referral.
- Total Number of Outpatient visits (13,166).

## Deliver:

- Several nutrition formula trials were conducted.
- Updated and implemented nutrition standards of care and nutrition practices.
- Launched the Aerodigestive Multidisciplinary Clinic.
- Assisted HIPEC Multidisciplinary Clinic 720 for Adult Medical Oncology.
- Pediatric celiac clinic 710 KASCH.
- Tube Feeding Clinic.
- Nutrition Formula Supply (Walk-in Clinic).

## Promote:

- Clinical Nutrition Services has educated 40 interns from COAMS and other universities.
- Accreditation for Clinical Nutrition Diploma Program for two years.
- (3) New devices for body composition analysis were approved, for outpatient and inpatient nutrition assessment under process with NUPCO.
- Approved one dietician as resource speaker for CGM and insulin pump workshops on November 30, 2023.
- Provided education and teaching for medical professionals (physicians and nurses).

## Implement :

- Supported the outpatient department of KASCH regarding the Clinical Dietician Solo Module in V-Clinics.
- Nutrition screening tools and nutrition daily monitoring have been updated and submitted to IT for deployment.
- Department statistics was built in Dashboard platform in order to obtain automated accurate data (Clinical Dietician Performance by case for In-Patient, Departmental Statics Dashboard, Dietician Assessment Documented, Nutrition Outpatient Visits and Nutrition Screening Done by Nurse.
- Modification of nutrition documentation in Bestcare to reflect KPIs on the dashboard.

## Daily habits to stay healthy



# Health Information Management

## Introduction:

Health Information Management is a support service whose primary purpose is to contribute to the quality of patient care through the development and maintenance of a comprehensive Medical Record System.

Services and functions shall be developed and implemented in such a way that confidentiality, privacy, and data security considerations are respected at all stages of gathering and processing the healthcare information.

The system shall also provide health information to support and promote the related goals and activities of the health care facility in the areas of education, training, research, facility management, and decision-making.





# Health Information Management

King Abdulaziz Medical City – Riyadh

## Implement:

- A platform has been created to provide the required information to the MNGHA end-users for the National Disease Registry, which was Establishment of based in Royal Decree No. 44897 dated 4/7/22/1441 AH, and the decision of the Saudi Health Council No. 3/8)17/7/1441 AH, which includes the approval of the national strategy for national health records, and directive from Chief Executive Officer of Health Affairs in Ministry of National Guard to facilitate obtaining the required information in the National Disease Registry for the following Diseases for all MNGHA facilities in all regions:
  1. Stroke.
  2. Diabetes Mellitus.
  3. Hearing Disability.
  4. Autism.
  5. Physical Disability.
  6. Birth Defects.
- The service of inputting IQAMA medical check-up through SEHA platform has been provided to the concern departments in MNGHA facilities in ALL regions.
- Sick Leave Forms have been integrated into SEHA Platform automatically for all MNGHA facilities. Patient sitter report has been added to SEHA Platform.
- Uploaded Maternity leave through SEHA platform has been provided for all MNGHA main hospitals in ALL region.
- The service of Pre-school check-up through SEHA platform has been provided for the concern departments in ALL MNGHA facilities in ALL regions.
- A Healthy Marriage Service has been provided to all MNGHA facilities in all regions and through that the results will automatically upload through SEHA Platform. HIM built up a special Dashboard for Healthy Marriage Service to follow-up the progress of work and to ensure that it is provided on time with high quality.



## Nursing Services

### Introduction:

The Nursing Services Department at the Ministry of National Guard Health Affairs has a diverse and talented workforce committed to providing exemplary care in a quaternary hospital setting with all specialties and is affiliated with a world-renowned academic research facility.

The Nursing Governance and Accountability Board and functions autonomously in relation to maintaining professional nursing standards and scope of practice while collaborating in partnership with medical and allied health leaders in the development of program-specific strategies, goals, policies, and standards of care govern the department.



# Nursing Services

King Abdulaziz Medical City – Riyadh

## Emphasize:

- Stroke Awareness, Geriatric Awareness, Asthma Awareness and Pulmonary disease Awareness and Sepsis Awareness Day-implementation of sepsis bundle in Protocol Wards.
- Patient Experience Week.
- Flu campaign.

## Achieve:

- Najran Mission and Soldiers evacuees via Medivac.
- Soldier Medics Up-skilling Program.
- Humanitarian Aid. King Salman Humanitarian Aid & Relief Centre in cooperation with MNGHA. supports medical missions outside of KSA. In 2023 to Nigeria and Yemen.

## Provide :

- ECC-Resus Neutropenia (Door to Antibiotic compliance of 28 mins. international standard is 60 mins.)
- HAPI incident rate = 0.21 per 1000 patient bed days (median =0.59) reduced from 0.76 HAPIs per 1000 bed days in Dec 2022.
- HAPI Prevalence rate = 4.42% in Q2 2023 – a reduction from 5.62% in Quarter 1 2003.
- In-patient falls rate per 1,000 patient days – 0.43%.
- Medication administration errors resulting in harm to the patient – 0.014% (3 out of 212 incidents where a medication reached the patient.
- Drug library – 98%, CLMA – 98.5% and CLSC – 99%.
- Pain Prevalence – 1st, 2nd, 3rd Quarter 2023 – 99%.
- Saudization rate including residents – 17.74%.
- COR – Ensure Correct Surgical Count – 100%.
- Ensure Correct Implants/Prosthesis – 100%.

## Deliver:

- Tracheostomy Dislodgement Simulation: Started August 2023.
- Citrate CRRT commenced in RICU February 2023.
- Stroke nurse activation in NCCU commenced September 2023.
- Inpatient Stroke code activation.
- Index trial- Precedex versus Placebo for patients on non-invasive ventilation.
- EPO Trauma patient Erythropoietin versus placebo by MICU nurse on all Trauma patients.
- Establishment of Infection Control Prevention Measures for Heart Transplant/ Lung Transplant patients.
- Provided Infusion suite service for Iron Infusion replacement for heart failure patient in CL 502.
- ROTEM- Point of Care Coagulation monitoring- in the MICU and GICU- measuring coagulation for determination of blood/colloids.
- Point of care testing for TROP-I.
- Patient Flow management.

## Implement:

- Nursing Flow sheet created in BestCare.
- CLMA for outpatient.
- Stroke patient educators have implemented the Stroke virtual follow –up clinic to improve the patient's adherence to medications and reinforcing patient education.
- QR Code Instruction for Specimen collection for Outpatient.
- Rapid access to SEPSIS Alert in Best Care.
- TransMedics OCS – organ care system used for safe transport for harvested heart and lungs.
- Penumbra System - for quick and effective clot removal in Cath Lab.
- Provided Virtual schooling for long-term paediatric patients.
- Establishment of Cardiac Nursing Education Platform – INSPIRE.

## Promote:

- Completed an upskilling program for 19 staff members in ACC/ Medical/Cardiac and Protocol clinics for the commissioning of Ward 5 as a new Surgical Unit with 16 beds operational.
- The Charge Nurse Development Workshop developed to provide a –in depth understanding of the role of a charge nurse and be able to integrate the basic leadership skill in clinical practice. CNC and SN1 of medical care conducted it twice this year.
- Completed INSPIRE- Lung Transplant Management Program – Pre, Intra, Post, ICU Management.
- 16 nurses trained for Nursing Led VV ECMO.
- Cardiovascular Technologist – training in collaboration with King Saud Bin Abdulaziz University for Health Science (KSAU-HS).
- Patient Care Technician (PCT) advancement program.
- Developed and approved Cardiac OR Cross training Program.
- OTAMU UPSKILLING 36 nurses trained in AU NPFC s7.
- Baxter Company has recently trained staff and Patient in Peritoneal dialysis in the use of the Claria automated dialysis machine in Haemodialysis KAMC.
- Haemodialysis staff training on the new Nipro Surdial dialysis machine and next will be the new Fresenius 6008 dialysis machine.
- Cellular Therapy Program (Foundation Accreditation for Cellular Therapy) – Successful.
- Chest X-ray interpretation program commenced September 2023.
- International Collaborative Program - lung transplant training program at Hospital Santa Marta, Lisboa, Portugal.



# Nursing Services

King Abdulaziz Medical City – King Abdullah Specialized Children's Hospital -Riyadh

## King Abdulaziz Medical City

### International Awards, Recognition, Contributions:

- First successful Total Artificial Heart (TAH) - SynCardia implantation – March 2023.
- Cardiac Cath Lab v2 Accreditation with PCI by American College of Cardiology (ACC).
- Nursing abstracts were accepted and published in the Middle East and North Africa Stroke Congress Publication in October 2023.

### National Awards, Recognition, Contributions:

- ECG Technician Training Program by Saudi Commission for Health Specialties (SCFHS).
- Re-accreditation for Cardiac Advance Diploma by SCFHS.
- Saudi Central Board for Accreditation of Healthcare Institution (CBAHI) re-accreditation – October 2023.
- EMS, Soldier Medics up-skilling Program.
- Saudi Emergency Nursing Diploma Program – Reaccreditation achieved for MNGHA Center.

## King Abdullah Specialized Children's Hospital

### Emphasize:

- High compliance rate in related to flu vaccine among health care providers.
- Participated with Respiratory department – International Respiratory Week.
- Nursing Champions for Pain, Patient Experience, CLABSI, Shaken Baby and No-Hit Zone.

### Achieve :

- Secondment of nursing staff to support military missions.

### Provide:

- PEWS/PRRT Trigger Tools.
- PRRT Indicators on DBIM.
- High compliance with sepsis alert in hematology unit, which had a vital impact on patient's status.
- Reduced Delay of Result of Cross Matching and Type and Screen for Same Day Admission Kidney Donor Transplant Patient.
- Rapid Access to highly integrated care SEPSIS Alert.
- ACC: Goals for the 4-week Access to Care Activity:
  1. All accepted referral has a preferred date of appointment first visit within 4 weeks.
  2. All accepted referral would have a fix date appointment (confirmed appointment).
  3. All accepted referral must receive appointment within 4 weeks (target is above 75%).
  4. Below is the statistic for October 2023 Diabetic Education Program.
- MEOWS (Modified Early Obstetric Warning Score) trigger tool successfully implemented in Q4 2022- Q1 2023 to help alert care providers of potential impending critical illness to improve maternal safety.
- The sustainability of the MEOWs (Modified Early Observation Warning Scoring) system enables the recognition and timely escalation of abnormal vital signs.
- The use of OTAS (Obstetric Triage and Acuity System) in GOTAMU allows the staff to prioritize patient care requirements
- The use of Canadian Triage Acuity System (CTAS) in GOTAMU allows the staff to prioritize patient care for gynaecological related and non-pregnant women.
- An increase in the percentage of staff nurses who are classified as Specialist.
- Shorten waiting time to improve patients' experience in chemotherapy infusion unit.
- Drug library achieved 95% compliance across KASCH ECC units to reduce risk of harm and used for medication, blood products etc. Omni cell- ADC reducing risk of medication errors.
- Reduced Transfer of Immediate Post-Operative Patient from PACU to Ward at King Abdullah Specialized Children's Hospital KASCH.
- Oncology AICU C55:
  1. Reduction of CLABSI incidents compared with last year.
  2. Increased compliance with surveillance of MRSA and Candida Auris.

### Deliver:

- Started the SDA Liver Donor.
- Gene Therapy, the first in the Kingdom.
- Z-Flo fluidized positioner to minimize and prevent HAPI.
- Pain Team Audited from BestCare pain screening on admission to Emergency Room in KASCH - average compliance rate is 99% for the last 12 months.
- PEWS – early recognition of the deteriorating child and early rescue to reduce increased admission to PICU and reduce risk of mortality and morbidity events.
- 90% of staff are able to care for antenatal, post-partum and gynae patients. This ensure manpower is utilized effectively.
- The provision of 100% compliance in 1:1 care for women during labour.
- Establishment of and based in L & D to provide an immediate response to neonates when clinical condition shows deterioration and attending physicians are not immediately present.
- Establishment of Home Health Care for Obstetric Patient and service expanded to all types of post-partum patient (with or without complications).
- Establishment of Quality Project aimed at Reducing Delirium in PICU.
- Guidelines on CRRT, Abdominal Pressure Monitoring, Guidelines on Gene Therapy, Guidelines on care of different types of Conjoined twins.
- Desferoxamine sub-cut Home Infusion Pump (reducing bed occupancy from 5 days to zero).
- Improved uptake for critical lifesaving vaccinations patients with Sick cell disease (SCD) via Nurse Lead clinic.
- First CAR-T Therapy Nursing Preceptorship Program in KSA for Adult patient.
- Oral Anti-Cancer Drug nurse led clinic.



# Nursing Services

King Abdulaziz Medical City – King Abdullah Specialized Children's Hospital -Riyadh

## Promote:

- PCT training program for first cohort
- Pediatric Surgical HUD up-skilling.
- Implemented Pediatric ICU focused up-skilling program for new staff and unit based individualized learning program – all Pediatric wards lead by PediSTEP.
- Rhythmic PN+ (mobilized IV pump) in order to shift one of chemotherapy treatment from in-patient to home infusion to reduce bed occupancy rate.
- PDA Scanner for close loop medication administration.
- Up-skilling programme in PACU for Pediatric Oncology and Hematology Patients Post Sedation Care.
- ECC: through training Saudi Nurse remains at the forefront of our work:
  1. ER Diploma (15 trainees 7 D1, 8 D2).
  2. Residency Program (2 residents).
  3. Saudization 17%.
- PCT Advancement program.
- Trained 90 nurses from NICU as Neonatal Code Blue Runner program.
- PEDI Step has successfully implemented parents/family Simulation Program for Gastrostomy. Care, Home TPN Program, Tracheostomy Care and Emergency CPR for specific patient groups.
- Pediatric fall prevention programs to reduce the risk of harm. ECC-KASCH achieved very low patient's falls compared to International Hospital for the same size.
- Centre for Nursing Education:
  1. LEAD in Nursing Initiative.
  2. Oncology Emergencies Workshop and Master Class in Basic Oncology Practices Workshop.
  3. Hematopoietic Stem Cell Transplant Course and Wound and Ostomy Care Course.

1. Peritoneal Dialysis Workshop: The Essential of Peritoneal Dialysis.
  2. Specialized Paediatric Nursing.
  3. Enhancing Communication.
- Oncology AICU C55: Up-skilling program (chronic vent forward nursing staff).
  - Lead ICN Nurses are trained/up-skilled to respond to neonatal code blue and to attend to all level 1 Elective Cesarean Section without the need to have a physician present.
  - Saudi Commission for Health Specialties accredited MNGHA-CR as a training for Advanced Nursing Practice Diploma in Neonatal Intensive Care.

## Implement:

- Implemented Centralized Monitoring of Patients under PRRT.
- Virtual family support for recently discharged GI patients.
- Electronic Pediatrics Physical Assessment implementation.
- Helpline Services for both Adult and Pediatric.

## International Awards, Recognition, Contributions:

- Abstract Poster Presentation during the 2023 ACS Quality and Safety Conference (10-13 July 2023) – Impact of a Same Day Admission project in Reducing the Pre-operative Bed Occupancy demand in Pediatric In-patient Hospital.
- Presentation by PediStep in Lisbon.
- An International Centre of Conjoined Twins Separation (from Middle East, Asia, Africa & Europe).
- FACT Accreditation for Cellular Therapy Program.
- Best Abstract Award received from the Emirates Critical Care Conference (04 Oct 2022).
- Saudi Commission for Health Specialties (SCFHS) Nursing Programs.

## National Awards, Recognition, Contributions:

- PEWS and PRRT implementation in all National Guard Hospital.
- Home TPN Program – Preparation to Discharge 8 TPN dependent patients were discharged home this year due to this program.
- Drug Library Program Completed for IVIG, Rituximab and Cyclic TPN. This initiative was adopted by all NGHHA Hospitals.
- 7 successful Twin Separation (Pre- and Post-Operative Care) – the highest number achieved since this program started.
- Successful Gene Therapy for SMA – The First in the Kingdom.



## Patient Services

### Introduction:

Patient services are one of the essential parts of the MNGHA hospitals, with its main function being to provide Saudi National Guard personnel, MNGHA employees, and their eligible dependents with the highest quality of healthcare service in all areas covered by patient services and continuous quality improvements.

### Achievements among MNGHA King Abdulaziz Medical City – Riyadh

#### Emphasize :

- Empower individual and communities to choose healthy behaviours. In addition, reduce the risk of developing chronic diseases and in primary prevention, a disorder is actually prevented from developing disease.

#### Implement:

- Establishment of file share PSD&REGISTRATION.

#### Deliver:

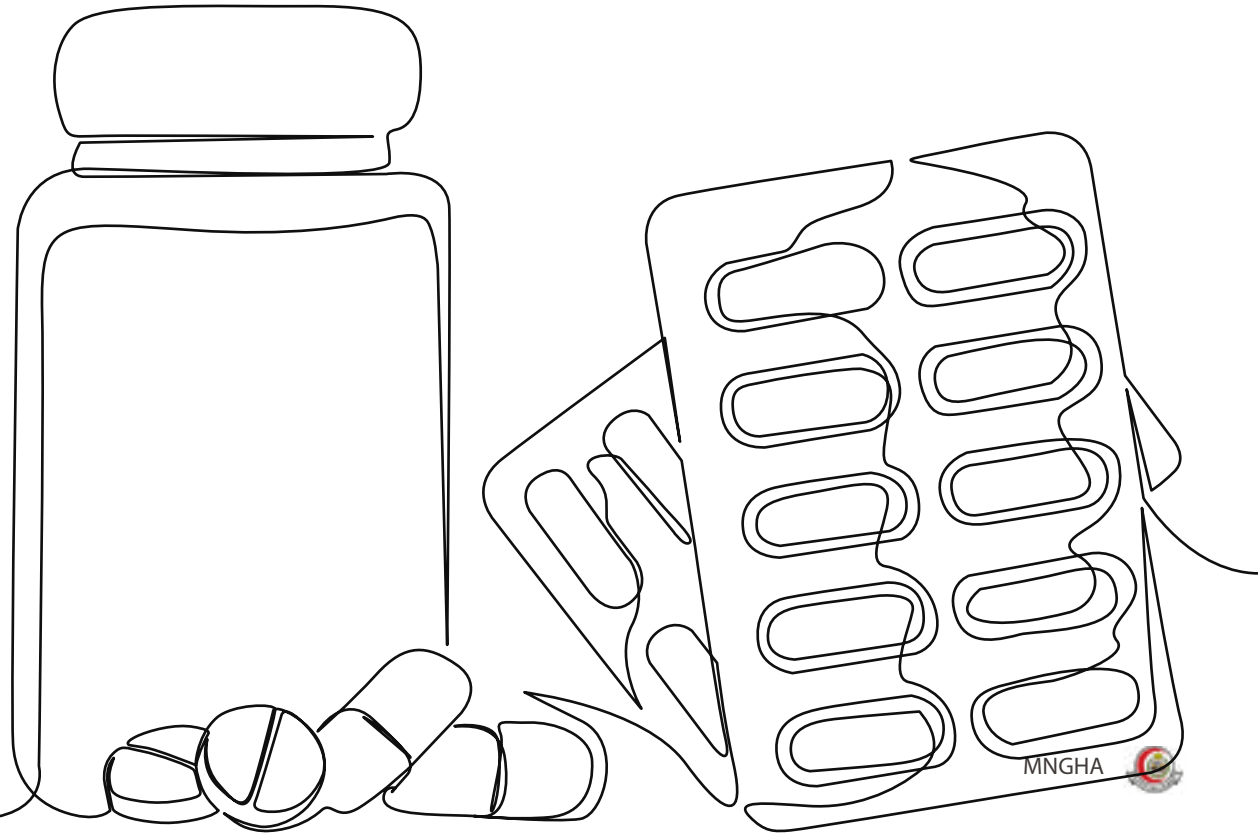
- Establishment of OPD Change Model First Visit Clinics.
- Centralized Scheduling Maintenance Section (continuous). The staff are now working for the clinic structures of KAMC, KASCH, Dental, HCSC, NGCSC, Prince Bader, Dirab, Iskan, Qadesia and WHH.



## Pharmaceutical Care Services

### Introduction:

Pharmaceutical Care Services provides comprehensive patient care through ambulatory care, decentralized inpatient care, and clinical pharmacy services. It offers a unique and extensive array of clinical and product services that are focused on providing quality care in accordance with CBAHI and JCI Standards.





# Pharmaceutical Care Services

King Abdulaziz Medical City – Riyadh

## Deliver:

- Monitored safety of prescription and report through Safety Reporting System (SRS).
- Monitored the quality level by exercising routine spot QI throughout the workflow within each Outpatient and Inpatient Pharmacy.
- Conducted an improvement project on the discharge medication dispensing process to find out what causes delays in medication dispensing and how to prevent patient discharge delays.
- Preparation and administration of the GEN Therapy medication ZOLGENSMA® (onasemnogene abeparvovec-xioi) which is highly expensive medication as the first health care institute to do it in the Kingdom of Saudi Arabia.

## Promote:

- Executed a training program, tracer activity, and presentation for all Pharmacy staff to ensure compliance with national and international standards.
- Minimized the round time by accumulative stock supply.
- Participated in Total Parenteral Nutrition home programs and Palliative Home Care programs.
- Conducted weekly Grand Rounds and clinical half day, activities/ lectures for all pharmacy staff to disseminate knowledge thru translational research and active learning strategies that improve behavior of clinicians and knowledge retention, to disseminate clinical advances and improve patient outcomes.

## Implement:

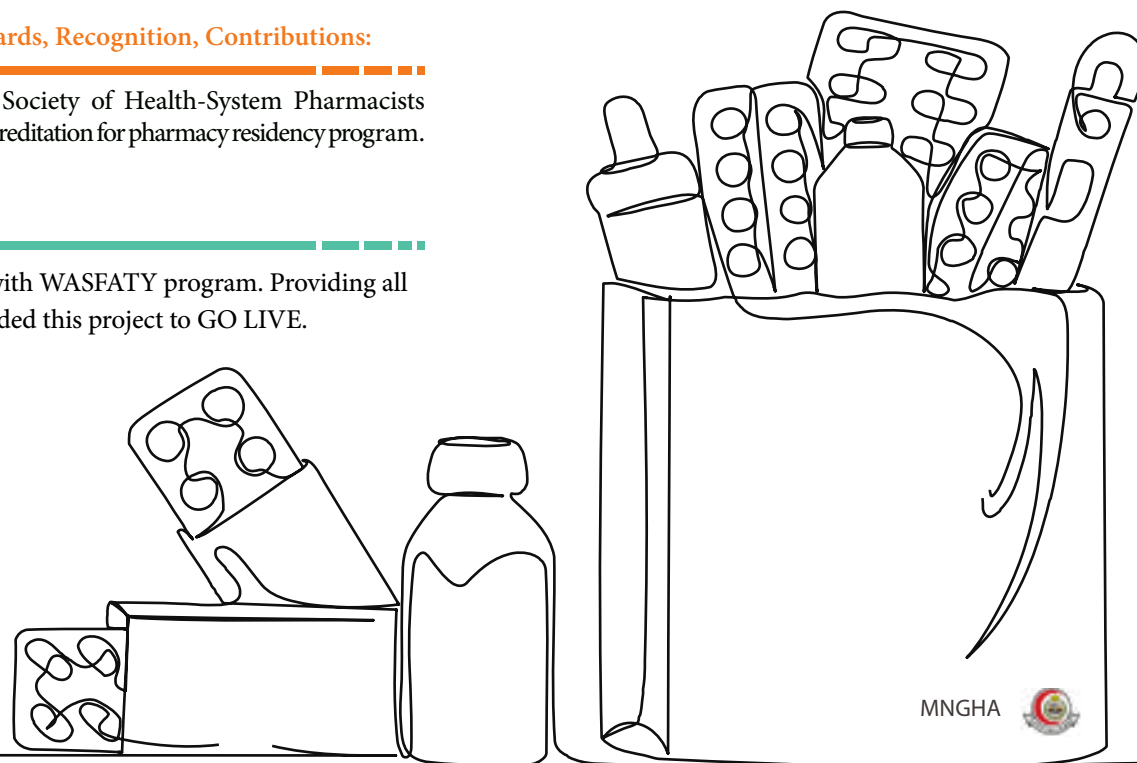
- Go live with Tele Health Virtual clinic and pharmacy services.
- Expanded the Inventory system.
- Defined a plan to Automate Non-Formulary medications requesting and processing procedures
- Quematic system Enhancement.
- Streamline Medication Refill (MD).
- ADCs (automatic /digital storage cabinet).
- Enhanced MNGHA Portal application and WeCare to order Refill medications.
- E-consent to hand over Narcotics and Psychotropic medications to the patient.

## International Awards, Recognition, Contributions:

- American Society of Health-System Pharmacists (ASHP) accreditation for pharmacy residency program.

## 2030 :

- Integrated with WASFATY program. Providing all support needed this project to GO LIVE.



MNGHA







الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGH-A

# Jeddah



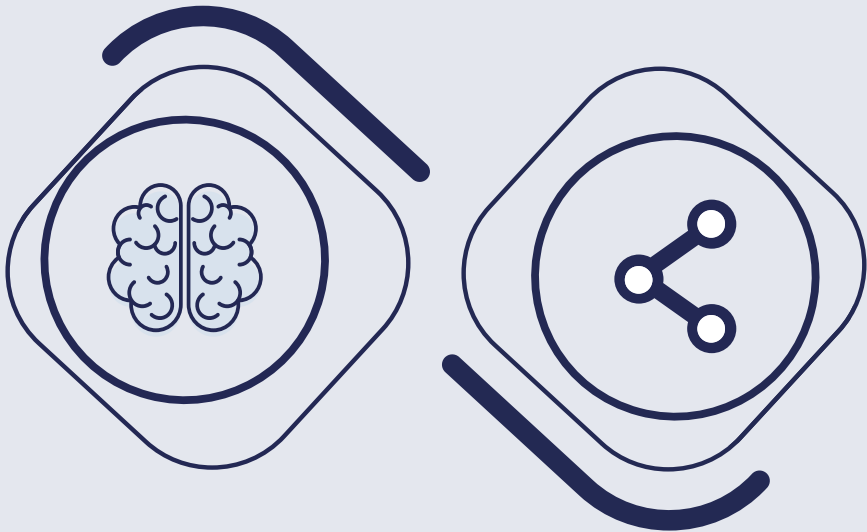


# KAMC-JEDDAH



## ACCESS TO CARE

Establishment of the New Emergency Department in the Neuro-Trauma Center .



King Faisal Cardiac Center have been integrated with red Crescent Authority in their STEMI Program.



# KAMC-JEDDAH



## SERVICE EXCELLENCE

Establishment of Allogeneic Bone Marrow Transplant services for Sickle Cell Disease.

CAR-T Cell therapy program , we were able to achieve a Total of 8 Lymphocytes collections with total of 6 successful final products infused with zero mortality.



The European Society of Medical Oncology (ESMO) had accredited Princess Nourah Oncology Center (PNOC) as designated Center of Integrated Oncology and Palliative Care during its annual meeting in Madrid. Spain.



Establishment of an outpatient stem cells collection service for both healthy donors and patients.



## KAMC-JEDDAH

### SERVICE EXCELLENCE

Achieved recognition for meritorious outcomes from the American Colleagues of Surgeon (ACS, NSQIP).

Establishment of Pediatric Rapid Response Team (PRRT) that is meant to provide a direct access to Critical Care 24 hours, 7 days a week.



Establishment of the Preoperative Care Center as multi-disciplinary preoperative one stop shop service.



Colorectal section reported the first stem cell use for anal fistula in the kingdom with promising outcome.





# KAMC-JEDDAH



## SERVICE EXCELLENCE

Achieved the highest volume of cases Surgical for the first time with more than 10,000 cases.



The Expansion of Corneal Transplant Surgery by performing 38 cases in a year.



Achiving 96 Robotic surgery cases after establishment of dedicated robotic operating room.



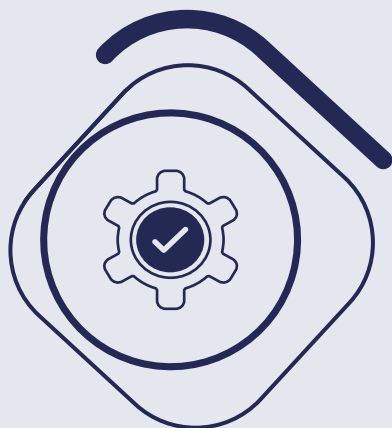
# KAMC-JEDDAH

## DIGITAL HEALTH

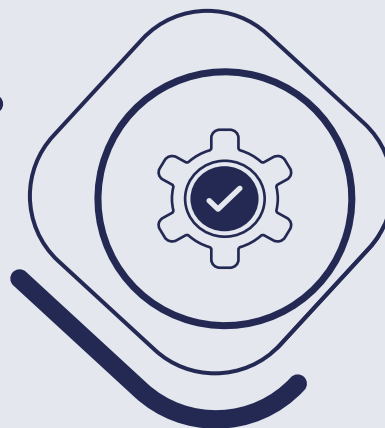
The establishment of Zyarati Videoconferencing facility.

Upgraded the MEWS scoring system to NEWS 2 scoring system.

Electronic Inspection System powered by (FMSRAD)



Utilization of Virtual Clinics (Endocrinology, Dermatology, Nephrologyhas, Health Education, Clinical Nutrition and Endocrine.)



Establishment of the virtual pharmacy service in the ambulatory care center by processing and delivering medications through the home delivery contract integrated with VC services.





الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Medical Services

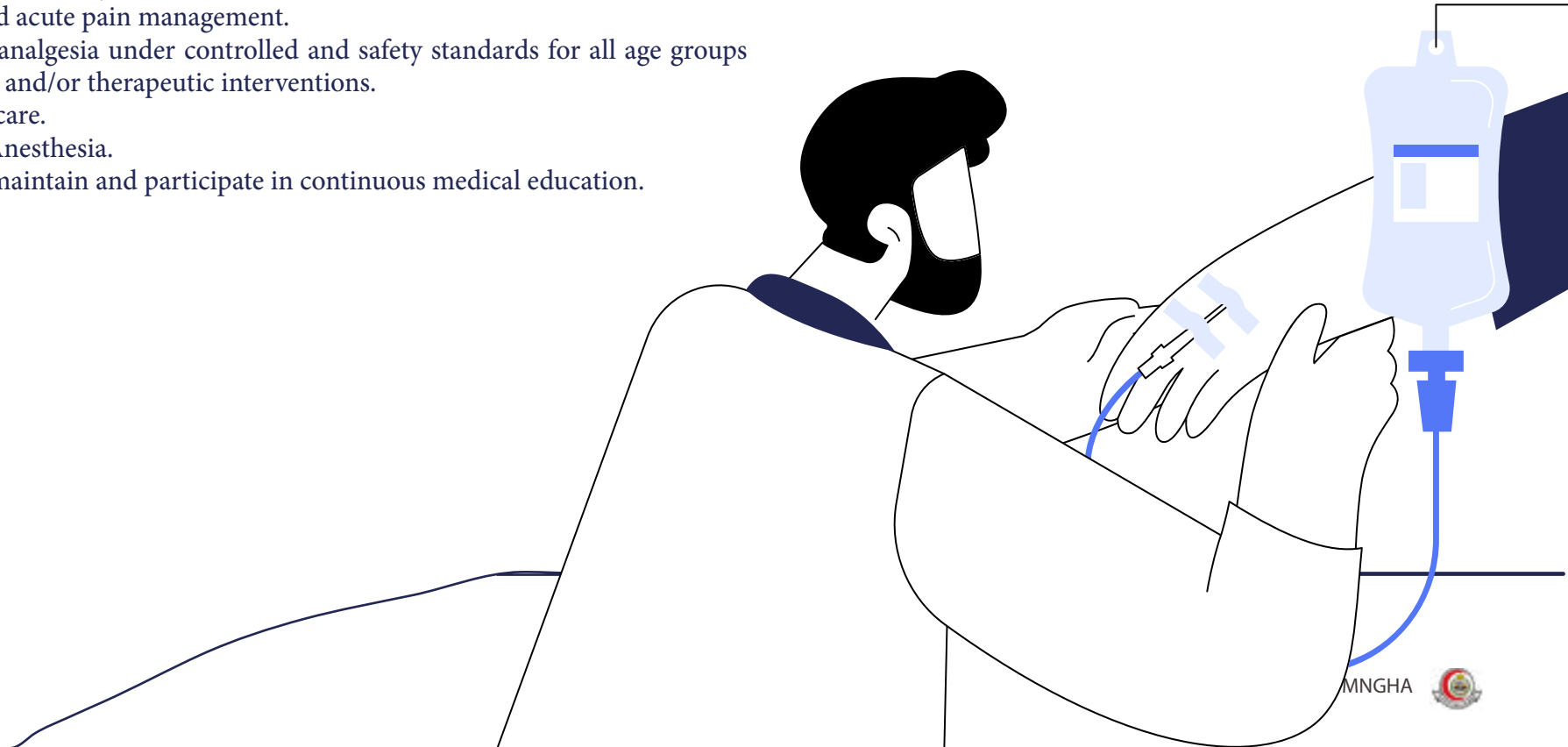


# Anesthesia Department

## Introduction:

The Anesthesia Department is committed to provide the highest possible standards of care for all patients presenting for anesthetic services at the National Guard (NG) - King Abdulaziz Medical City (KAMC), Neuro Sciences Center, & King Abdullah Specialized Children Hospital (KASCH) - Western Region (WR). This includes but not limited to:

- Preoperative assessment and consultation.
- Perioperative care, starting from monitored anesthesia care towards providing general anesthesia under standard safety measures.
- Post-operative care and acute pain management.
- Provision of sedation/analgesia under controlled and safety standards for all age groups undergoing diagnostic and/or therapeutic interventions.
- Acute & Chronic pain care.
- Specialized Pediatric Anesthesia.
- Encourage all staff to maintain and participate in continuous medical education.





## Anesthesia Department

King Abdulaziz Medical City- Jeddah

### Emphasize:

- Hosted over the years the Anesthesia Public Awareness Day, which has been successful in reaching the public and having popular impact nationwide.

### Promote:

- Successfully covered and Establishment of teaching and curriculum for CAMS-J Anesthesia Technology Bachelor Degree Program.
- Achieved SCFHS accreditation for Pain and Pediatric Fellowships training program and we are the only Center in the Western region to be fully accredited for Anesthesia Saudi Board training.
- Establishment of Anesthesia KPI dashboard at the corporate level.
- New PCA & Epidural Pumps.

### Deliver:

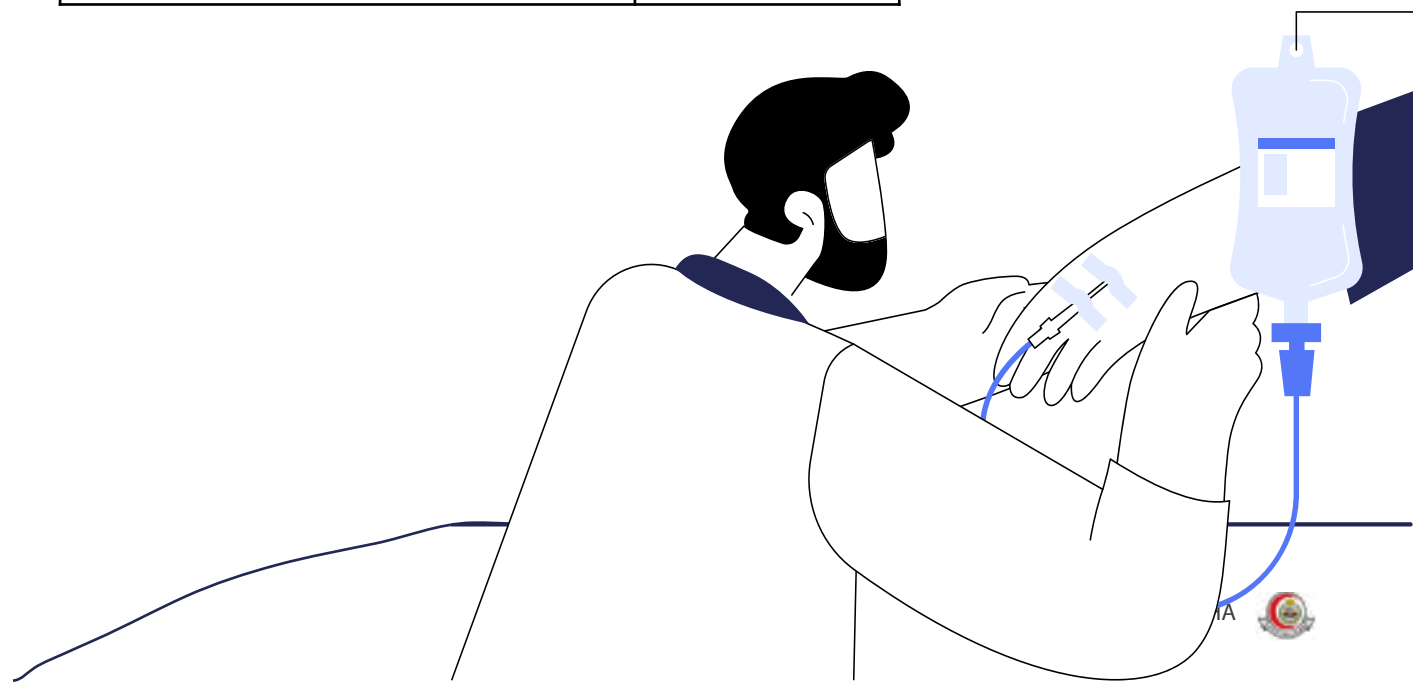
- Reached more than 10,000 anesthetics per year for O.R. services and outside O.R. services.
- Performed ultrasound blocks with a high volume on daily basis for pain patients acute and chronic.
- Less than 1% of major Morbidity& Mortality.

### Implement:

- Upgraded intraoperative Anesthesia Centricity software and Anesthesia Pyxis Machines.

### Statistical Information:

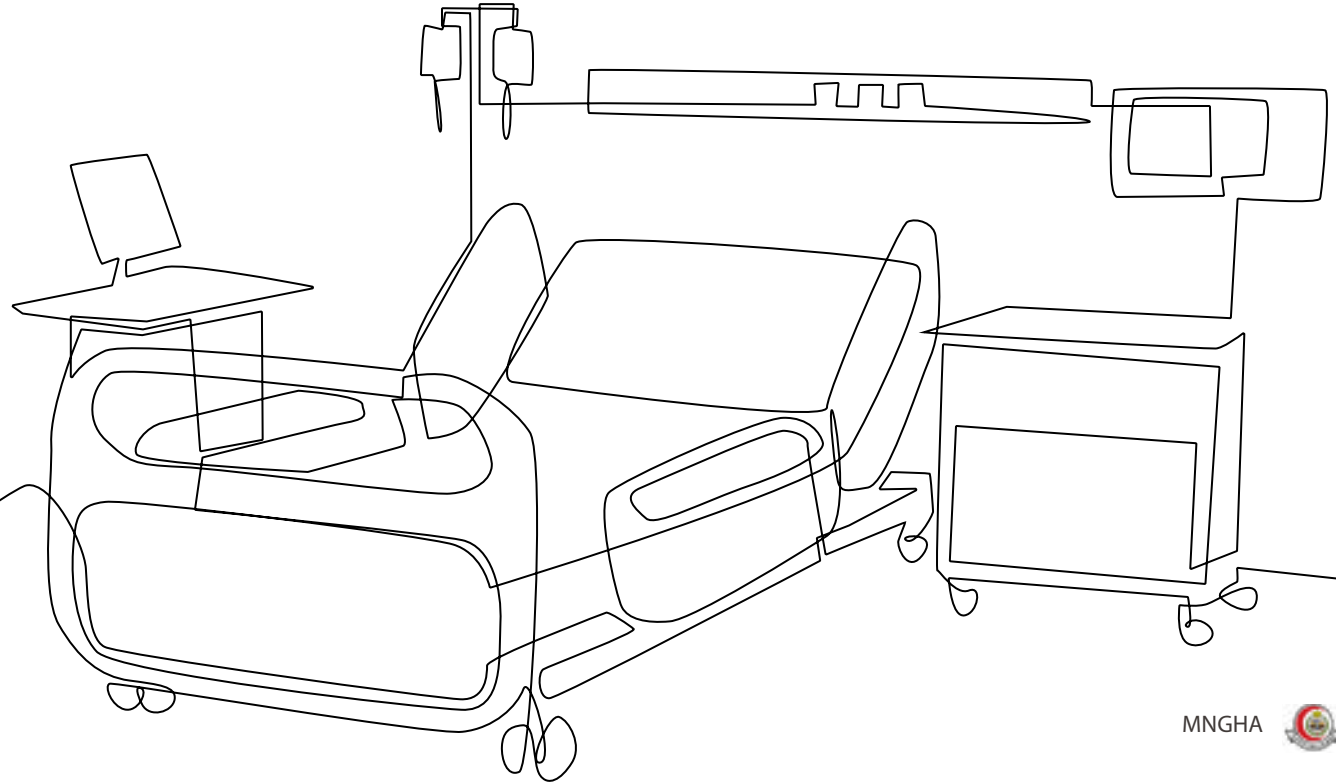
|  |       |
|--|-------|
| Total number of Surgical Cases in 2023:            | 9,869 |
| Total Outside Services Cases Done in 2023:         | 2,087 |
| Total number Patients Seen in PAC in 2023:         | 9,641 |
| Total number Inpatient Consultations in 2023:      | 3,032 |
| Total number Pain Procedures in 2023:              | 768   |
| Total number Pain Inpatient Consultations in 2023: | 369   |
| Total number Pain Clinic in 2023:                  | 2,538 |
| Total number Acute Pain Care in 2023:              | 353   |



# Bed Management

## Introduction:

Bed Management Department is leading a collaborative process of assessment, planning, facilitation and care coordination to meet individual patients/families' needs through a comprehensive communication with different departments and services to promote a cost-effective discharge process while maintaining high quality standards of clinical care. Three sections under the department (Admission Services, Case Management, and Medical Coordination).



# Bed Management

King Abdulaziz Medical City– Jeddah

## Emphasize:

- Performed rounds for the non-critical inpatient areas by Bed Management's Leadership to attend the family meetings with the assigned case managers to conduct the awareness program of the patient flow and safe discharges.

## Provide:

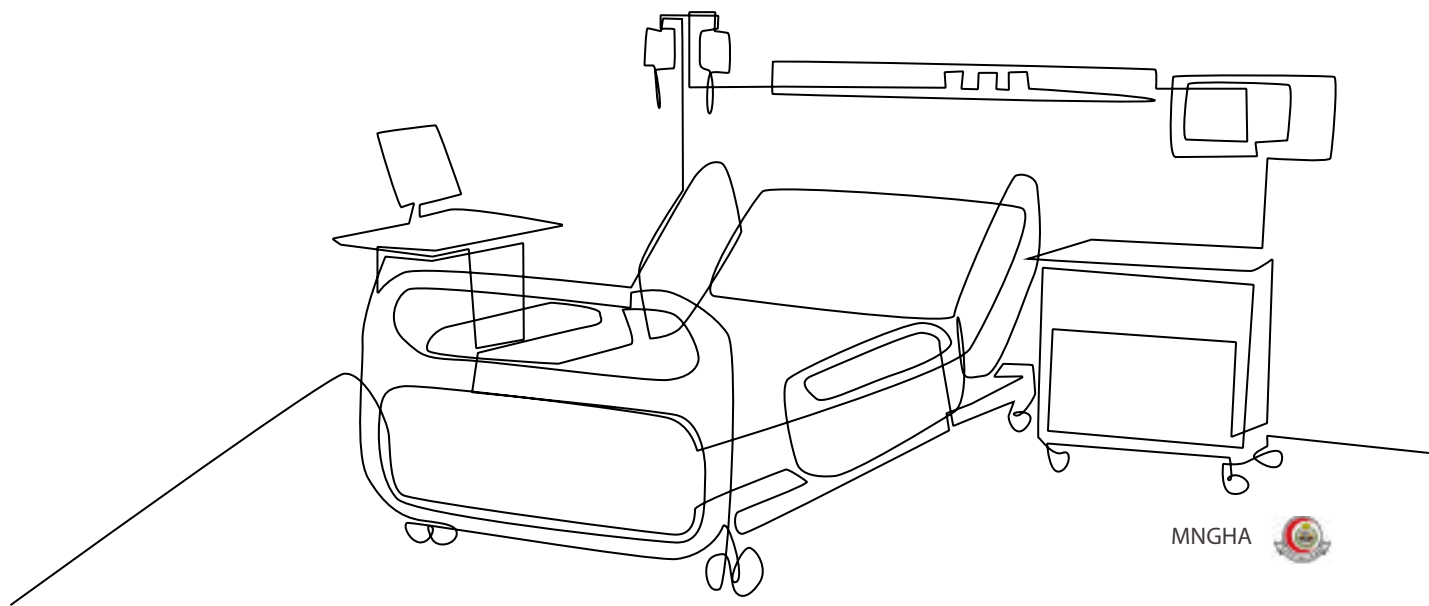
- Creation Admission Unit (TAU), thus (6) Isolation rooms utilized as an extension for ER beds, reduce the ER patients' waiting time.

## Deliver:

- Transferred NG patients and their dependents to the Chronic Care Medical Specialist Hospital (CCSMH) and provide medical services for them when they transfer back to the KAMC-JD.

## Implement:

- Supported the MOH EAHALTY SYSTEM to transfer non-NG patients to other MOH facilities by the action of the Medical Coordination and Advanced Case Management Program.
- Created New E-Services, this Application to govern the ambulance requests by Nursing and Case Managers for the dischargeable patients via the Emergency Medical Services (EMS).
- The "Bed Management free text SMS services" covered this point.
- The Medical Equipment Dispensing Unit (MEDU) System.
- Created unified ECTS for all medical equipment requests governed by Bed Management to reach paperless purpose, saving time, reduce redundancies, and effective tracking process.

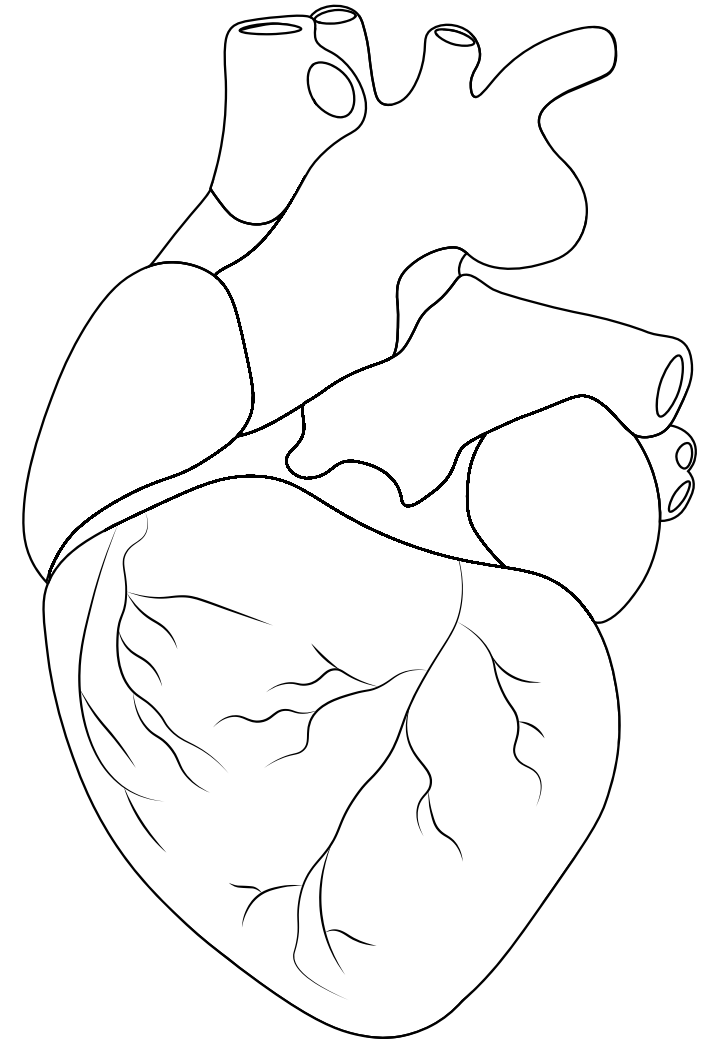


## Cardiac Sciences

### Introduction:

Cardiac Sciences provides comprehensive cardiac care for adult and pediatric patients. Committed to providing the highest quality care for patients and their relatives in professional, safe, efficient and teamwork environment.

In order to be a Global Leader in transformational cardiac surgical care by integrating excellence in clinical care, teaching, research and innovation.



## Cardiac Sciences

King Abdulaziz Medical City- Jeddah

### Emphasize:

- World Heart Day Awareness Campaign.
- Awareness, educating the community on the importance of early detection of heart disease and heart failure specifically, and ways of prevention and management, including lifestyle modification and early treatment, which has an effective role in improving individual's health and quality of life.
- Introduced the advanced health and medical services available at the King Faisal Cardiac Center and introducing their distinguished results.
- All units in the King Faisal Cardiac Center such as: Diagnostic Heart Tests, Cardiac Catheterization Lab, Cardiac Surgery Department and Pediatric Cardiology Department: to raise awareness and educate about all diagnostic and treatment methods offered to heart failure patients.

### Implement:

- Ehalaty System to improve the volume of patients in cardiac service Patients who applied for a medical treatment to cardiac services is directly communicated with the KFCC Clinical Coordinators who will process such request in order that timely care for our patient is provided.
- PROGRAMS: Structural / EP, Full TAVI Platform.

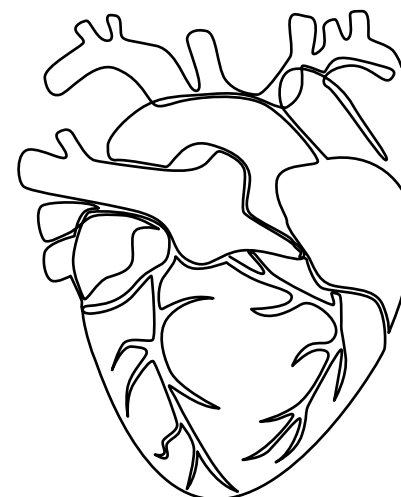
### Deliver:

- Allocated Consultation Clinic in OPD services to provide services to the new patients with the most functional module.

- King Faisal Cardiac Center was chosen to be the first complex atrial fibrillation-training center in the Kingdom, to commence on Dec 2023.
- NEW TECHNOLOGIES/MACHINES:
  - Adult Cardiology:
    1. Pascal Mitraclip.
    2. LBBB Pacing procedure .
    3. The following procedures were performed first time in King Faisal Cardiac Center and first in the Middle East.
      - Epicardial Brugada Syndrome and long QT Ablation.
      - Epicardial Atrial Fibrillation Ablation.
  - Cardiac Surgery :
    1. Use of MCS in MCCU /ACICU.
    2. Minimal invasive procedures.
- PROGRAMS:
  - Adult Cardiology:
    1. CTO PCI Program.
    2. Renal Denervation Program.
  - Structural / EP:
    - PV Percutaneous Intervention
    - LAA Closure Program
    - AF Cryoablation Program
    - Pulse field pacing program
    - TV Percutaneous Intervention
  - Cardiac Surgery:
    - ECMO Program
    - Cardiac Robotic Surgeries
  - Cardiac Rehabilitation Program: Cardiac rehabilitation (CR) is a cornerstone in the secondary prevention of CVD. CR improves exercise capacity, quality of life, and psychological well-being, in addition to reducing mortality, morbidity, and hospital readmissions.

### International& National awards, recognition, contributions:

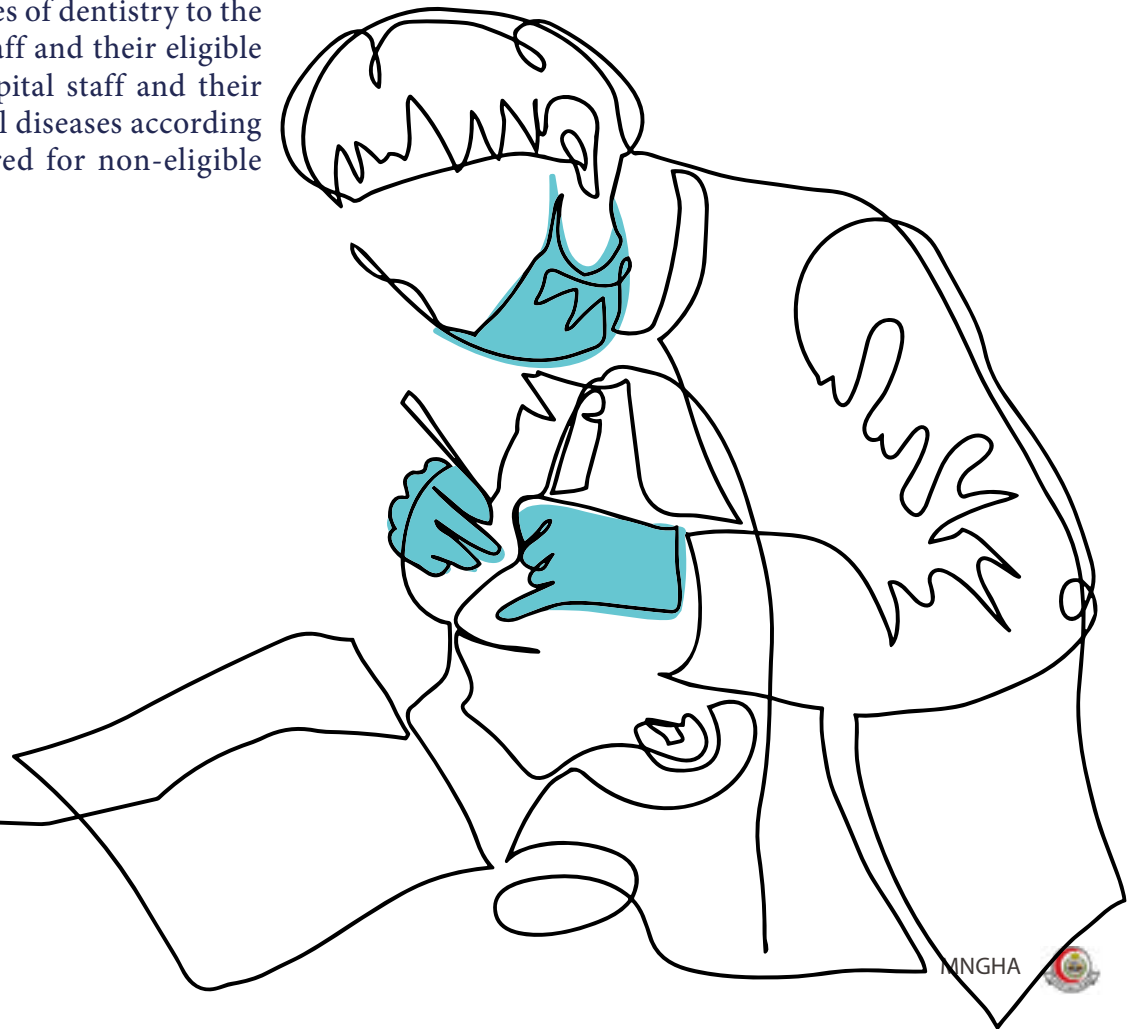
- Gulf Arrhythmia Congress by Saudi Heart Rhythm Society 24-25 February 2023.
- Annual Cardio Masters Meeting 16-17 February 2023, Abu Dhabi, UAE.
- Participated in King Faisal Cardiac Center during the second Annual National Heart Forum.
- KAUST – Research: Predictors of Outcomes After Coronary Artery Bypass Grafting: The Effect of Concomitant Mitral Repair. Computer-aided detection and diagnosis of atherosclerosis using signal processing and artificial intelligence methods. Dehydration monitoring using a smartphone and a smart watch.
- Selection of C26 Cardiac Ward, KFCC as the best hospital ward and highest evaluation in the patient satisfaction survey during first half 2023- recognized by MNGHA higher administration.



## Dental Services

### Introduction:

The Dental Services Department at MNGHA-Jeddah delivers all phases of dentistry to the National Guardsmen and their eligible dependents, Saudi hospital staff and their eligible dependents, as well as emergency dental services to non-Saudi hospital staff and their eligible dependents. Primary dental care is also offered for exceptional diseases according to CEO directive. Private Fee-for-Service Dental Services are offered for non-eligible patients outside National Guard working hours.



## King Abdulaziz Medical City- Jeddah

- Dental Department provided a Prevention Programs For:

- ### Deliver:

- ### Statistical Information (from January to December 2023):PATIENT VISITS, KAMC-J WR

## OPERATING ROOM ACTIVITIES

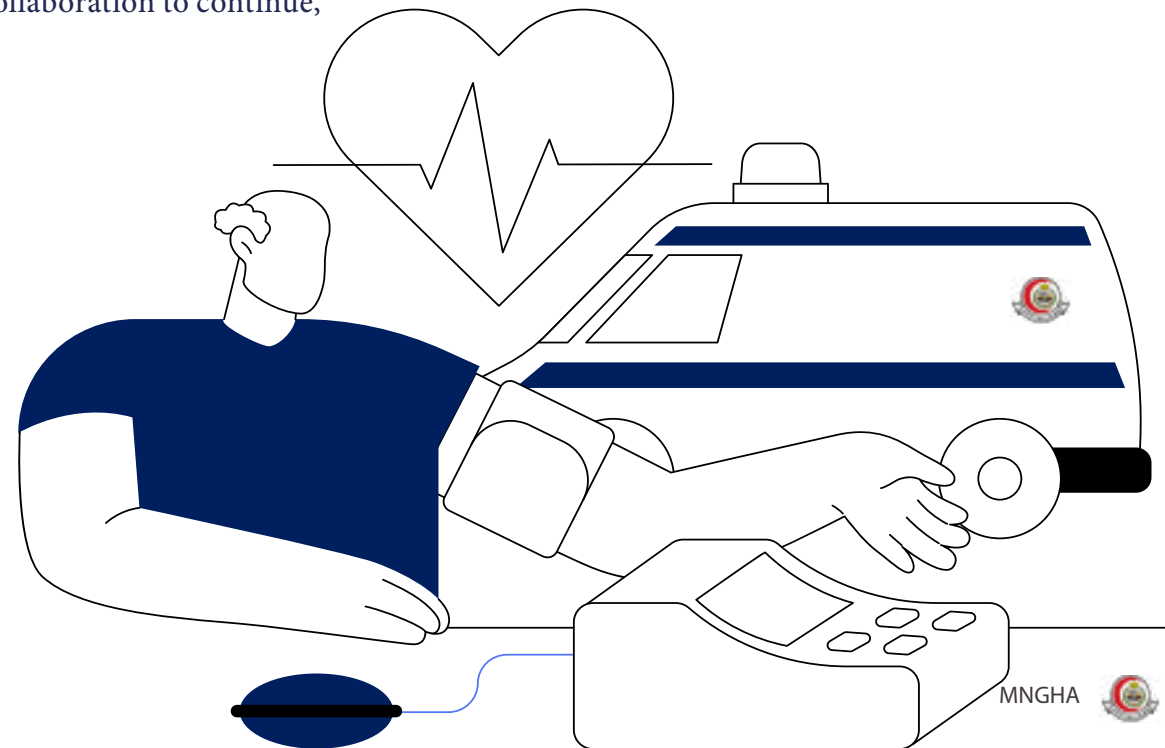
| O R                              | 2023  |
|----------------------------------|-------|
| Appted Patients                  | 1,151 |
| Appted Patients Seen             | 921   |
| Appted Patients DNA<br>&CANCELED | 230   |
| EMG / Walk-in Patients           | 3     |
| TOTAL PATIENTS SEEN              | 924   |



# Emergency Medicine

## Introduction:

The Department of Emergency Medicine in King Abdulaziz Medical City—Jeddah is a 41 beds department operating 24/7 with a mission to provide timely and state-of-the-art emergency care for National Guard employees, their-families, and any critically ill or injured patient in need of urgent intervention. We are dedicated to improving the outcomes of acutely ill and injured patients through high-quality, evidence-based, and cost-efficient care. More so, high-level education and research. We have taken giant steps in the area of quality improvement and quality interactions with our patients and are still making headway towards excellence. We are working closely together in collaboration to continue, improve, and maintain our achievements.





# Emergency Medicine

King Abdulaziz Medical City– Jeddah

## Emphasize:

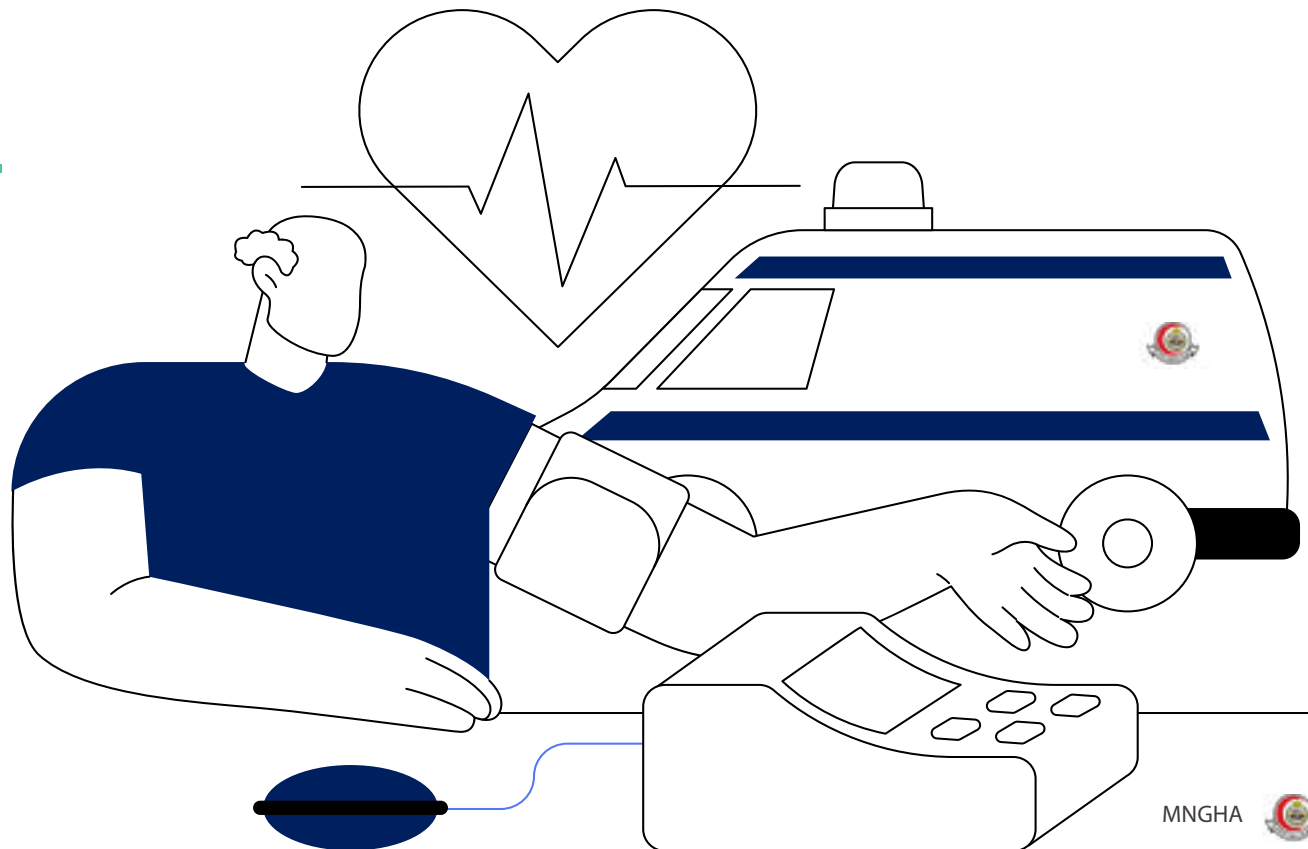
- Flu Vaccination lead by ED nursing.

## Provide:

- Dedicated Paediatric Beds in the ED (expedited flow and more experienced nurses in Peds).
- Fast Track area initiation and expansion to minimize delays in care of lower acuity patients.
- More than 1200 patients were transferred from the MNGHA to their homes.
- Re-Establishment of RESP Unit to serve Infectious patients.

## Promote:

- Introductory Crash Course for new residents held in KFAFH sim lab.
- Well-Being Workshop. EM Procedure Workshop. Ethics Workshop. Critical Appraisal Workshop. The Art of Consultation Workshop. ED Quality and Patient Safety course.



## Family Medicine & Primary Healthcare Centers

### Introduction:

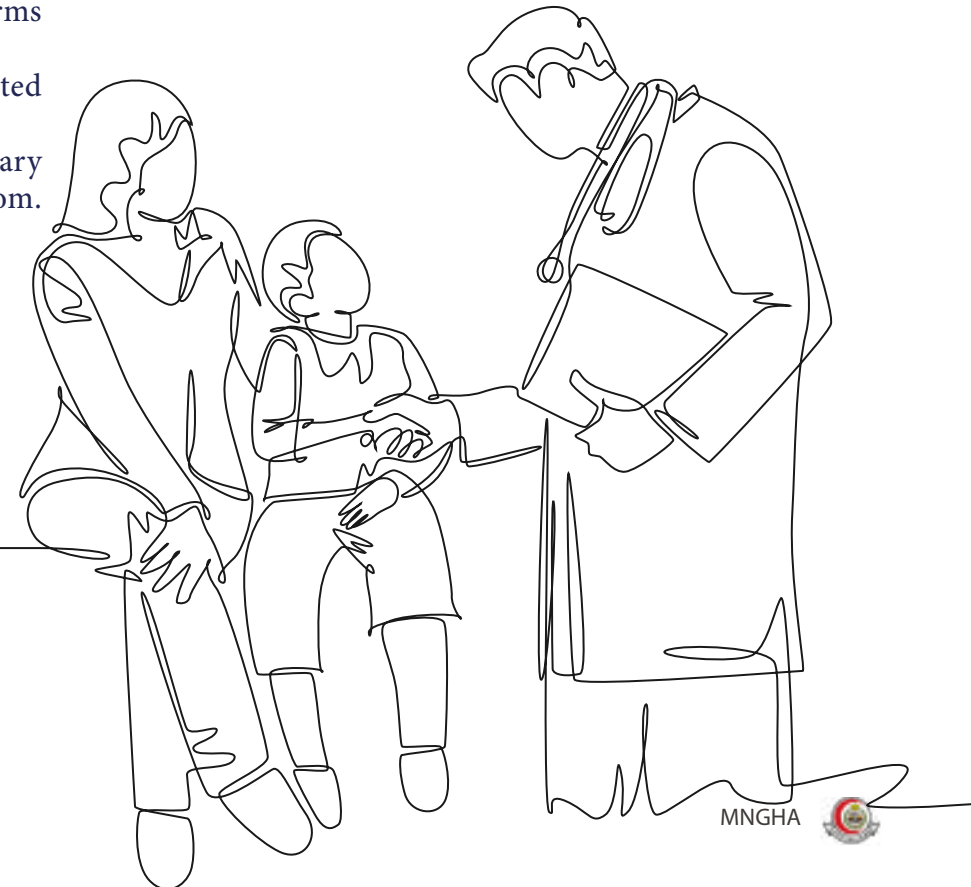
The Family and Community Medicine Department, Western Region (F&CM-WR) includes two main specialties:

- Family Medicine and Preventive Medicine and Public Health.

These two specialties provide a range of promotive, preventive, curative, and rehabilitative services to the National Guard population. They also share four unique features in terms of the characteristics of care provided to the patients:

- Continuous Care, Comprehensive Care, Integrated Care and Community Oriented Healthcare.

These services are provided through several Family and Community Medicine Primary Health Care (PHC) Centers and Clinics distributed over the Western Region of the Kingdom.



# Family Medicine & Primary Healthcare Centers

King Abdulaziz Medical City- Jeddah

## Emphasize:

- Conducted various Health Promotion activities within PHCs, schools, and Military Battalions.

## Achieve:

- A community-based medical check-up program for military personnel in the Western Region was implemented. Dedicated to promoting preventive health and facilitating referrals to Lifestyle clinics, Family Medicine clinics, Smoking Cessation clinics, and Chronic Disease clinics.

## Deliver:

- In collaboration with KAMC (Oncology Center), an Early Detection clinic was Establishment of in PHC, which is run by Family physicians.
- Each diabetic patient has an annual plan of care with virtual appointments with Chronic Disease clinics, Dietitians, Health Educators, and Lifestyle clinics, in addition to creating scholarship opportunities.

## Promote:

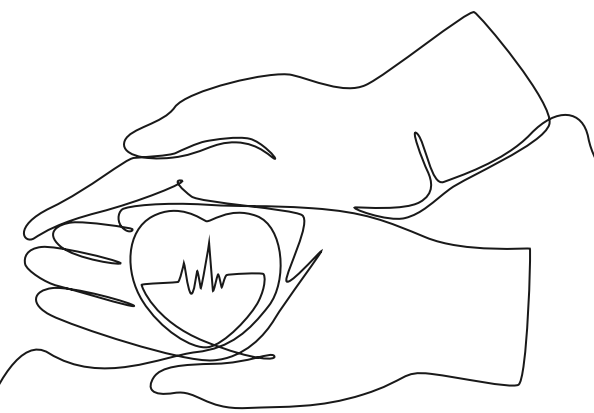
- Two scholarships have been created in the department namely Mental Health and Woman Health.
- Preventive Medicine accredited as a full independent training program by the Saudi Commission for Health Specialties.
- Family Medicine residency training program increased its capacity to accommodate 19 new candidates annually.

## Implement:

- Virtual Care clinics have been activated in all PHC centers in the Western Region that provide medical services via audiovisual communications.

## Statistical Information:

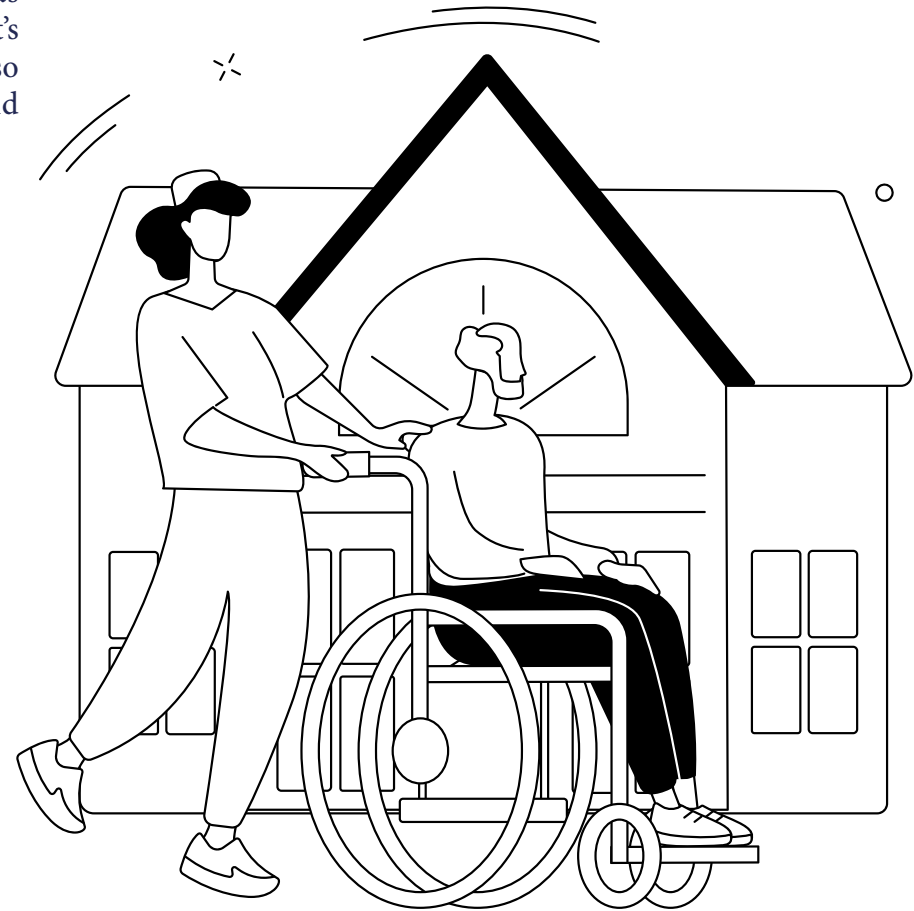
| PHC CENTERS                              | Type of clinics | # Visits | % No Show | % Referral |
|--|-----------------|----------|-----------|------------|
| Specialized Polyclinics (Khozam Clinics) | Regular         | 80,685   | 24%       | 13%        |
|  | Virtual         | 16,379   | 24%       |            |
|  | Dental          | 15,596   | 2%        |            |
|  | Total           | 112,660  | 21%       |            |
| Bahra Clinics                            | Regular         | 32,541   | 30%       | 12%        |
|  | Virtual         | 6,774    | 30%       |            |
|  | Dental          | 4,083    | 3%        |            |
|  | Total           | 43,398   | 28%       |            |
| Sharaie Clinics                          | Regular         | 28,792   | 15%       | 11%        |
|  | Virtual         | 3,021    | 7%        |            |
|  | Dental          | 2,301    | 4%        |            |
|  | Total           | 34,114   | 13%       |            |
| Iskan Jeddah Clinics                     | Regular         | 16,948   | 20%       | 9%         |
|  | Virtual         | 443      | 25%       |            |
|  | Dental          | 2,603    | 1%        |            |
|  | Afterhours      | 26,670   |           |            |
| Taif Clinics                             | Total           | 46,664   | 18%       | 5%         |
|  | Regular         | 39,479   | 25%       |            |
|  | Virtual         | 3,946    | 20%       |            |
|  | Dental          | 5,408    | 1%        |            |
| Jizan Clinics                            | Afterhours      | 20,366   |           | 8%         |
|  | Total           | 69,199   | 21%       |            |
|  | Regular         | 2,885    | 6%        |            |
|  | Dental          | 556      | 3%        |            |
| Employee Health Clinics                  | Total           | 3,441    | 5%        | N/A        |
|  | Regular         |          |           |            |
| KSAUHS- Clinics                          | Total           | 27,150   | 7%        | N/A        |
|  | Regular         |          |           |            |
| Umalsalam Clinics                        | Total           | 14,676   | 8%        | N/A        |
|  | Regular         |          |           |            |
| NG Training Centre                       | Total           | 1,813    | 0%        | N/A        |
|  | Regular         |          |           |            |
| Grand total                              |                 | 3030     | 1%        | N/A        |
|  |                 | 356,145  | 19%       | 10%        |



## Home Health Care

### Introduction:

The Home Health Care Program is a hospital-based, community program, which was Establishment of to facilitate discharges from the hospital and for continuation of patient's care. It was developed to include as goals, not only to decrease hospital length of stay but also to reduce patient's visits to E.R., re-admission to hospital, visits to outpatient clinics and laboratories and also as an alternative to hospitalization, i.e., palliative care and IV therapy.



## Home Health Care

King Abdulaziz Medical City– Jeddah

### Emphasize:

- Implemented INR (blood co-agulation) morning at home (point of care).
- Initiated new services nutrition follow up in community.

### Statistical Information:

Total No. Of referrals: **619**

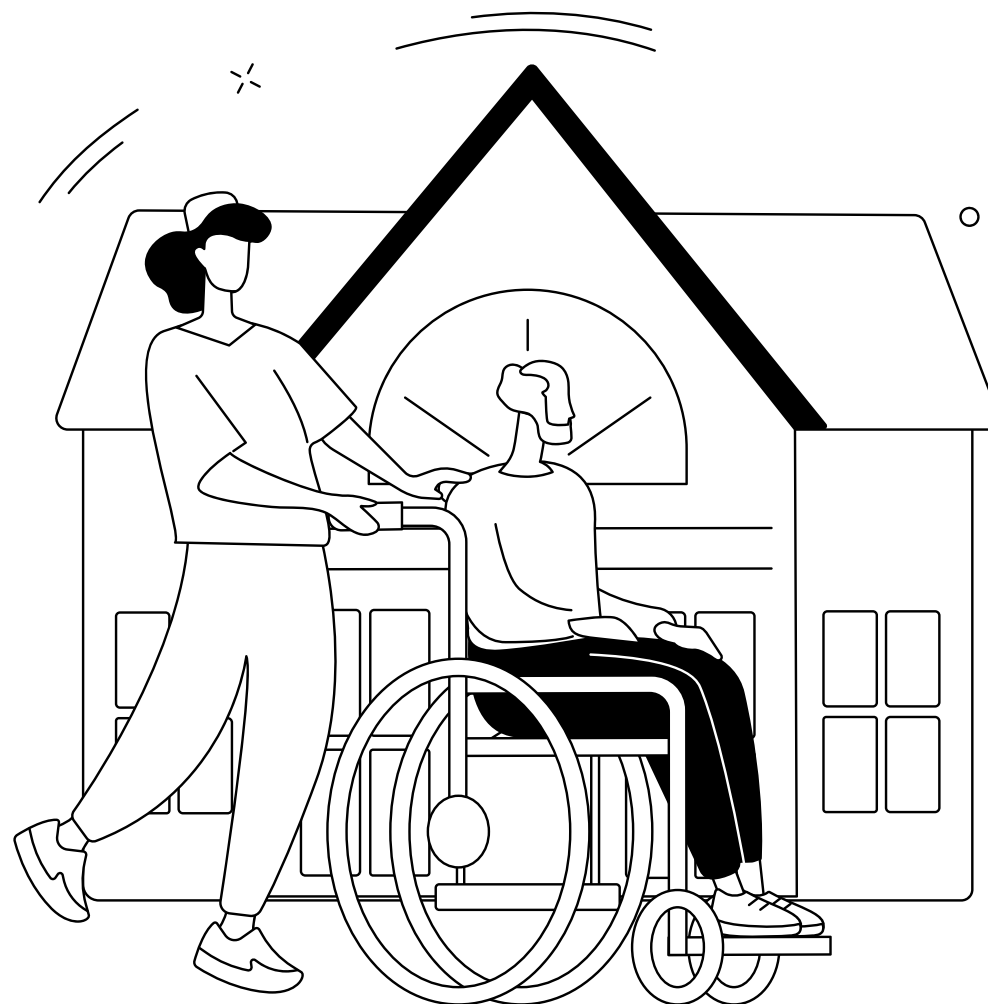
General: **465**

IV Antibiotics: **71**

Palliative: **73**

b) Home Health Care Visits/ Services:

| Services                          | Numbers |
|-----------------------------------|---------|
| - Wound care                      | 3400    |
| - IV Antibiotics                  | 2282    |
| - Palliative                      | 409     |
| - Respiratory care                | 592     |
| - Urinary bladder care            | 509     |
| - Pain management                 | 134     |
| - Physiotherapy                   | 736     |
| - Blood Extractions               | 4200    |
| - Diabetic teaching               | 498     |
| - Diet Counselling (Nut F/U)      | 166     |
| - General Health Education        | 6567    |
| - Social Assessment               | 176     |
| Total Number of visits/Services   | 19493   |
| Total Number of Telehealth Clinic | 563     |



## Intensive Care Unit (ICU)

### Introduction:

Our mission statement is: “To provide the highest possible standards of medical, nursing, and respiratory therapy care for all adult patients (14 years of age and over) requiring critical care services during their clinical course at the King Abdulaziz Medical City KAMC-WR.

While adopting the closed system of operation, the department fosters a multidisciplinary approach and prompts a concurrent & multidisciplinary care atmosphere to provide a wide spectrum of patients’ care allowing new and updated measures and therapeutics.

The department is also, committed to provide a full education opportunity to all trainees (Residents, Fellows & Interns) in the Saudi specialized program (in critical care program or rotating from other programs) and thrives to create a suitable research community in the related fields.”

Our vision statement is “To be widely recognized for innovation and excellent in clinical care, education and research in Critical Care Medicine. To provide an enriching environment for our employees and an exceptional health care experience for our patients and their families.”  
The department has 4 Units: ICU 1, ICU 2, ICU 3 and ICU 4.



# Intensive Care Unit (ICU)

King Abdulaziz Medical City– Jeddah

## Provide:

- By utilizing interventional radiology services properly in 2023, procedure cancellations were reduced to zero.

## Promote:

- ICU Point of Care (POCUS) Program: To improve the Competency and standardize the training program as part of SCFHS.

## Implement:

- ICU Simulation Project: The project is an artificial representation of the real- world to achieve educational goals through experiential learning.

## Deliver:

- The percentage of readmission to the ICU within 48 hours of transfer to other wards is 2.17%, which is significantly less than the international benchmark ratio of 7.78%.
- Implemented CAUTI Bundle to reduce Catheter associated urinary tract infection.
- Implemented CLABSI Bundle to reduce Central Line associated bloodstream infections.

## International awards, recognition, contributions:

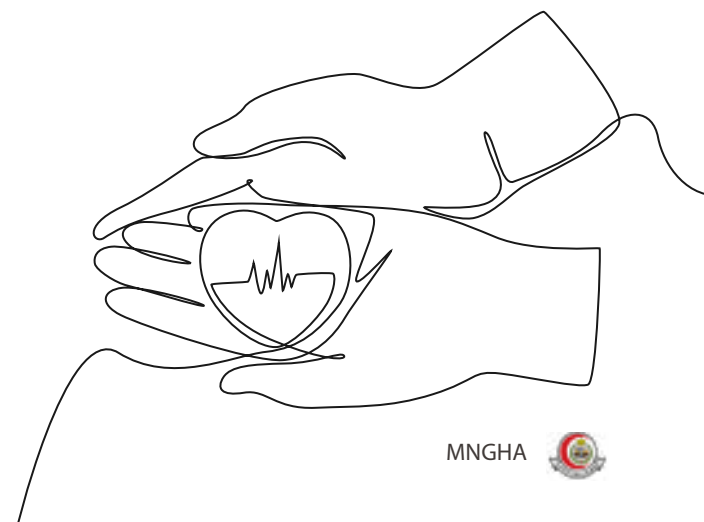
- Stanford's University's 2023 World's Top 2% Scientists List:
  - According to lists created by senior researchers at Stanford University in the United States and published on the Elsevier website, Prof. Fahad Al-Hameed, the chairman of the Intensive Care Department, KSAU-HS was in the top 2% of the world's most cited scientists for their scientific research in 2023.

## National awards, recognition, contributions:

- The Adult Intensive Care Unit was honoured with a distinguished recognition for their exemplary contributions toward the ongoing growth and success of the Infection Prevention and Control (IP&C) Program. This accolade was presented at the IP&C Achievement Day on January 24, 2023.”
- The ICU Department received a Certificate of Appreciation from Medical Services, WR, acknowledging their distinguished support in the successful launch of the CAR T Cell therapy at KAMC-WR.

## Statistical Information (JAN- DEC- 2023):

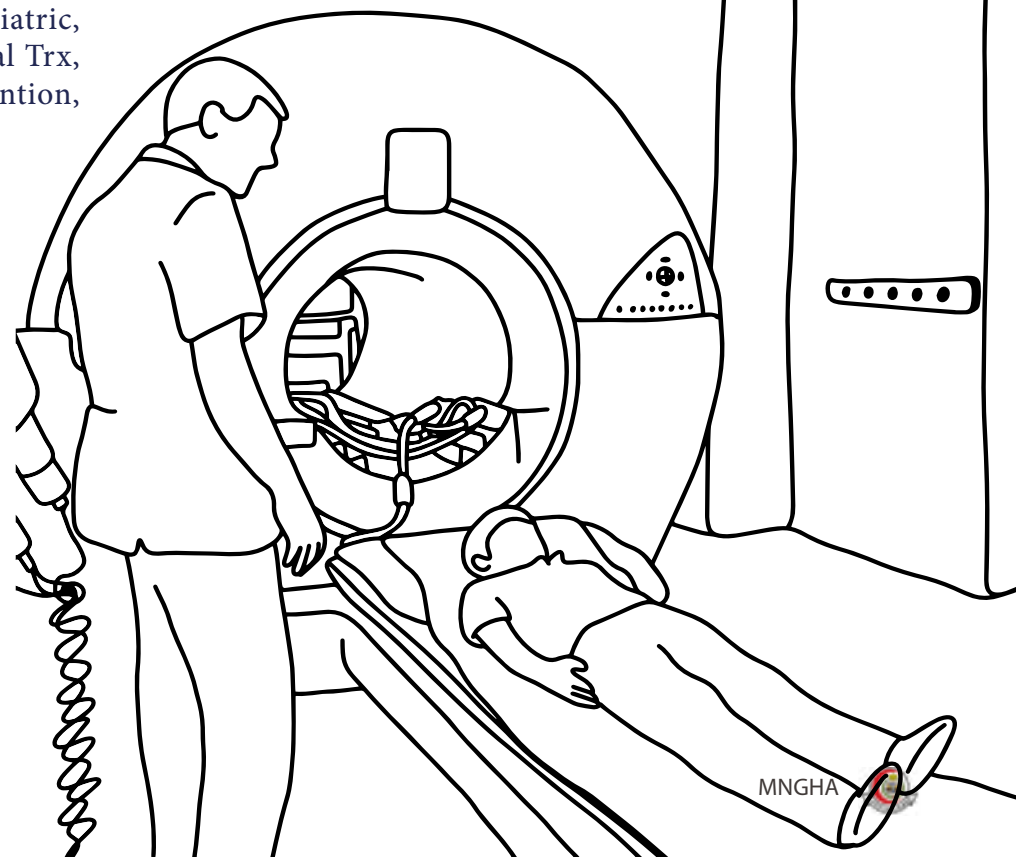
- ICU Admissions: More than 1196 patients with serious and life-threatening conditions who require round-the-clock monitoring and specialized care were admitted into the ICU.
- ICU Discharges (Alive): More than 975 patients who were ready to leave the ICU were successfully discharged alive.
- ICU Readmission within 48 hours: The percentage of readmission to the ICU within 48 hours of transfer to other wards is 2.46%, which is significantly less than the international benchmark ratio of 7.78%. (Ref. Elliot, M. Readmission to intensive care: a review of the literature. Australian Critical Care. Volume 19, Number 3: p-96 104, August 2006.).



## MEDICAL IMAGING

### Introduction:

The Medical Imaging Department provides a comprehensive range of high-quality Diagnostic, Interventional and Therapeutic Radiology. The management is responsible to the MNGHA and community to maintain its service excellence through its up-to-date Radiological practices in order to provide quality and excellence in our Radiological and Imaging Services and to support the clinical programs. Full coverage of hospital demand including all clinical tertiary subspecialty for example, Oncology, Pediatric, Trauma, Neurology. Medical and Surgical Subspecialties, Bone Marrow Trx, Renal Trx, etc. The units are CT, MRI, Ultrasound, General X-ray, Breast Imaging, Intervention, and Nuclear Medicine.





## MEDICAL IMAGING

King Abdulaziz Medical City– Jeddah

### Provide:

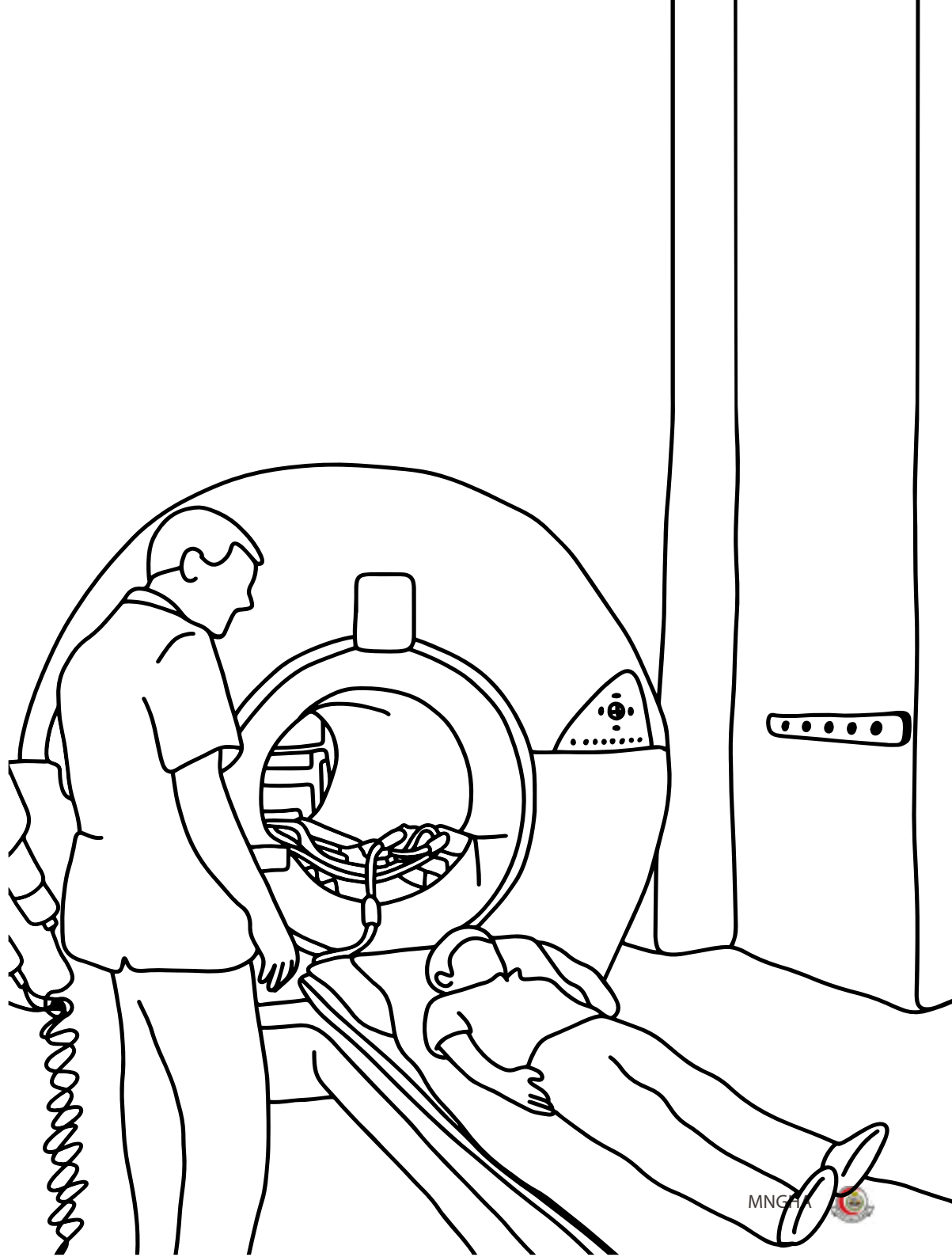
- Increased PET scan capacity to 30 patient per week. To support elimination of the PET waiting list.

### Deliver:

- New services introduction, new Porta-Cath insertion service in Interventional Radiology.
- There are 14 Tumour Board being covered by the department in weekly basis.

### Promote:

- Increased the number of candidates in the Fellowship Programs.
- Introduced MSK Fellowship Program and Pediatric Radiology Fellowship Program.
- Increased the number of Fellows in Interventional Radiology.
- replacement of equipment:
  - Replacement of MRI Unit
  - Added new Mammo machine
  - C. Replaced Ten ultrasound machines
  - Replaced DEXA Scan
  - Replaced Portable X-ray Machine



## Medicine Department

### Introduction:

The Department of Medicine (DOM) at the King Khalid National Guard Hospital, Western Region, Jeddah benchmarks with the organizational vision and mission statements encompassing quality, education, research and leadership. DOM provides outpatient, inpatient, consultation services, and additional supporting services including day case diagnostic and interventional procedures, and training and education of medical students, interns, residents and fellows from various specialties.



# Medicine Department

King Abdulaziz Medical City- Jeddah

## Emphasize:

- Endocrinology Section: World diabetes day. Diabetes in Ramadan Campaign.
- Psychiatry Section: provide addiction services to military personnel of MNG.
- Rheumatology Section: Rheumatic Diseases Update Campaign for Family Physicians (October 2023).
- Nephrology Section: Organized Jeddah International Dermatology & Cosmetics Conference 2023. Organized health volunteering campaign to increase population awareness about the most common hair problems and disorders (Busailah) 16 May 2023 held as online via Twitter platform.

## Achieve:

- Psychiatry Section: provide addiction services to military personnel of MNGHA.

## Provide:

- Gastroenterology Section: New Referral response time less than 48 hours.
- Psychiatry Section: Decreased the waiting time in the outreach clinics in Taif and Sharaiea.
- Establishment of RAC (Rapid access clinic) twice weekly.
- Establishment of post discharge OPD GIM clinic twice weekly.
- Establishment of RAC (Rapid access clinic) twice weekly.
- Establishment of post discharge OPD GIM clinic twice weekly.

## Deliver:

- General Internal Medicine Section:
  1. Long stay /transitional care inpatient team.
- Gastroenterology Section:
  - Increased the number and complexity of procedures at endoscopy unit. Treated more than 100 patients with hepatocellular carcinoma and the section is the largest centre to treat HCC.
  - New installation of fluoroscopy room.
  - Launch the followings:
    1. Capsule endoscopy.
    2. Spyglass service at Endoscopy.
    3. Hot Axios and third space endoscopy.
    4. Multidisciplinary care to IBD Management team along with colorectal surgery and radiology departments.
- Respiriology Section:
  1. Created pulmonary rehabilitation program.
  2. Establishment of chest unit.
- Psychiatry Section:
  - Establishment of Child & Adolescent Mental Health Services to meet the expected increase in the demands with the Autism Screening Program and the soon transfer to KASCH.
- Endocrinology Section:
  1. Establishment of Diabetes Foot Care Clinic.
  2. Establishment of endocrine dynamic testing unit.
  3. Establishment of protocols for Endocrine testing/interventional radiology.
- Rheumatology Section:
  - Expanded of MSK Ultrasound service.
  - Upgraded Virtual Clinics clinics to serve 30% of Rheumatology population remotely through Virtual Clinics.

## Promote:

- Gastroenterology Section:
  - Developed and implemented of Primary health care referral guidelines to adult Gastroenterology.
  - Acquisition of new endoscopic ultrasound machine.
  - Trained Saudi Nurses on advanced Endoscopy techniques.
  - Installed new dashboard of endoscopy.
- Endocrinology Section:
  - Insulin pump: 640G and CGM and data upload Carelink account.
  - Free Style Libre 2: Flash glucose monitor and data upload- Libre view account.
  - Endocrine fellowship program+ Diabetes fellowship program: 3 seats per year.
  - Diabetes Fellowship training program: Reaccredited by SCFHS as a full program until 31st of December 2027- (100% pass rate).
  - Adult Endocrinology Fellowship Training program: Reaccredited by SCFHS as a full program and expansion for 4 training seats until 31st of December 2027- (100% pass rate).
- Infectious Diseases Section: expansion of antibiotic stewardship program Include more antibiotics Outpatient + inpatients. Implementation of IV programmed pump machines.
- Reengineered endoscopy booking procedures and introduction of new process of booking pathways at Endoscopy with utilization of endoscopy module.
- Restructured process of booking and scheduling of Fibrosan with proper documentation.



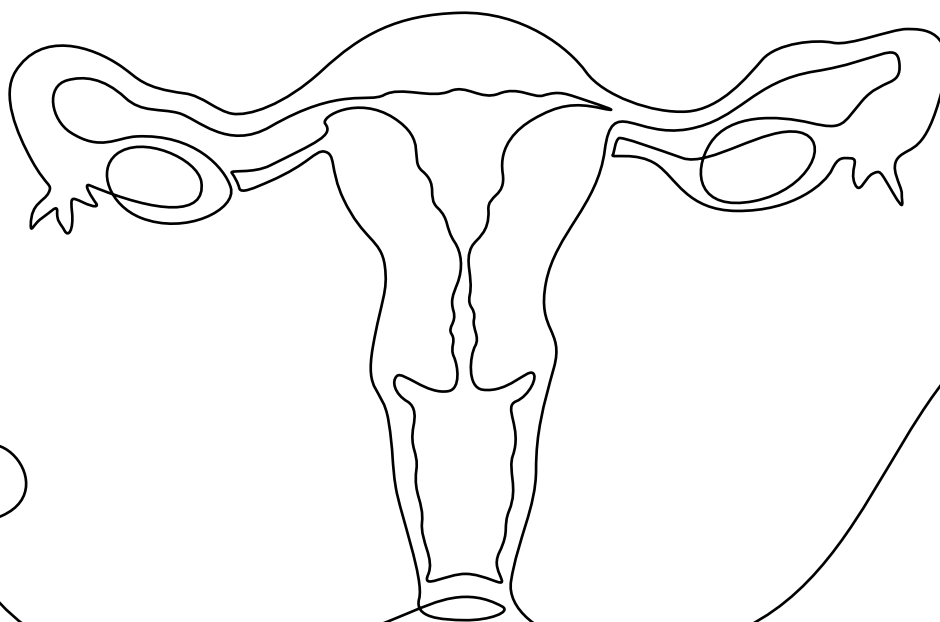
## Obstetrics & Gynecology

### Introduction:

The Department's aim is to offer the highest achievable evidence-based standard of Obstetric and Gynecological care (within the available resources) to women in the Western Region by providing the facilities and skills necessary to accomplish safe, professional, ethical and understanding medical management.

The department has two sections:

- General Obstetrics & Gynecology.
- Maternal Feto Medicine Unit.



# Obstetrics & Gynecology

King Abdulaziz Medical City- Jeddah

## Deliver:

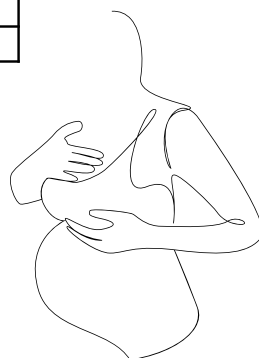
- The labor and delivery unit underwent a full commission of expansion, including the addition of a triage area. This expansion increased the unit's capacity by 60% and significantly reduced emergency department deliveries.
- Establishment of clinical practice and DPP committee, which ensures that medical care, is provided according to the latest standards and international recommendations.

## Admission

|                           |      |
|---------------------------|------|
| Total Number of Admission | 3425 |
| Booked                    | 3237 |
| Unbooked                  | 188  |

## Delivery

|                              |      |
|------------------------------|------|
| SVD                          | 1550 |
| Forceps                      | 23   |
| Ventouse                     | 187  |
| Total C/S (including Breech) | 861  |
| Primary C/S                  | 292  |
| Primigravida C/S             | 163  |
| Mutiple Birth Mother         | 57   |
| Total Deleveries             | 2621 |



## MFMU Statistics

|                            |       |
|----------------------------|-------|
| Total Of Attended Patients | 8813  |
| New Patients               | 4448  |
| Follow Up                  | 4560  |
| US Done                    | 9047  |
| CTG Done                   | 2829  |
| Ferrosac                   | 128   |
| Blood Sugar Monitoring     | 521   |
| Procedures                 | 3484  |
| Total Booked               | 10188 |
| Extra Walk in              | 234   |

## OBGYN OR Conducted in the Main OR Statistics

| OR Type |      | Total |
|---------|------|-------|
| C/S     | Gyne |       |
| 809     | 300  | 1109  |

## OBGYN Clinic Statistics

|   |       |
|---|-------|
| ANC New Patients  | 2540  |
| ANC Follow up Patients  | 8614  |
| Gyne New Patients   | 1363  |
| Gyne Follow up Patients   | 4620  |
| MFM New Patients  | 172   |
| MFM Follow up Patients  | 1182  |
| Urogyne - Urodynamic New Patients                                   | 279   |
| Urogyne -Urodynamic Follow up Patients                              | 945   |
| REI New Patients (Reproductive Endocrinology and Infertility)       | 455   |
| REI Follow up Patients (Reproductive Endocrinology and Infertility) | 1218  |
| Suspected Cancer New Patients                                       | 64    |
| Suspected Cancer Follow up  | 127   |
| EPAU New Patients (Early Pregnancy Assessment Unit)                 | 62    |
| EPAU Follow up (Early Pregnancy Assessment Unit)                    | 141   |
| RAPID ACCESS New  | 26    |
| RAPID ACCESS  | 47    |
| Telehealth (Starting from September 2023)                           | 521   |
| Total   | 22376 |

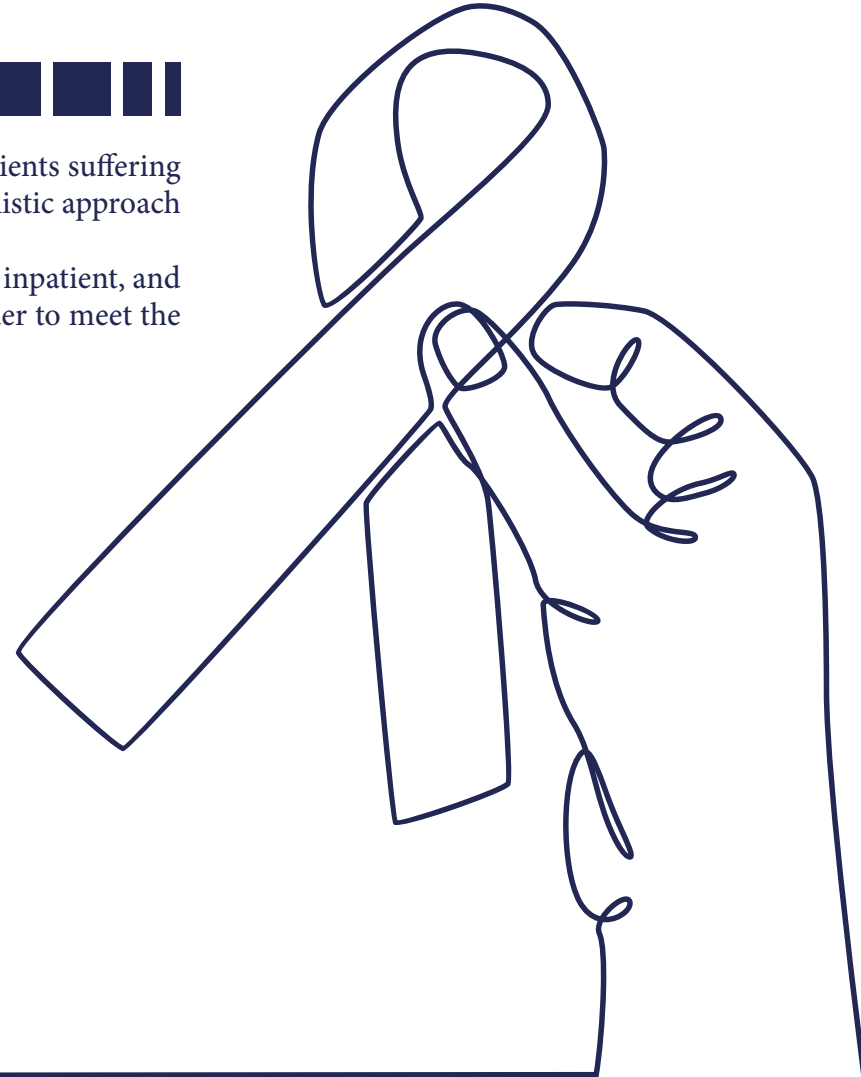


## Oncology

### Introduction:

Specializing in acute cancer care, Princess Noorah Oncology Center serves patients suffering from solid tumors, lymphoma, leukemia, and blood diseases. We provide a holistic approach to cancer therapy tailored to the individual needs of the patient.

Since its inauguration in April 2001, PNOC continues to expand its outpatient, inpatient, and radiation oncology services, and strives to develop and upgrade services in order to meet the increasing demand and to improve quality of care to cancer patients.



## Deliver:

- GYNECOLOGY ONCOLOGY SECTION:
  1. Enhanced Recovery after Surgery (ERAS) for Gynecology Oncology. ERAS programs to reduce the length of hospital stay after surgery and speed patients' return to normal daily activities without increasing complications, readmission rates, or cost.
  2. Deliver compassionate end-of-life care and palliative services for patients with advanced gynecological cancers, focusing on pain management and symptom control.
- Adult Hematology Oncology, Adult Stem Cell Transplant & Cellular Therapy Sections:
  1. Expanded CAR-T cell-Cell Cellular Therapy Program and expand into other disease categories Like Acute Lymphoblastic Leukaemia and Multiple Myeloma.
- PALLIATIVE CARE SERVICES SECTION:
  1. Implemented standardized palliative care protocols and guidelines to ensure consistent and high-quality care delivery.
  2. Implemented advanced care planning initiatives to facilitate discussions about goals of care and end-of-life preferences.
- GYNECOLOGY ONCOLOGY SECTION:
  1. Implemented standardized treatment guidelines and protocols to ensure consistent and evidence-based care for patients with gynecological cancers.
  2. Implemented survivorship programs to address the long-term physical and emotional needs of gynecology oncology patients' post-treatment.

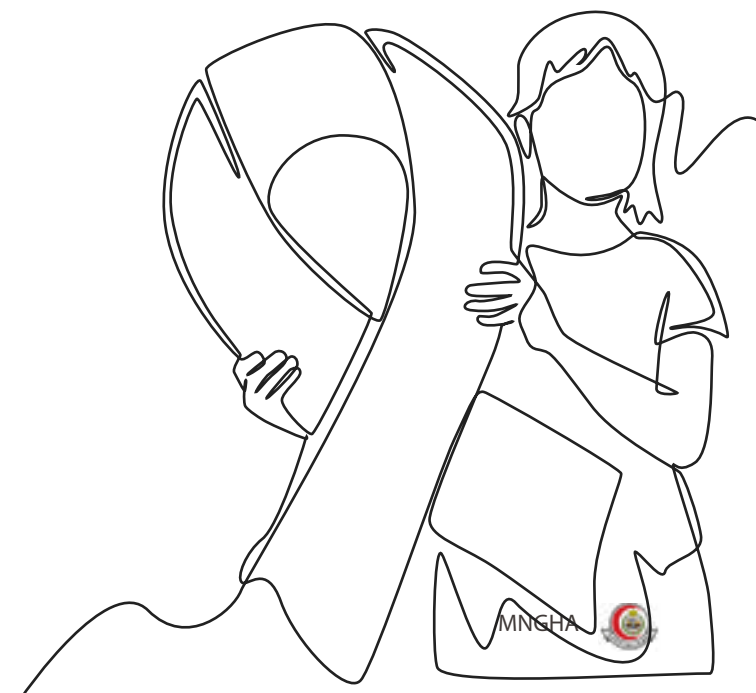
## Statistical Information:

### Inpatient Data

|  |      |
|--|------|
| Total Number Of Admission                          | 4909 |
| New Inpatient Consultations To Oncology            | 6498 |
| Pediatric Oncology Walk-In Emergency Room (Power): | 1074 |
| Gyne Oncology O.R. Procedures                      | 162  |

### Outpatient Data

|  |       |
|--|-------|
| TOTAL PATIENT SEEN                     | 55207 |
| NEWLY ONCOLOGY-REGISTERED PATIENTS     | 2626  |
| PROCEDURES DONE BY TYPE                | 27139 |
| CHEMOTHERAPY PROCEDURES                | 71235 |
| CHEMOTHERAPY PATIENTS                  | 24193 |
| RADIOTHERAPY ACTIVITIES AND PROCEDURES | 13150 |

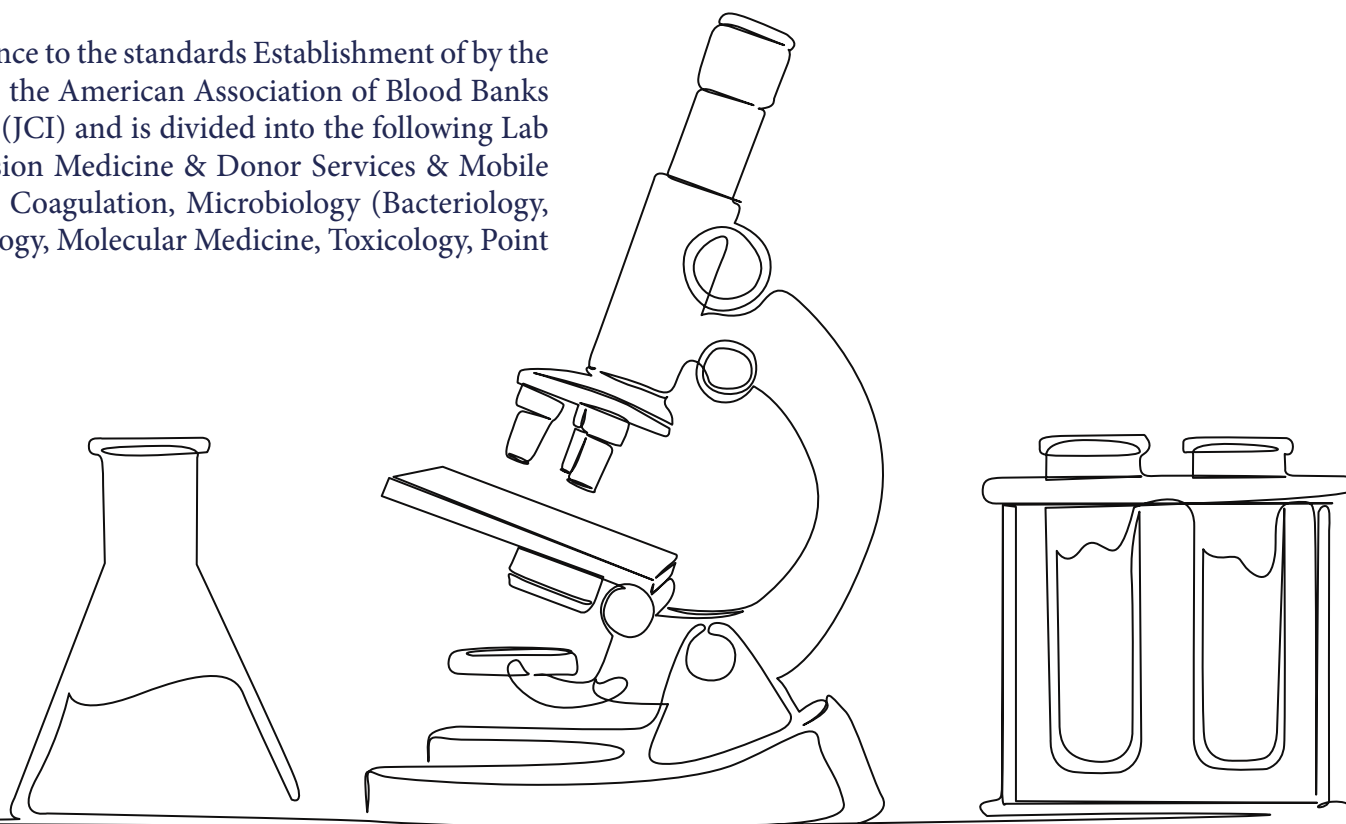


# Pathology and Laboratory Medicine

## Introduction:

The department provides all routine and specialized clinical laboratory qualitative and quantitative assays of blood, body fluids and secretions, urine, faces, and tissues used to detect, diagnose, treat or monitor disease states.

The department provides all its services in accordance to the standards Establishment of by the CBAHI, College of American Pathologists (CAP), the American Association of Blood Banks (AABB), and the Joint Commission International (JCI) and is divided into the following Lab sections and units: Anatomic Pathology, Transfusion Medicine & Donor Services & Mobile Donor Unit, Clinical Chemistry, Haematology & Coagulation, Microbiology (Bacteriology, Urinalysis, Mycology & TB), Serology & Immunology, Molecular Medicine, Toxicology, Point of Care Services.





# Pathology and Laboratory Medicine

King Abdulaziz Medical City- Jeddah

## Achieve:

- Conducted screening tests in several departments, including toxicology, serology, and haematology, for over 7000 soldiers.

## Provide :

- The Point of Care testing menu was expanded to include more tests, which aims to provide the clinical team with faster access to critical lab tests on bedside.
- Emergency Room orders turnaround time has been monitored and maintained within pre-defined limits.
- Critical lab results were communicated within acceptable pre-defined targets.
- More than 85% of patients thought our service was excellent, and the lab was able to reduce the average wait time for outpatients in the phlebotomy section to less than 20 minutes.

## Deliver:

- Adopted innovative technology such automation, advanced diagnostic tests such as whole exome sequencing and rapid tests to increase efficiency, reduce errors and expedite test results delivery.

## Promote:

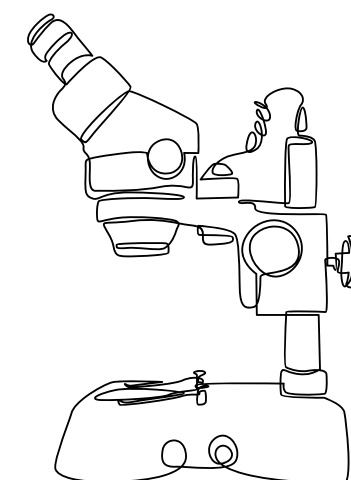
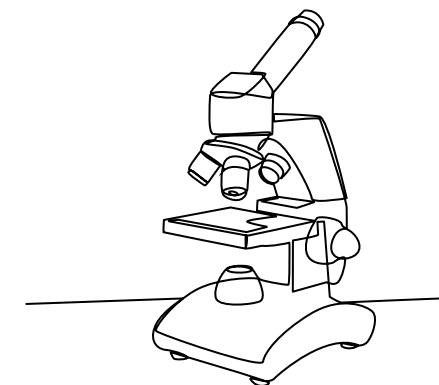
- Recognized as an accredited facility for the residency-training program in infectious diseases.
- Fully accredited for the Saudi Board Residency training program in Anatomical Pathology.

## Implement:

- Closed-loop sample labelling system implementation.

## Statistical Information (from January to December 2023):

| YEAR   | 2023       |
|--|------------|
| TOTAL LAB WORKLOAD                             | 17,527,527 |
| Phlebotomy Total# Patient Served               | 190,457    |
| Workload for Clinical Chemistry                | 6,738,597  |
| Workload for Point of Care Testing             | 1,688,025  |
| Workload for Toxicology                        | 67,676     |
| Workload for Hematology                        | 8,000,374  |
| Workload for Flow Cytometry                    | 37,746     |
| Workload for Microbiology                      | 120,263    |
| Workload for Serology                          | 300,327    |
| Workload for Molecular Biology Unit            | 30,899     |
| Workload for Cytogenetics                      | 4,068      |
| Workload for Transfusion Medicine              | 29,3876    |
| Workload for Blood Donor collection            | 13,750     |
| Workload for Blood/Blood Products Preparations | 27,896     |
| Workload for Cell Separator Unit               | 1,276      |
| Workload for HPC Stem Cell Procedures          | 166        |
| Workload for Anatomic Pathology (Units)        | 12,131     |



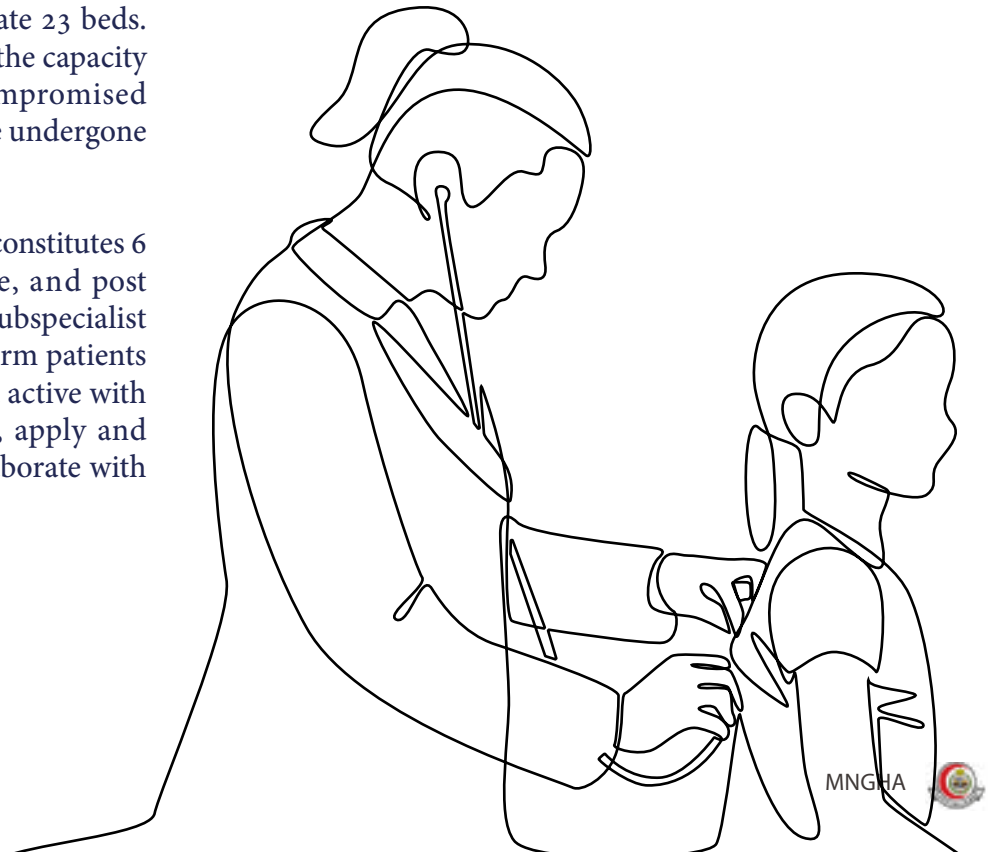
## Pediatrics Department

### Introduction:

The department aims to provide the best pediatric medical care to both inpatients and outpatients, and to take corrective actions in the high dependency units and day care area. Fourteen sub-specialties and eight divisions provide the service. The department is developing new services and sub-specialties. The goal is to have Fellowship training programs in most sub-specialties as well as the Residency Training Program. Both specialty clinics and outreach clinics are present.

Wards 7, 8, and 9 are where the In-Patient Service is located. Pediatric surgical procedures are under Ward 7. The NICU and step-down facility in Ward 8 can accommodate 23 beds. Ward 8 also hosts a multi-disciplinary Pediatric Intensive Care Unit (PICU) with the capacity of 9 beds and an additional 3 beds in the cardiac PICU to host immune compromised pediatric patients. The PICU team also cares for some pediatric patients who have undergone open-heart surgery after it. In May 2023.

The pediatric cardiac ICU (PCICU) in ward 2 was merged under the PICU and this constitutes 6 beds serving the pediatric cardiac critical care, post cardiac surgical care, and post interventional cardiac care. Ward 7 and 9 offer a medical facility for General and Subspecialist Pediatrics for 35 patients. Ward 9 has a 5-bed Step-down Unit for chronic long-term patients that is supervised by the PICU team. The outpatient department is very busy and active with 77 clinics per week. The Department of Pediatrics strives to create, evaluate, apply and disseminate the latest information and technology in medicine and seeks to collaborate with others in improving the present and future health of children in the Kingdom.



## Pediatrics Department

King Abdulaziz Medical City– Jeddah

### Emphasize:

- Initiated 2023 RSV campaign. This is an annual campaign that is conducted over 5 months every year during the high RSV season, aiming to provide Immunotherapy for prevention of RSV in the high-risk newborns.
- Organized the ضنى campaign by the Pediatric Gastroenterology team.
- “Aman” Campaign raising awareness against child abuse and neglect with the Deanship of Student Affairs, National family safety program and Department of Pediatrics.

### Deliver :

- New subspecialized General Pediatrics Clinic, New Pediatric Gastroenterology Clinic, New Pediatric Pulmunology clinic, New Pediatric Rheumatology clinic, New Pediatric Gastroenterology Clinic.
- Agreement for adolescent care transmission between pediatric and internal medicine.
- Integrated care of inpatients between general pediatrics and: (Pediatric Nephrology Pediatric Allergy/ Immunology).

### Promote:

- Establishment of the Antimicrobial stewardship program in the PICU.

### National awards, recognition, contributions:

- Participated in launching of the Clinician Investigator Program (CIP): This program will be the first program in the Kingdom to educate healthcare workers in leading research under the umbrella of the SCFHS.
- Establishment of Saudi Neonatal Resuscitation Program (NRP) under the Saudi Heart Association in 2023.



## Genetics & Precision Medicine Department

### Introduction:

Genetic and precision medicine is a newly Establishment of department at king Abdul-Aziz Medical City in Jeddah. It serves patients and families with genetic and hereditary conditions within different subspecialties across the whole hospital. It has only one unit so far and we are in the process of adding different sections and logistic services



## Genetics & Precision Medicine Department

King Abdulaziz Medical City– Jeddah

### Deliver:

- Initiated some of the newer medication for rare genetic conditions (vosoritide in achondroplasia patients).

### Promote :

- Created our own genetic mutation database that help in identification of common genetic conditions in our center with the help of molecular section under laboratory medicine department.
- Establishment of local genetic/ metabolic fellowship program, and it will be the first in the Western Region.
- The Antimicrobial stewardship program in the PICU.

### Statistical Information (from January to December 2023)

- Genetics & Precision Medicine:

| Activities         | 2023 |
|--------------------|------|
| Total Admission    | 156  |
| Outpatient         | 1058 |
| Inpatient          | 34   |
| Day Case Admission | 122  |



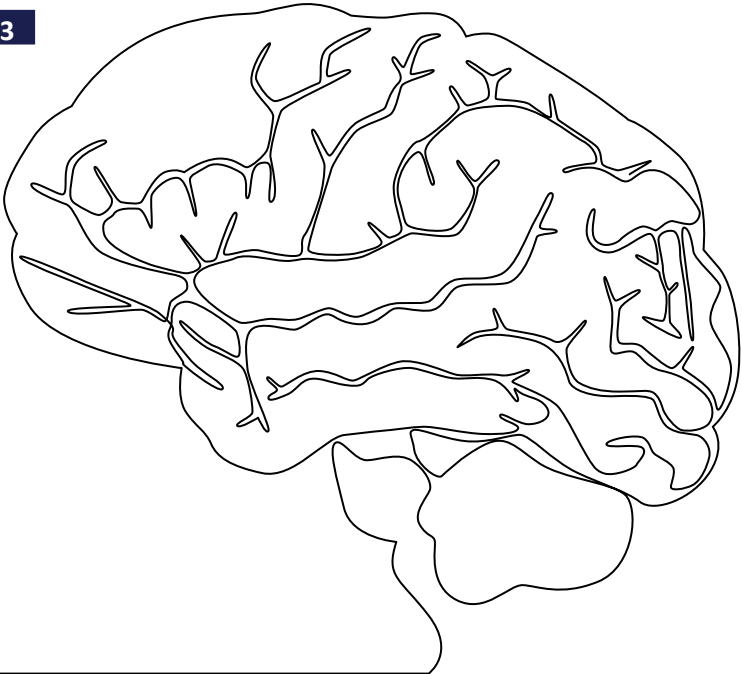
# Neurophysiology Lab

## Introduction:

The neurophysiology lab offers a comprehensive and extensive range of neurophysiological measurements for various neurodiagnostic services. Our service portfolio includes electroencephalography (EEG), nerve conduction studies (NCS), electromyography (EMG), autonomic diagnostic testing, and evoked potential studies for both pediatric and adult patients.

Statistical Information (from January to December 2023)

| Month | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Year 23 |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|
| Total | 300 | 228 | 260 | 80  | 279 | 240 | 262 | 379 | 378 | 419 | 479 | 315 | 3619    |



# OUTPATIENT Department

## Introduction:

The Outpatient Center is a major component of the Ministry of National Guard Health Affairs organization, providing specialized medical care.

The operation of the Outpatient Clinics is a shared effort of three major departments. The first is Medical Staff, the second is Nursing Services and the third is Patient Services. Each of these specialties are under a separate department, therefore there are some matters in between which does not fall under any of these different department.



## Statistical Information (from January to December 2023)

### Outpatient Department-KAMC-WR

| Dept.        | Total Patient Seen |
|--------------|--------------------|
| Medicine     | 74296              |
| OBGYN        | 18455              |
| Pediatrics   | 22458              |
| Surgery      | 109915             |
| Cardiac      | 16575              |
| Oncology     | 47347              |
| Neuroscience | 24087              |
| Total        | 313133             |

**Note:** Neurosciences OPD Clinics had been entered as an Additional Department (Separate), however there were still total of 212 Neuro patients seen and counted in June 2023 in Medicine Clinic.

### Outpatient Department-KAMC-WR

| Dept.                 | Total Patient Seen |
|-----------------------|--------------------|
| EHC                   | 42102              |
| KSAU-HS Health Clinic | 12203              |
| Nutrition             | 10075              |
| Health Promotion      | 4105               |
| Social Services       | 5005               |
| Rehabilitation        | 33092              |
| Dental Services       | 39295              |
| Total                 | 145877             |

**Note:** Clinical Nutrition started from October 2023 to include the specialized clinics & Walk-in STAT.

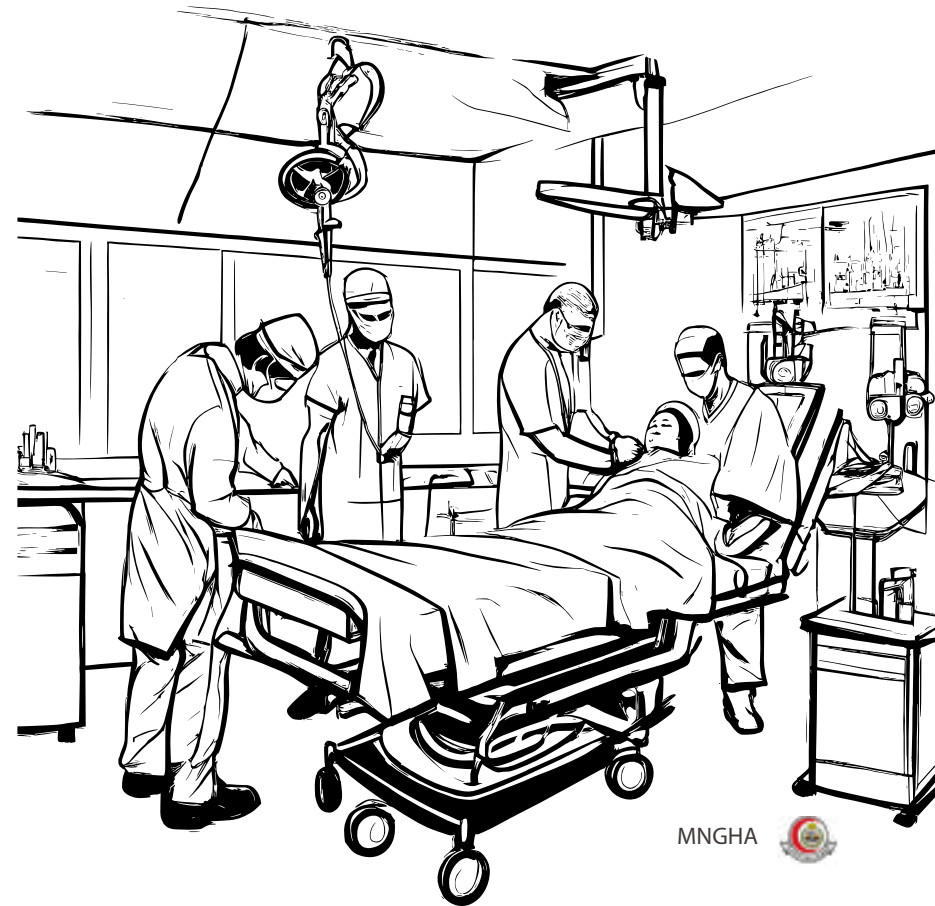


# Surgery Department

## Introduction:

The Surgical Department stands as a cornerstone within our hospital, dedicated to delivering excellent patient care by incorporating state-of-the-art technological advancements and adhering to the latest guidelines and recommendations. Our surgeons are esteemed leaders in their respective specialties. The department consists of ten sections, namely:

- Surgical Oncology section composed of Breast / Endocrine and Hepatobiliary-pancreas services.
- Thoracic & Upper GI section includes Bariatric, Thoracic, and Upper GI services, offering a comprehensive range of bariatric surgeries, including complex referred cases, as well as addressing benign and malignant conditions in the thoracic and upper GI. Additionally, the section has initiated services for hernia and abdominal reconstructive procedures.
- Colorectal section provides different colorectal and perianal disease services.
- Trauma and Acute care section provide comprehensive trauma management and surgical management for different general surgery emergencies.
- Plastic Surgery section provides Burn unit, Reconstructive microsurgery, Paediatric plastic, Hand, Aesthetic, Peripheral nerve services.
- Paediatric Surgery section provides service to children with congenital anomalies, oncology diseases, and trauma.
- Ear Nose Throat section provide a comprehensive service covering ENT with head and neck benign and malignant diseases for adult and paediatric age group.
- Ophthalmology section provides all types of Retina diseases, ocular oncology cataract complication management and other complicated referred cases.
- Vascular section provides the best available medical care to MNGHA patients in line with institutional goals and policies, working with other specialties to offer timely sensitive medical care.
- Urology section provides oncology, kidney transplantation, female urology, and general and paediatric urology services.





## Surgery Department

King Abdulaziz Medical City– Jeddah

### Provide:

- Reduced surgery waiting lists and clinic visit times, by implementing dedicated additional clinics for pre-operative anesthesia, and launching a new clinic for fast access to perianal diseases and hernia cases.

### Deliver :

- Conducted oncological surgeries utilizing cutting-edge advancements and the latest updates.

### Promote:

- Initiated fellowship program in Breast and Endocrine surgery, and got the accreditation for Thoracic surgery fellowship program.
- Many surgeons from different specialties have received specialized robotic training, commencing robotic cases with promising start and outcome.

### Implement:

- The commencement of Diabetic Retinopathy screening programs integrating digital and artificial intelligence.

### National awards, recognition, contributions:

- Ophthalmology section conducting many live surgeries in the kingdom and the only center to treat pediatric adult eye tumours.

### International awards, recognition, contributions:

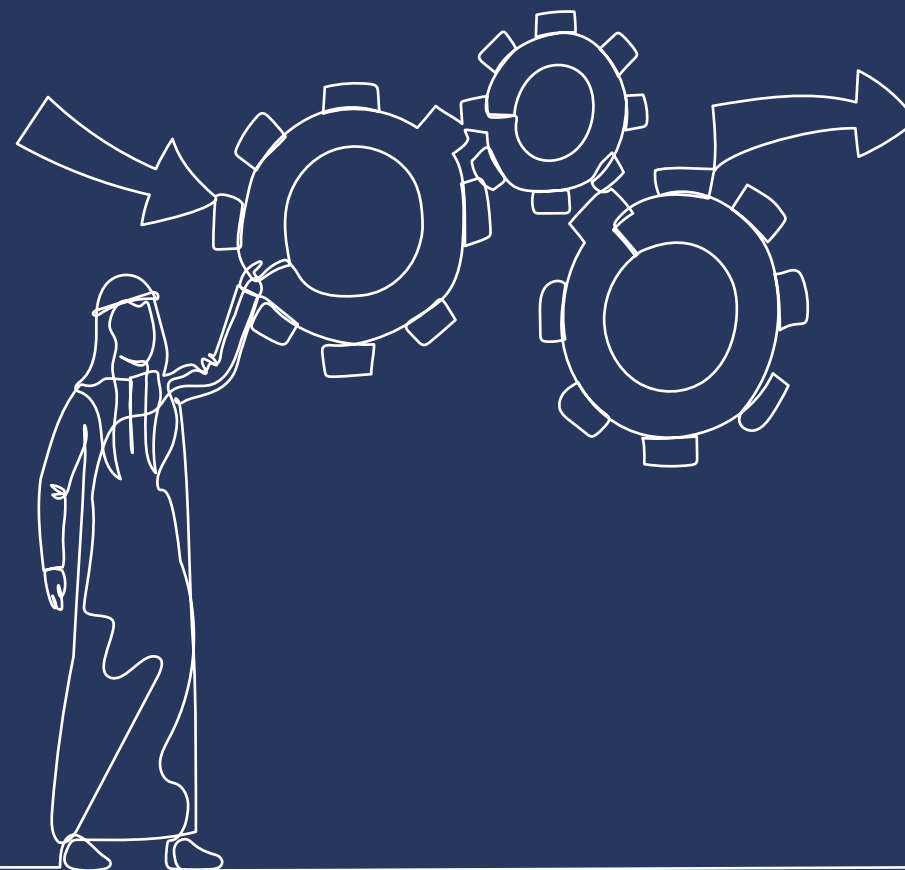
- Pediatric Section staff have contributed into international volunteering missions through official channels.
- Achieved “Meritorious” status concerning composite quality score in both the all cases and high-risk category from The American College of Surgeons National Surgical Quality Improvement Program.





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Ministry of National Guard Health Affairs  
MNGHA

# Operations



## Clinical Nutrition Services

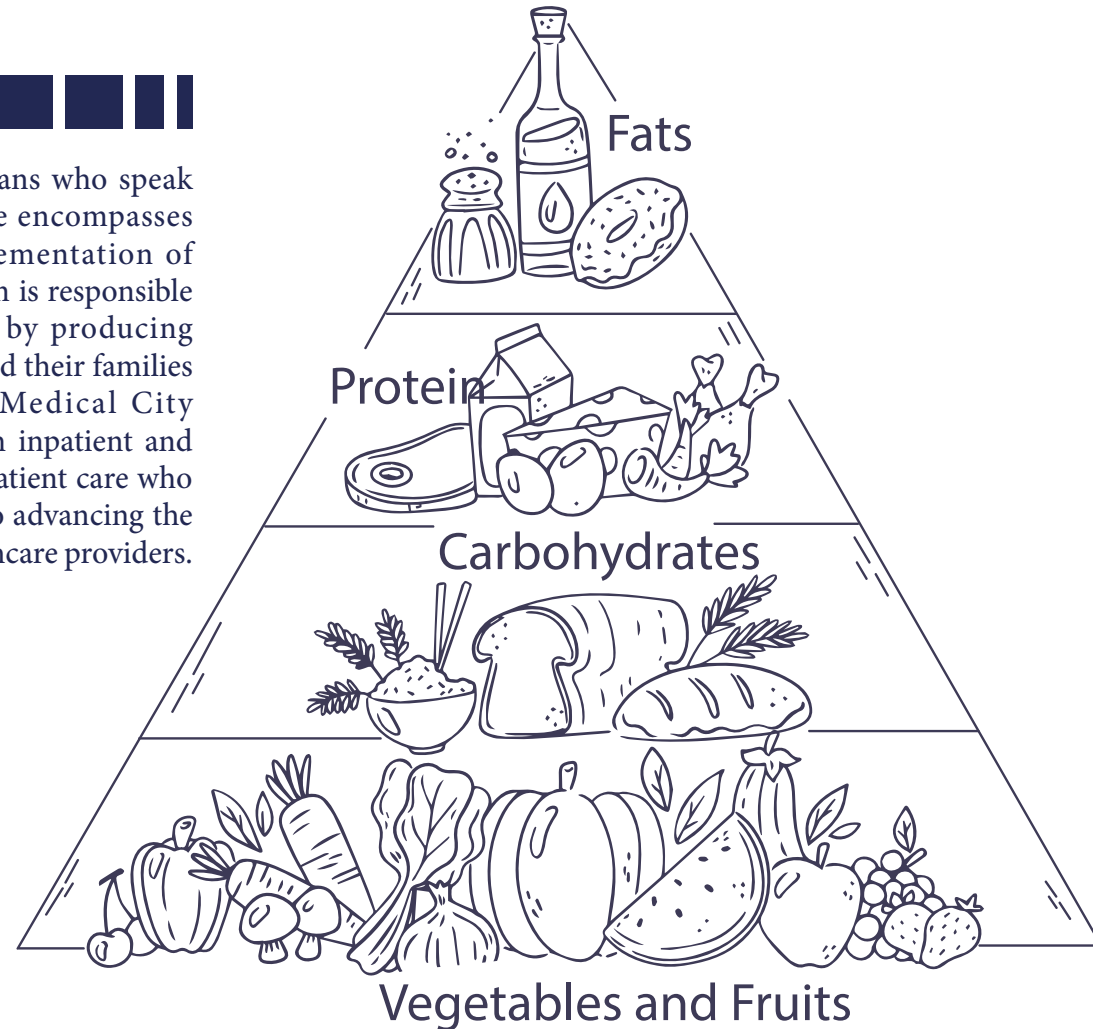
### Introduction:

Clinical Nutrition Department-WR consists of qualified and skilled dietitians who speak Arabic and non-Arabic languages. Consultation on patient nutrition care encompasses assessment, recommendations for nutritional management, and implementation of therapeutic diets in the hospital. As a registered dietitian, the registered team is responsible for attending daily rounds and managing complex nutrition therapies by producing and monitoring an enteral feeding regimen. Their commitment to patients and their families ensures the highest quality of nutrition care. At King Abdulaziz Medical City (KAMC-NGHA-WR), the department provides nutrition services for both inpatient and outpatient care. Clinical Nutrition Department has become integral part of patient care who is dedicated to providing the highest quality patient-focused nutrition care, to advancing the practice of clinical nutrition, and to educating future dietitians and other healthcare providers.

#### King Abdulaziz Medical City – Jeddah

##### Deliver:

- Produced a manual for the Saudi Career Development Program (SCDP).
- In accordance with the Food Services, clinical guidance was provided in the provision of patient meal services include: (menu planning, tray line supervision, formula room supervision, education and training to the kitchen staff).



# Health Information Management

## Introduction:

Health Information Management is a support service whose primary purpose is to contribute to the quality of patient care through the development and maintenance of a comprehensive Medical Record System.

Services and functions shall be developed and implemented in such a way that confidentiality, privacy, and data security considerations are respected at all stages of gathering and processing the healthcare information.

The system shall also provide health information to support and promote the related goals and activities of the health care facility in the areas of education, training, research, facility management, and decision-making.



# Health Information Management

King Abdulaziz Medical City– Jeddah

## Provide:

- Reduced the delinquency rate to 10% by modifying the in-house Electronic Physicians Deficiency. This system was created to help monitor and track the deficiencies of the MRP team, including residents, assistants, and other members.

## Deliver :

- Provided a high-quality health record system that is ready and accessible to healthcare providers and administrative staff, resulting in more efficient patient care.
- Ensured all records were finished, particularly for discharge summaries and operation reports, so that patients can request copies whenever they require them.
- HIM staff, nurses, and physicians conducted regular closed reviews to promote the evaluation of quality and completion of clinical documentation.

## Implement:

- Integrated data of patient's health record by 90% of patient's health record data location are identified.
- Completed Coding backlogs of years 2021 & 2022.

## 2030:

- Completed death cases of years 2021, 2022 and of October 2023 while raising the quality of coding for those deaths and those claimed by the Ministry of Health according to the Ministry of Health's ICD -10 medical coding system guidelines.
- Trained more than 50 students from different universities in all aspects of HIM.
- Assisted more than 100 researchers (physicians, medical students, cancer registry specialist, nurses, QM, etc.) in gathering the required data for their IRB research studies by gathering the disease and procedure cases via ICD-10-AM classification system and retrieving a paper record.
- Implemented a new HIM research database aimed at keeping track of all the research done.



## Nursing Services

### Introduction:

Through effective leadership support, advanced technology and innovation, and ongoing professional development, nursing services provides patient and their families with high-quality, safe nursing practices. The aim of the nursing division is to become a global center for nursing excellence.

MNGHA system adhere to core values taken from religious, social and professional principle, abiding by Teamwork, Productive work environment, Transparency, Patient safety and satisfaction, Quality performance, Accountability and Excellence & innovation.



# Nursing Services

King Abdulaziz Medical City- Jeddah

## Emphasize:

- Breastfeeding and Breast cancer Barcodes reading material was implemented in the room for patient awareness.
- Premature Awareness Day, World Heart Awareness Day, CSSD awareness Day and Pressure injury World awareness Day.
- Antimicrobial Resistance Awareness and Infection control week.

## Provide:

- Implemented strategy to reduce waiting time in ED and OB/ GYN.

## Deliver:

- Implemented Telemetry Monitoring Nursing Services in Cardiac HDU.
- Commissioned new Emergency Unit in NSTC on the 22 February 2023 without discontinuity of services and without major incidents: 44 beds in total.
- TAU (Transition Admission Unit) started to accommodate boarding patients pending for admission.

## Promote:

- Nursing Code Blue Program started under the umbrella of Nursing Stander of Care.
- GREATS implemented in NGHAWR ED and full collaboration with patient experience services, as a part of nursing transformation program.
- Implemented a program to start the First Case Start in OR.
- New Hearing screening devices to assist in hearing screening for all Newborn delivered in National Guard.

## Implement:

- CLMA Automated scan was started in both unit for IV medication.
- Closed sloop specimen Collection using the Barcode scanner achieving 100%.
- Coagulation check point of Care in cardiac OPD & Medicine Clinic.
- RAT (Rapid Antign Test) implantation.
- POCT for Creatinine in Medical Imaging.
- AIC – Diabetic Center.
- New triage process in place with separate steps: visual triage, ARI then physical triage.

## 2023:

- Clinical leadership training program for Saudi nurses aims to enhance Saudi nurses' leadership skills. The training program duration is four months during which trainees are equipped with the leadership related theories and skills in order to be prepared for a leader role in the future. (27) Nurses participated in the program.
- In 2023 MNGHA-WR New two groups are accepted for training through the Health Academy under SCFHS as a for Diploma of Patient Care Technicians and Central Sterilization Supplies and Decontamination program.
- 2023 the hospital is accredited as training Center for Advanced Nursing Cardiac Diploma. Two candidates accepted.
- Closed loop specimen Collection using the Barcode scanner achieving 100%.
- Implemented closed loop medication administration (CLMA) only for IV medication. CLMA is designed to reduce medication error aiming to reach zero Harm of medication administration.
- Implemented the Patient reporting system for all postnatal patient, which allow reporting incident and caring Experience.



## Patient Services

### Introduction:

Patient Services Department contribute to the MNGHA main goals to provide the National Guard personnel, their eligible dependents and other eligible patients with the highest quality of care, ensuring efficiency and proper utilization of available resources.

The Mission of the Patient Services Department is to obtain, manage and utilize patient information in an effort to enhance and improve individual and organizational performance in patient care, administration, management and support process.





## Patient Services

King Abdulaziz Medical City– Jeddah

### Promote:

- Create a new work area with advanced devices and machines to ensure efficient service delivery.

### Implement:

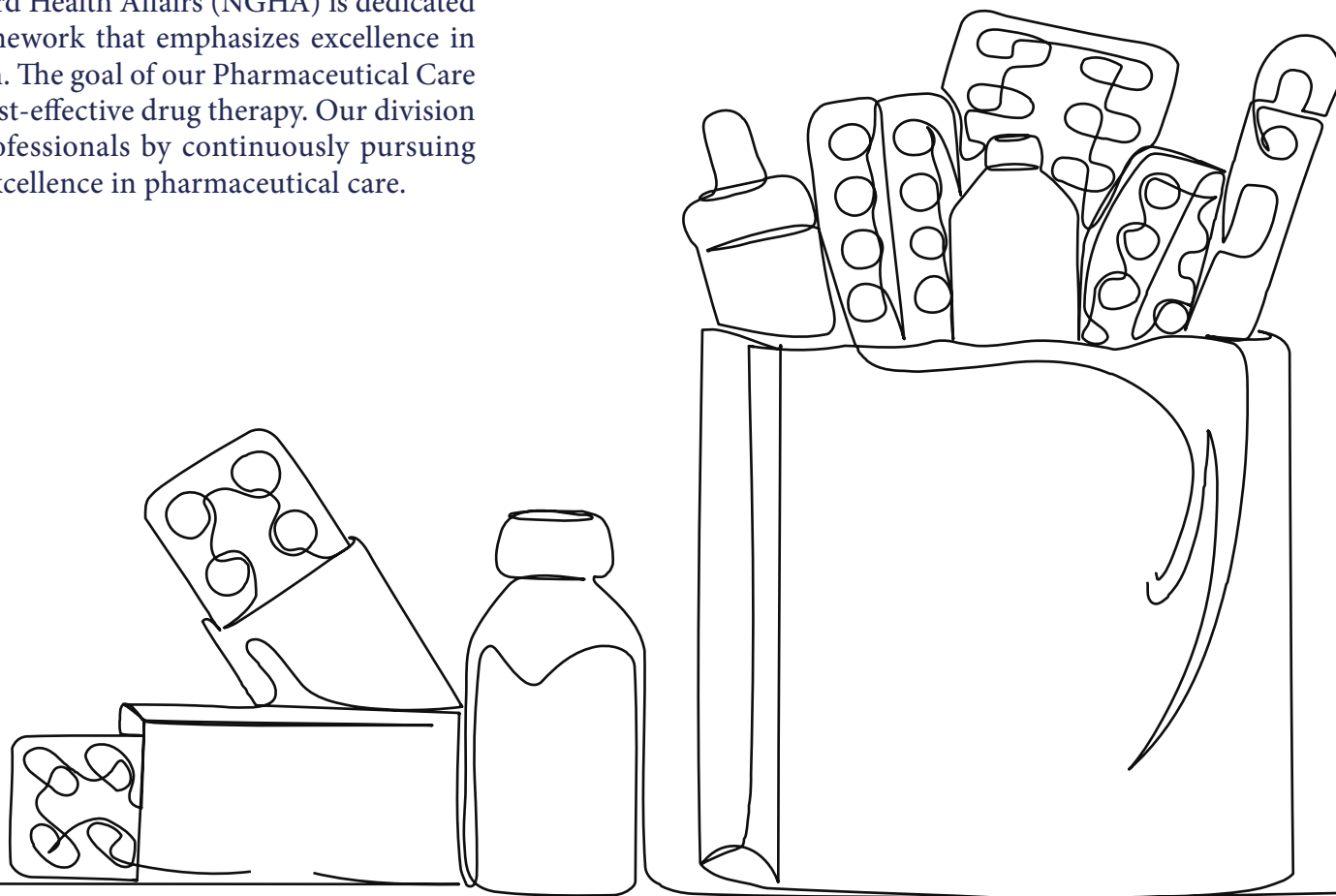
- Activated higher level of technology to ease and speed up the services provided; Patient Services department Establishment of “Patient Escort Lending System”.
- Patients are able to request for medical reports electronically through the application.



## Pharmaceutical Care Services

### Introduction:

The Pharmaceutical Care department of National Guard Health Affairs (NGHA) is dedicated to provide comprehensive care in an integrated framework that emphasizes excellence in patient care services, education, training, and research. The goal of our Pharmaceutical Care department is to provide our patients with safe and cost-effective drug therapy. Our division aims to enhance the expertise of our healthcare professionals by continuously pursuing education and training, while fostering a culture of excellence in pharmaceutical care.



# Pharmaceutical Care Services

King Abdulaziz Medical City– Jeddah

## Emphasize:

- Assisted pharmaceutical care services during health campaigns and awareness days, like World Diabetes Day, Antimicrobial Awareness Day, World Heart Day, and Pharmacist Day. Pharmacist Day was utilized to highlight the crucial role of pharmacists in healthcare.

## Achieve:

- The assignment of more than 20 military staff to the Najran mission for the protection of the southern border and providing health services stands as a significant achievement in fulfilling our mission.

## Deliver:

- Initiated Blinatumumab Smart Pump Project. Smart pump technology is used in this project to administer Blinatumumab and save oncology beds, making it a new and innovative approach to outpatient therapy.

## Promote:

- Implemented Automated Dispensing Cabinets (ADC) or Omnicell technology in the neuroscience and trauma center represents a significant advancement in our commitment to maintain the sustainability of pharmaceutical care services.

## Implement:

- Implemented Pharmacy Inventory Module, a new software inventory management system integrated into the HIS (BESTCare) and linked with the Oracle system. This project utilizing the barcode verification technology, to manage and control the medication use process including requisition, receiving, stocking and dispensing by using barcode verification technology.

## International awards, recognition, contributions:

- American Society of Health-System Pharmacists (ASHP) and Joint Commission International (JCI).

## 2023:

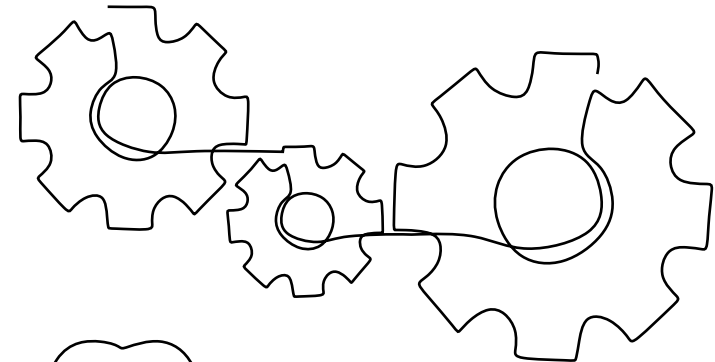
- Initiated a class review of CDK4-6 inhibitors (Palbociclib, Ribociclib and Abemaciclib) which has resulted in cost saving of 10 million SAR per year through negotiation due to the competition.
- Recommended to add Ravulizumab replacing Eculizumab because of class review of Ravulizumab Vs Eculizumab with a cost saving of 20 million SAR per year.
- Implemented a cost saving initiative of Oncology biosimilars such as Trastuzumab, Bevacizumab, Rituximab, Filgrastim (neupogen) and Pegylated filgrastim (Neulasta) with a net cost saving of around 40 million SAR per year
- Recommended to add Isatuximab for multiple myeloma because of class review of Isatuximab Vs Daratumomab, which has a potential of cost saving of more than 5 million per year with better cost effectiveness.
- Implemented novel treatment with CAR-T cell therapy for many cancer patients, who otherwise used to travel to Riyadh or abroad for this treatment. This has resulted in expected cost saving of nearly 40-50 million annually.
- Initiated a novel idea of Oncology Stewardship Program (OSP) with an intention to reduce financial toxicity and improve clinical and patient reported outcomes at MNGHA. OSP is expected to save millions of SAR.



## Support Services

### Introduction:

Support Services Department oversees and is responsible for support services activities and functions related to staff housing, transportation and vehicle maintenance, fire protection services, food services contracts and operations, safety management, and environmental services, with contracted services such as food services, housekeeping, public health, laundry, horticulture roads and grounds, hazardous materials services, and transportation services.



## Support Services

King Abdulaziz Medical City– Jeddah

### Deliver:

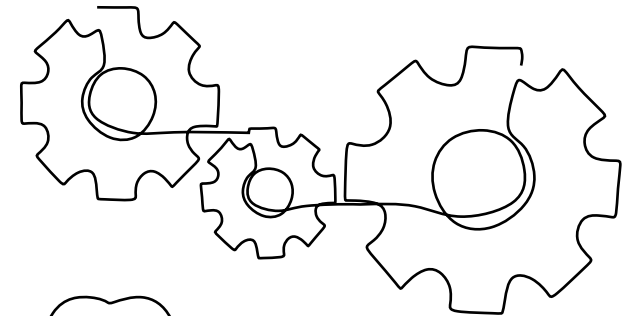
- Extended our services to cover the new neuroscience & Trauma care center.
- focusing on food safety. This includes having a food safety management system in place, training staff on food safety procedures, and regularly monitoring food safety practices.
- Measurement strips are provided to check the quality of chemical mixing. As a result, any area of cleaning becomes more efficient and effective.
- The new neuroscience & Trauma care centre waxing and vinyl flooring project.
- Based on two annual visits by the Ministry of Health, our department has achieved the following score:
  1. March visit: 100% compliance with housekeeping procedures, 92% compliance with medical waste and 100% compliance with laundry service.
  2. August's visit revealed: 94% Compliance housekeeping procedures, 92% medical waste, and 100% laundry.

### Promote:

- Streamlined training process for housekeepers, who number more than 400, implementation of sharp medical containers collecting APP and replacing them in an efficient manner to serve the nursing department.

### Implement:

- BestCare system is using digital meal ordering systems that allow patients to order meals that meet their specific dietary needs, which can help to identify patients who are at risk of malnutrition
- Implemented an advanced system for completing and following up on tasks both internally and with contractors.





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Ministry of National Guard Health Affairs

MNGH-A

# Al Madinah



# PMBAH-Al Madinah

## OPERATIONAL EFFICIENCY

Establishment of the intensive care nursery (ICN)



Establishment of Psychology Service

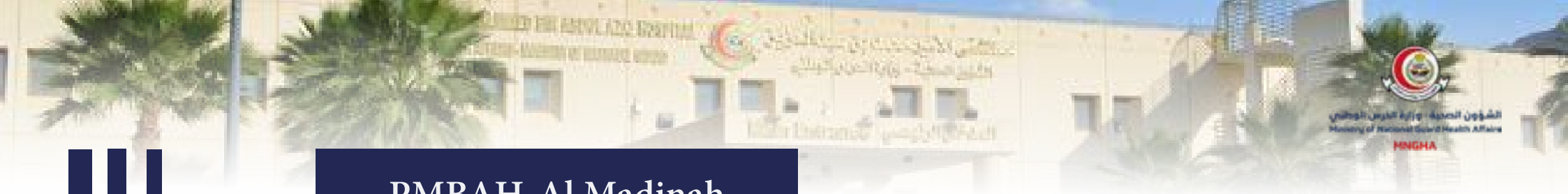


Establishment of Sleep Lab



Establishment of Pediatric Emergency Medicine services



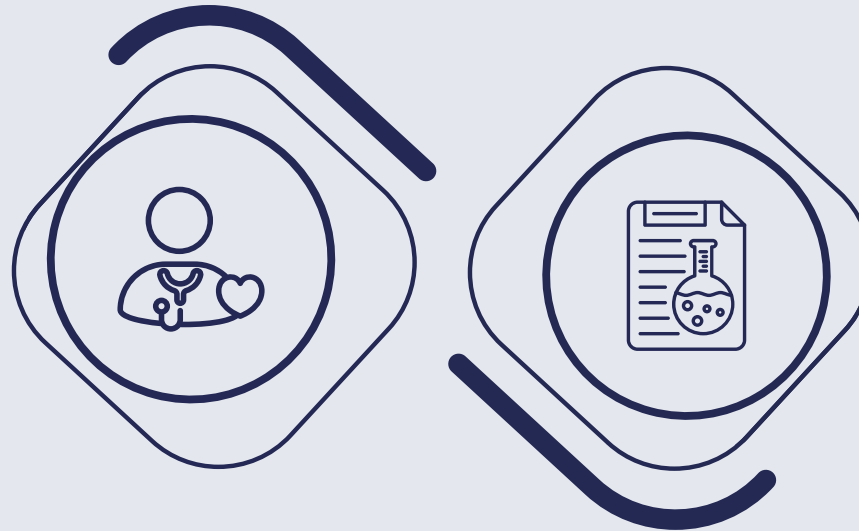


## PMBAH-Al Madinah



### SERVICE EXCELLENCE

Establishment of Pediatric Rapid Response Team (PRRT)



First to obtain the International Accreditation from the International Laboratory Accreditation Cooperation (ILAC) in the field of toxicology and drug analysis and clinical Point-Of-Care analysis through the Saudi Accreditation Center (SAAC) with the International Standards ISO15189:2012 and ISO22870:2016



## PMBAH-Al Madinah

### SERVICE EXCELLENCE

Renewed the hospital's commitment to implementing the standards of the National Basic Patient Safety Requirements (ESR) program by The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) with a 100% compliance rate.



The Primary Health Care Center for Family Medicine in Medina has obtained full accreditation from The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI).



CBAHI Accreditation with (98.06) Score.



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Medical Services



## Anesthesia Department

### Introduction:

Anesthesia Department focused on establishing excellence in patient care, medical education and clinical research to meet the strategic plan of the National Guard Health Care System and our staff rendered their service with patient, working as expert in providing the Anesthesia in Pre-operative Program, in the main Operating Theatres, Caesarean Specialty Theatres and in Day Surgery Unit.

Our primary goal is to provide the finest care to patients through collaboration with all members of the healthcare team and the utilization of continuous quality improvement principles. The Anesthesiology Department is a crucial partner in providing clinical care that is based on evidence, and effective pain management for all patients to achieve these goals. To offer education to young men and women who are seeking a challenging and exceptional experience. Our commitment is to fully integrate our interests in clinical practice, medical education, and research in the Anesthesiology Residency Program.



# Anesthesia Department

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Deliver:

- Activated 5 operating rooms on daily basis.
- Provided Anaesthesia service for interventional radiology patients.
- Activated chronic pain clinics (04 clinics per week).

## Promote:

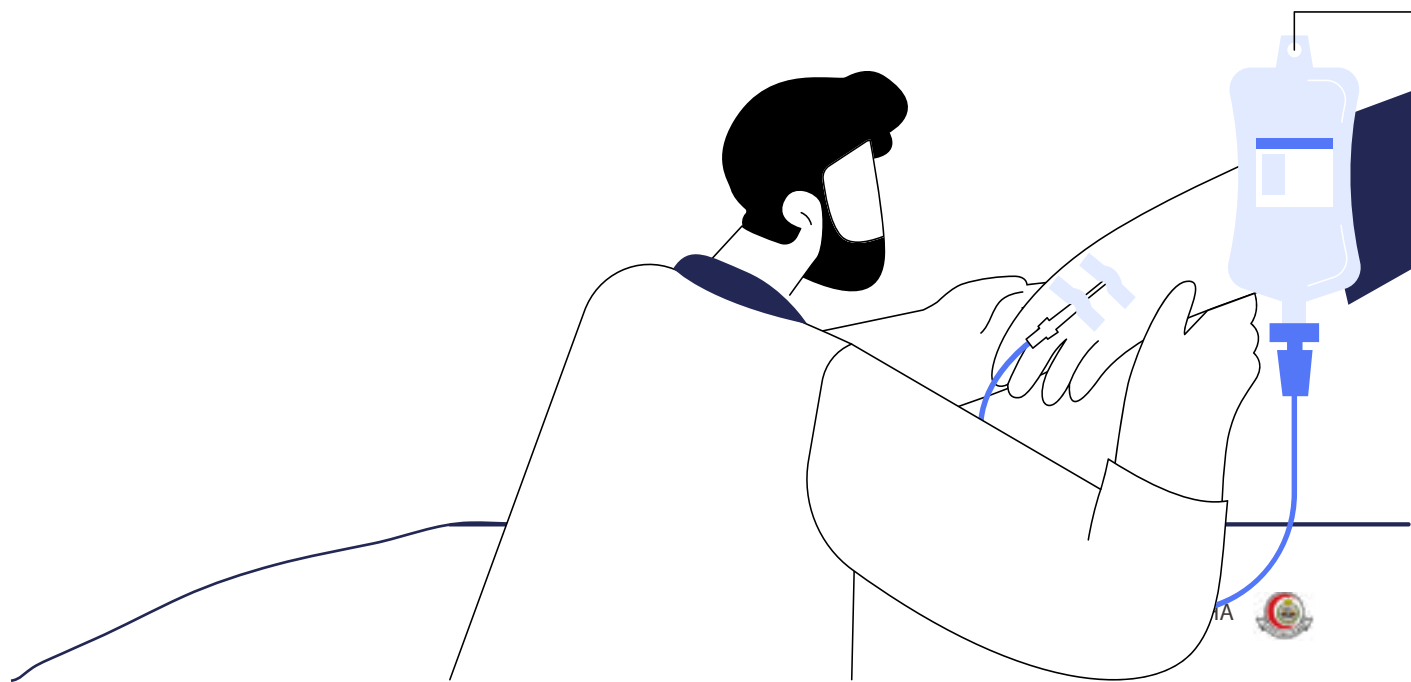
- Started Green Anaesthesia project.
- New devices were provided and activated:
  1. Broncho Scope tower.
  2. MRI Combatable monitor.
- Anaesthesia Residency Program (the number of new residents was increased to be two new residents every year).
- Moderate Sedation Course for hospital staff (physician and nurses).

## Implement:

- Reliance on the Virtual Clinics Pre-Anaesthesia clinic (90%).
- Activated Anaesthesia tracking system.

## Statistical Information:

|            | Total Numbers of Vaginal Delivers in L&D | Number of Patient with PARA 4 and more | Total Number of NSVD IN L&D after Excluding PARA4 and more | Total Number of NSVD patients who received Epidural after Excluding PARA4 and more | Total Number of NSVD patients who Did not receive Epidural after Excluding PARA4 and more |
|------------|--|--|--|--|---|
| Total/year | 1170                                     | 155                                    | 1015   | 299  | 716   |



# Bed Management

## Introduction:

The bed management department was established in Jun 2022. It consists of two sections: Bed Management (Admission office) and Case Management. The goal of the department is to facilitate the inpatients flow from admission to discharge while maintaining the higher standards of care by collaboration with all stakeholders.

The bed management operationally is organized into seven main sections that work cooperatively and effectively to achieve the department's goals.

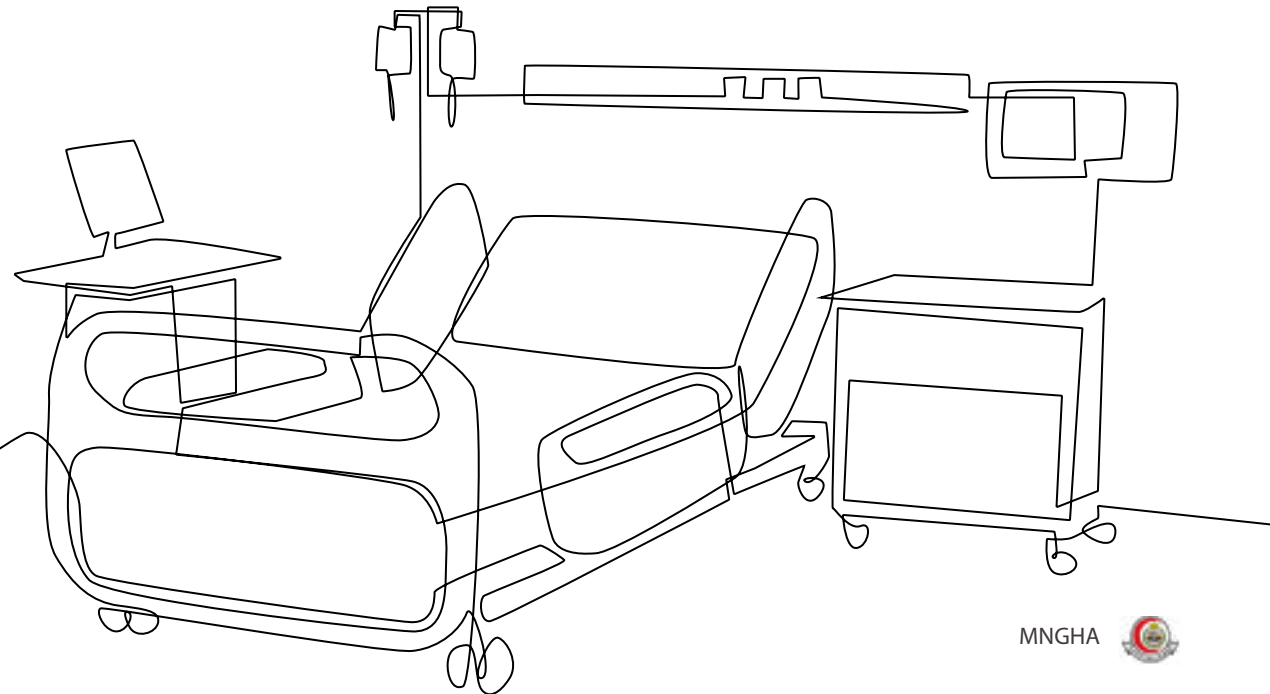
### Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

#### Deliver:

- Daily Patient flow and bed planning meeting (Discharge pathway): To maintain ER boarding below two hrs. In addition, to avoid OR cancellation due bed availability.

#### Promote:

- Establishment of full process of medical equipment dispensing in order to facilitate discharge and home health care.



## Dental Services

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

### Introduction:

As a part of the Ministry of National Guard-Health Affairs, the aim of the Dental Services Department at Prince Mohammed Bin Abdulaziz Hospital (PMBAH) in Al-Madinah is to provide the National Guard personnel and their dependents with the highest quality of primary, secondary and tertiary dental and maxillofacial surgery services, while ensuring accuracy and proper utilization of our available resources:

- Oral & Maxillofacial Surgery.
- Pedodontics.
- Orthodontics.
- Prosthodontics.
- Restorative Dentistry.
- Endodontics.
- Periodontics.
- General Dentist/Staff Dentist.
- Dental Hygiene.

### Deliver:

- Establishment of Periodontics clinic.

### Promote:

- Delivered dental prosthesis in the same day.

### Statistical Information

| Total No. of / Average of                                  | Statistic                   |
|--|-----------------------------|
| Total No. of Patients Seen by Procedures (Pediatric/Adult) | 7493                        |
| Total No. of Booked Patients (Pediatric/Adult)             | 8836                        |
| Total No. of No-Show Patients (Pediatric/Adult)            | 1343                        |
| Total No. of Walk-In Patients (Pediatric/Adult)            | 2304                        |
| Total No. of Referrals (Pediatric/Adult)                   | 2000                        |
| Average Patient Waiting Time in the Clinic (Minutes)       | 5 Minutes                   |
| Average Consultation Time (Minutes)                        | 15 Minutes                  |
| Average Time Per Procedure (Minutes)                       | 45 Minutes                  |
| Average Waiting Time for Appointment Schedule (Days)       | 30 Days                     |
| Total No. of Admission (Pediatric/Adult)                   | (Pediatric: 90 / Adult: 97) |
| Total No. of Dental Surgeries                              | (Pediatric: 90 / Adult: 97) |
| Average Length of Stay (ALOS) (Pediatric/Adult)            | 2                           |



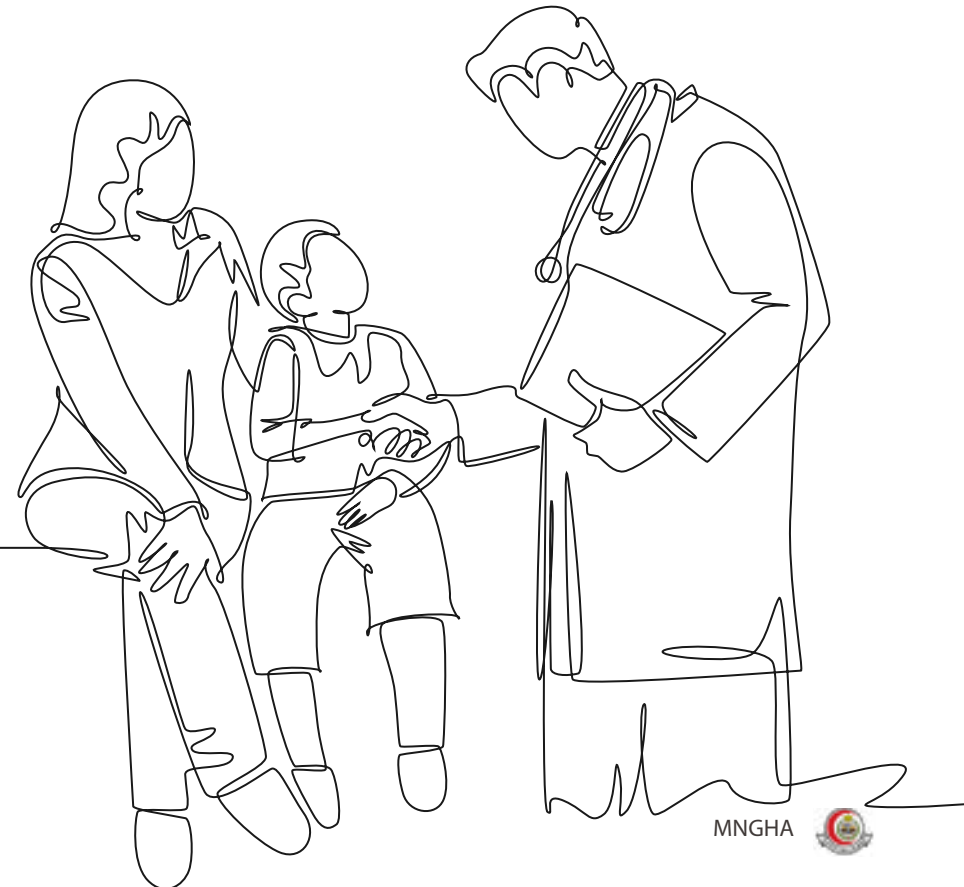
## Family Medicine & Primary Healthcare Centers

### Introduction:

The Family Medicine and Primary Healthcare Department provides preventive, therapeutic and rehabilitative care to Ministry of National Guard population, through primary care centers placed in Central, Western, and Eastern Regions. Further, to achieve the goals and strategies of health affairs, which confirm that primary health care is the basis of the health system.

Our services include the following:

- Preventive: both primary and secondary prevention.
- Curative for the acute and chronic health problems presented.
- Promotion of community wellbeing and Community Participation.



# Family Medicine & Primary Healthcare Centers

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Emphasize:

- Vaccination Campaign (Influenza and Herpes Zoster 'Shigrix', Meningitis).
- World Health Days: World AIDS Day, World Diabetics Day, Participation in the awareness exhibition at Taibah University to combat tobacco and drugs, Participating in Women's Cancer Awareness Day, Participation of the in-World Breast Cancer Day held at the Al Madina Chamber, Celebrate Osteoporosis Day, celebrate breast cancer Day Celebrate world Diabetic Day.

## Achieve:

- Accomplished Military Missions all over the year (9 missions with 48 working days missions).
- Influenza Vaccine Campaign for military personnel.

## Deliver:

- Provided integrated services with PMBAH and other health care facilities.
- Expanded Dental services at PHC Madinah.
- Expanded laboratory services to meet the safety standards.
- Allocated new medical waste room according to national safety hazard treatment.

## National awards, recognition, contributions:

- Published 1 research (The Impact of using phone technology for follow-up care among the adult population with type 2 diabetes: a systematic review) (Authors: Amani Mahrous, Meshari Turjoman, Souad Fadhlalmawla and Khulood Alsiary.

## Statistical Information:

### Total Visit Statistics

| MONTH     | STATISTICS |
|-----------|------------|
| JANUARY   | 9,738      |
| FEBRUARY  | 6,678      |
| MARCH     | 7,708      |
| APREL     | 3,761      |
| MAY       | 9,219      |
| JUN       | 5,979      |
| JULAY     | 8,093      |
| AUGUST    | 9,279      |
| SEPTEMBER | 8,439      |
| OCTOBER   | 10,022     |
| NOVEMBER  | 9,120      |
| DECEMBER  | 10,422     |
| TOTAL     | 98,458     |

| Patients Gender | Male   | Female | Total  |
|-----------------|--------|--------|--------|
|                 | 34,526 | 63,932 | 98,458 |

|   |        |
|---|--------|
| Clinical Nutrition Clinic Statistics      | 444    |
| Dental Clinic Statistics                  | 4,318  |
| Obgyne Clinic Statistics                  | 2,562  |
| Well Baby & Vaccination Clinic Statistics | 3,543  |
| Antenatal Care Statistics                 | 2,499  |
| Diabetes & Comorbidities Statistics       | 2,637  |
| Telehealth Chronic Disease Statistics     | 119    |
| Health Education Clinic Statistics        | 1,177  |
| Telehealth Statistics                     | 43,082 |
| Telehealth Postpartum Statistics          | 723    |
| ENT Statistics                            | 1,027  |
| Optometry Statistics                      | 1,974  |

| LAB Statistics | Lab Request | Patient | LAB Appointment | LAB Sample |
|----------------|-------------|---------|-----------------|------------|
|                | 107,319     | 22,884  | 12,384          | 107,319    |

| TYPE OF EXAMINATION-Radiology | Total |
|-------------------------------|-------|
| Chest & Heart                 | 186   |
| Orthopedic                    | 2,078 |
| E.N.T / Skull                 | 195   |
| Plain K.U.B                   | 23    |
| Dental X-Ray                  | 1,600 |
| Total                         |       |

|                       |         |
|-----------------------|---------|
| Pharmacy- Total RX    | 83,175  |
| Pharmacy- Total Items | 147,851 |



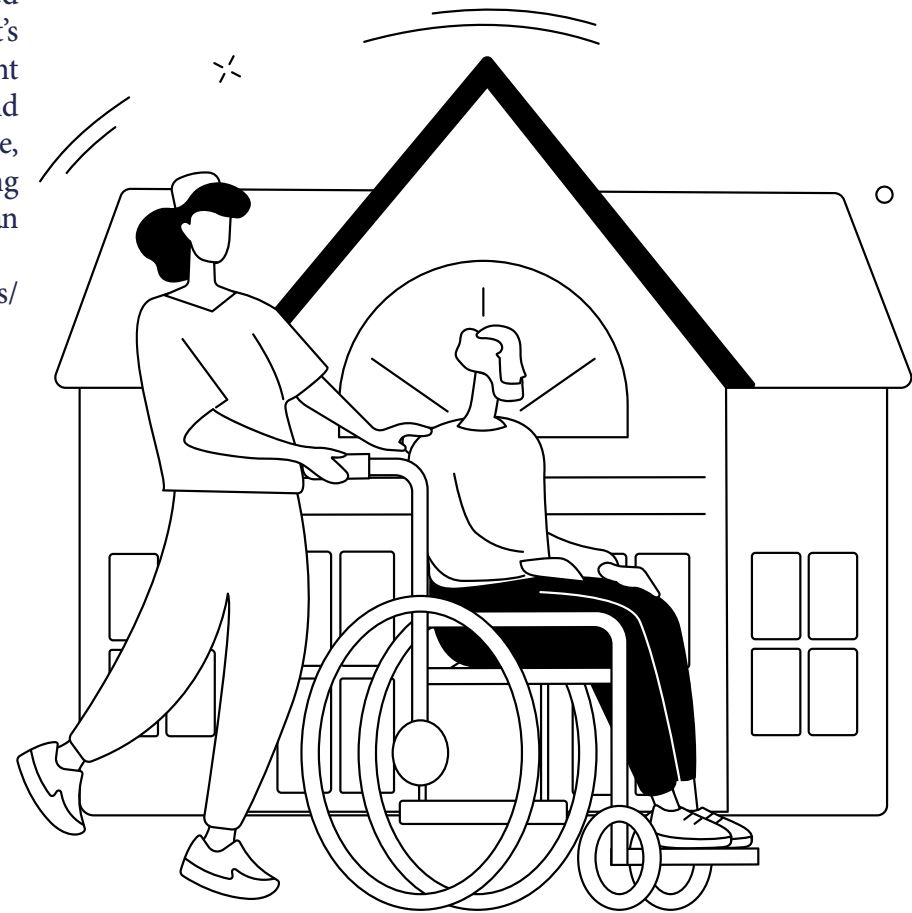


## Home Health Care

### Introduction:

The home Health Care Program is a hospital-based, community program, which Established of in September 2021 to facilitate discharges from the hospital for continuation of a patient's care, solver bed blocker, and for continuation of the patient's care. Also, to reduce patient visits to the emergency room, re-admission to the hospital, and visits to outpatient clinics and laboratories. And also, as an alternative to hospitalization, Anticoagulation monitor, wound Care, Laboratories follow-up, Vaccination program, Palliative care, and Nursing services including (folly Cath, SPC Cath, NG tube care & exchange, PEG tube site and stone care). Including physician consultation, respiratory care, occupational therapy, and social services.

- Home health care center works regularly 5 days a week from Sunday to Thursday, 9 hours/ day, and work during holiday and Eid critical visit only.
- HHC geographic coverage area 30 km from the main hospital.
- Providing take home supply through hospital store.



# Home Health Care

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Provide:

- HHC contributed in decreasing ER visits among HHC patients, as 55% of HHC patients has decreased their ER visits.

## Deliver :

- Oxygen Wean off from Respiratory Services.
- Initiated new services nutrition follow up and occupational therapy care in community.

## Promote:

- Initiated contentious education program and conduct 17 lectures for 205 employees from MOH and NGH.

## International awards, recognition, contributions:

- Participated in one of HHC employees in conferences and exhibitions of ARAB Health Exhibition in Dubai.
- Contribution of the First Annual International Conference of Saudi Scientific Society Home Healthcare in Madinah.

## National awards, recognition, contributions:

- Under the auspices of PMBAH Arranged the Annual Saudi Home HealthCare National Event.
- Contribution of the First Annual International Conference of Saudi Scientific Society Home Healthcare in Madinah.
- Participated in one of HHC employees in conferences and exhibitions of Health bition in Riyadh.
- Education Material of for training Home Health Care Patients' Caregivers.
- Continues education for the HHC staff and relative department.

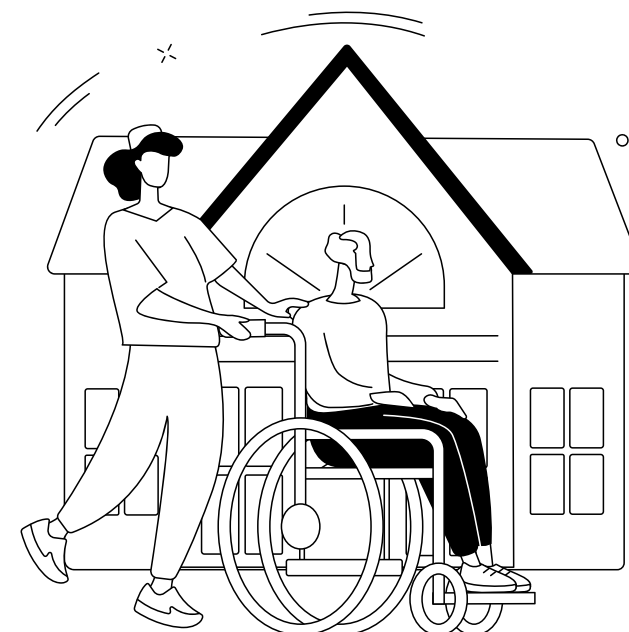
## Statistical Information:

Patient distribution according to required service

| Service required  | Number of patients |
|---|--------------------|
| Total number of patients served                                     | 234                |
| Total number of active patients                                     | 135                |
| Number of patients discharged or expired during month               | 6                  |
| Number of patients required nursing service                         | 135                |
| Number of patients required physio and occupational therapy service | 75                 |
| Number of patients required respiratory therapy service             | 30                 |
| Number of patients on tube feeding                                  | 20                 |
| Number of patients on urinary catheter                              | 28                 |
| Number of patients required wound care service                      | 22                 |

Number of Visit and Follow up per HHC Teams

| Team             | Total |
|------------------|-------|
| Physician visits | 1,140 |
| Nurses' teams    | 1,494 |
| Physiotherapy    | 364   |
| Respiratory      | 303   |
| Nutrition        | 297   |
| Health education | 197   |
| Social service   | 15    |
| Virtual visit    | 143   |



## Intensive Care Unit (ICU)

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

### Introduction:

The ICU has been operated since 2012 when PMBAH opened its door to National Guard patients. At present, it has three full time ICU Consultants, two Assistant Consultants, five Staff Physicians and one Administrative Assistant. We have Establishment of and ICU residency program through SCFHS and will receive our first resident this year (2023)

The department of ICU serves as a backbone for the hospital; its services include patients needing critical care admitted to Adult or Isolation ICU (Covid ICU). We provide our consultation services for patients presenting to Emergency Room, Hemodialysis, Operating Room and patients admitted to Chronic Ventilator unit. In addition, the ICU Department is primarily responsible for conducting and reviewing code blue and RRT (rapid response team) cases.

### Promote:

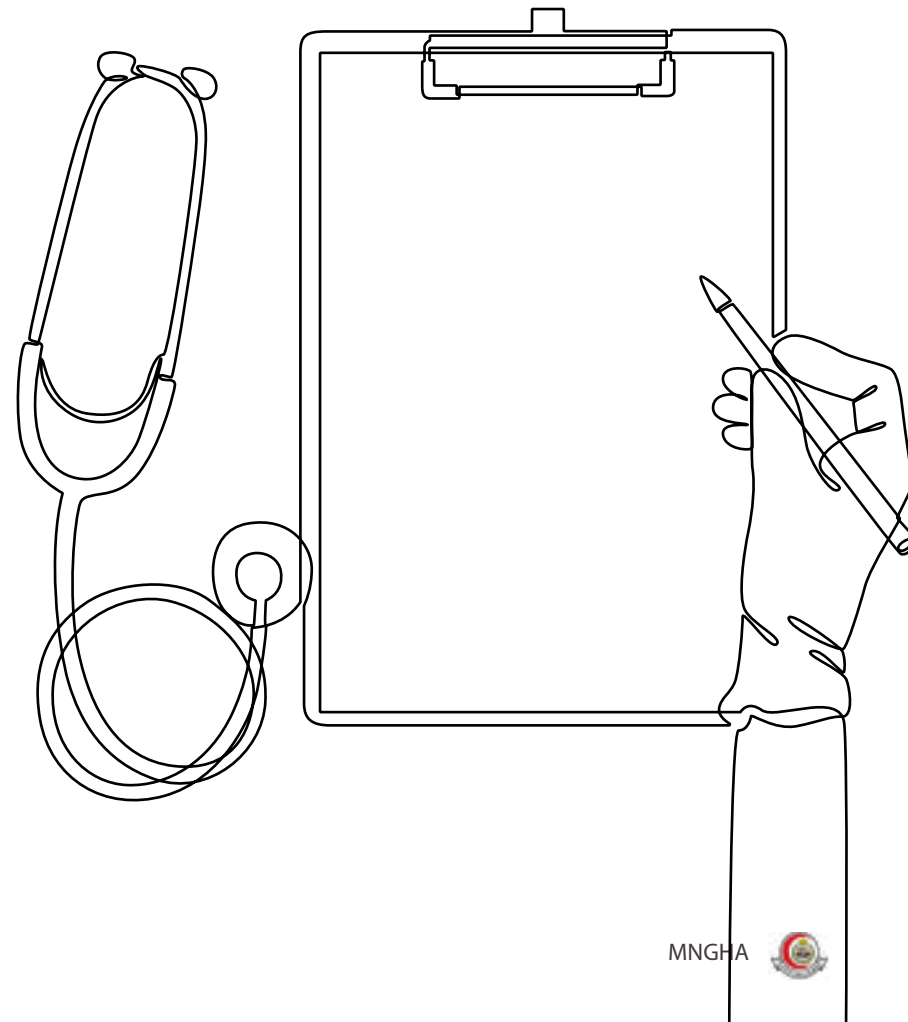
- Establishment of a high-quality critical care courses for Madinah Region like advanced hemodynamic monitoring, POCUS and mechanical ventilation courses.
- Expanded our scholars to critical care medicine training programs in North America
- Align ICU practice with resident trainee objectives.
- Developed comprehensive educational program
- Enhanced Point-of-Care Ultrasound (POCUS) utilization.



## Medical Eligibility

### Introduction:

Medical Eligibility Department was Establishment of to facilitate the process of accepting referred non-National Guard patients for tertiary medical care based on clinical criteria and according to hospital capacity to ensure that priority is given to those patients that are of greater need for our expertise and resources and maintain their eligibility as long as their medical condition require tertiary care. Recently, Medial Eligibility uses Ministry of Health (Ehalah) System to process MOH referred cases, both eligibility and coordination governed by MNGHA administrative policies and procedures.



# Medical Eligibility

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Implement:

- The MNGHA website's electronic services portal has procedures for non-members of the National Guard to receive medical care without attending a hospital. This emphasis reduces the risk of harm to both patients and families.
- Electronic services on the MNGHA website (NFATH) are used by 52% of eligible patients to request treatment without going to the hospital.
- 40% of the eligible individuals request to extend treatment through 'WECare' without attending the hospital.
- Medical Eligibility has successfully implemented this year automated electronic system for extending eligibility and activate SRS System (WECare) for receiving all extending eligibility requests in order to reduce number of walk-ins in OPD.
- The number of walk-ins in OPD was reduced by implementing an automated, electronic system for extending eligibility and activating the SRS System (WECare) to receive all extending eligibility requests.

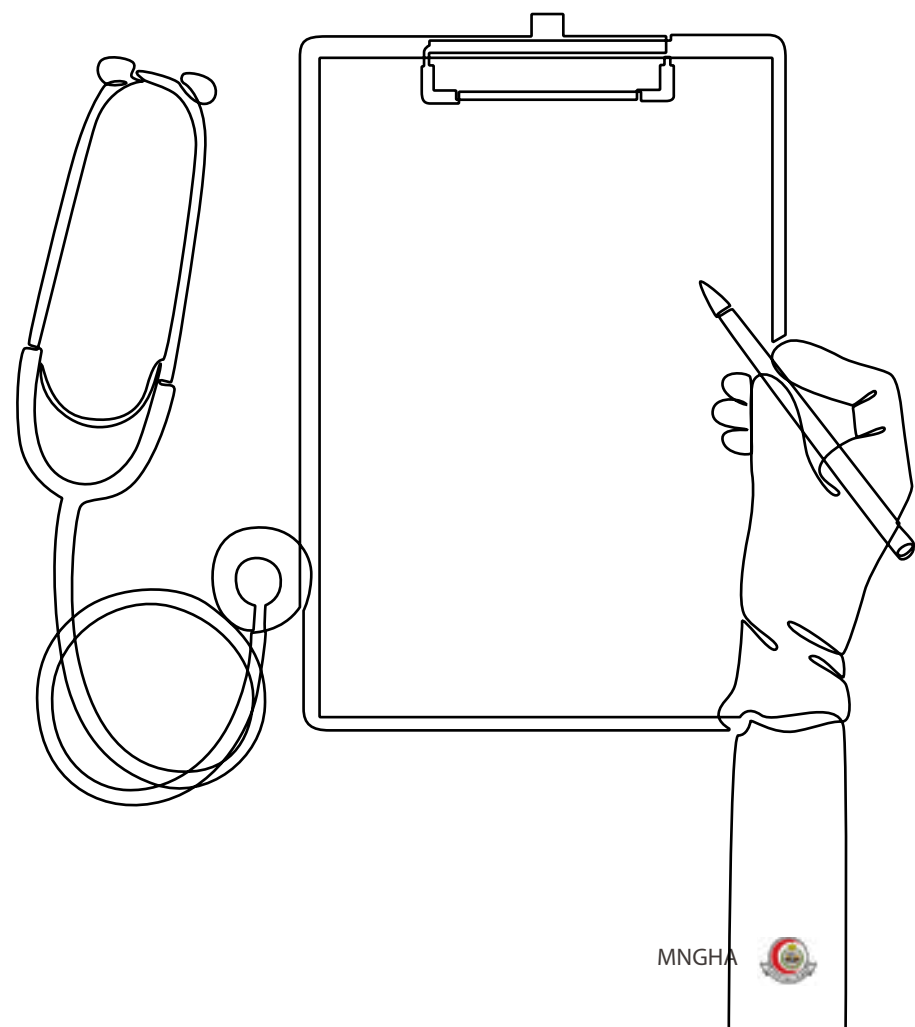
## Statistical Information:

Total Request by Specialty (Nfath)

| Specialty            | Approved |
|----------------------|----------|
| OB-GYNE              | 497      |
| Sur-Orthopedic       | 115      |
| MED                  | 49       |
| SUR                  | 8        |
| Sur-ENT              | 169      |
| Sur-General          | 110      |
| PEDI                 | 26       |
| Sur-Plastic          | 75       |
| Med-Internal         | 24       |
| Sur-Urology          | 43       |
| Med-Gastro           | 33       |
| Sur- Ophthalmology   | 23       |
| Full No (Dent/Cosm)  | 54       |
| Med-Endocrinology    | 33       |
| Sur-Neurosurgery     | 5        |
| OB-GYN               | 51       |
| Med-Neurology        | 24       |
| DENT                 | 11       |
| Sur-Ped-Orthopedic   | 34       |
| Surg-Vascular        | 22       |
| Med-Hematology       | 19       |
| Med-Nephrology       | 7        |
| Ped-General          | 13       |
| Full coverage        | 24       |
| MED-DERMA            | 5        |
| Ped-Neurology        | 9        |
| Med-Cardiology       | 4        |
| Med-Oncology         | 11       |
| Ped-Neonatology      | 22       |
| Ped-Endocrinology    | 15       |
| LAB                  | 10       |
| Ped-Hematology       | 6        |
| Med-Rheumatology     | 7        |
| Sur-Pediatric        | 4        |
| Med-Pulmonary        | 4        |
| Gynecology           | 2        |
| Full No Dent         | 4        |
| Ped-Nephrology       | 4        |
| Ped-Gastroenterology | 2        |
| Med-Psychiatry       | 1        |
| SUR-Obesity          | 2        |
| Vaccination          | 1        |
| Sur-Oral MF          | 1        |
| Psychiatry           | 1        |
| PedInfec             | 1        |
| Ped-Cardiology       | 1        |
| Med-Infetous         | 1        |
| Med-Immunology       | 1        |

## Extend Medical Eligibility

| Approved | Disapproved |
|----------|-------------|
| 2253     | 933         |



# Medical Imaging

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Introduction:

The Medical Imaging Department at Prince Mohamed Bin Abdul-Aziz Hospital in Al Madinah Al Munawarah has committed to provide good quality services by utilizing state of the art technology and highly skilled manpower. The department is also committed to make a valuable contribution of MNGHA vision by creating a safe, inspiring and pleasant working environment for all staff so that the clinical care of our respectable patients will continue to improve.

### Provide

- Provided 24/7 diagnostic imaging service (RIS) that can be accessed from Best-Care by physicians from anywhere in the hospital.

### Deliver

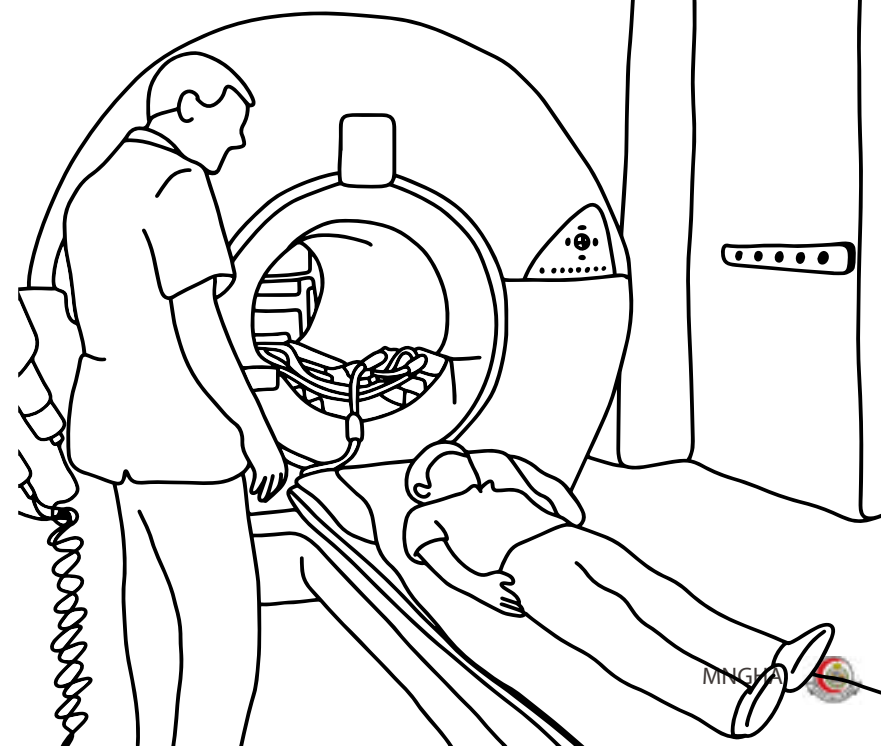
- Installed and completed of bones densitometry (DEXA) scan unit.

### Promote

- Launched Residency Program.
- Completed installation of modernized digital fluoroscopy machine.
- Completed the installation of two state-of-the-art digital radiography machines, which are very fast, accurate, and have achieved efficient diagnostic services.

## Statistical Information

| Intervention        | 662   |
|---------------------|-------|
| Nuclear Medicine    | 287   |
| FLUOROSCOPY         | 346   |
| MAMMOGRAM           | 490   |
| MRI                 | 3186  |
| COMPUTED TOMOGRAPHY | 9532  |
| ULTRASOUND          | 11525 |
| X-RAY               | 35124 |
| Total               | 60917 |



# Medicine Department

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Introduction:

The department of Medicine provide high quality inpatient, outpatient care and adult day care services to National Guard Employees and their eligible dependents and eligible Saudi citizens in Madinah Region in 15 different sub specialities. Furthermore, as the department strengthens its mission through organizational efforts to achieve excellence in patient care and medical education. While upholding the mission of the National Guard Health Affairs in hand with the Quality Management Monitoring Committee, we continue to monitor, try to excel our services.

### Emphasize:

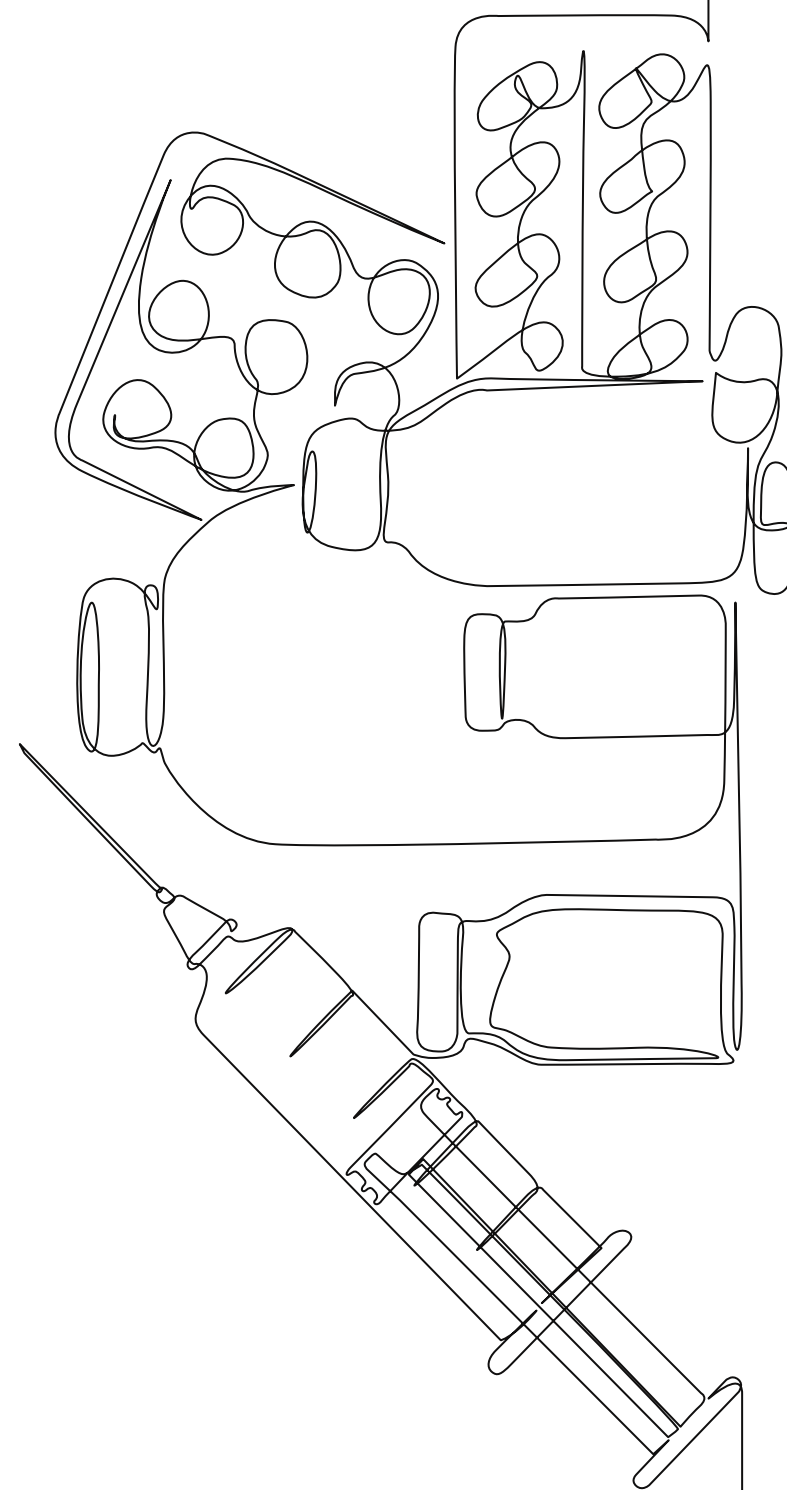
- Hepatitis Awareness Day, Stroke Awareness Day, Sepsis Awareness Day and World Osteoporosis Day
- Endocrinology Conference.
- Medicine Virtual Symposium: Feb 2023.

### Deliver

- Expanded Isolation Step-down In order to provide HDU care to COVID.
- Shadow Clinic project (Shadow Clinic):
  - To provide the patients with an easier method to refill or re-prescribe their medications without the need to book an appointment each time.
  - To reduce walk-in by 48% by creating Shadow Clinics for Speciality under Medicine.

### Promote

- Started Diabetes Fellowship program.
- Initiated Breast and colorectal Cancer screening program.
- Endocrinology fellowship (Pending approval by SCFHS.)
- Excimer Laser for treatment of vitiligo and psoriasis, Hand and foot narrow band UVB Phototherapy machine for localized psoriasis and vitiligo.



# Obstetrics & Gynecology

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Introduction:

Obstetrics & Gynecology department is one of the busiest departments in the whole hospital with increasing patient load. A 46-bed department including Labor Room, OR, Ambulatory Care and In-patient with 10CTG machines. We are providing comprehensive, high-quality care for National Guard patients and for patients referred to us. On other hand, we are overseeing health care professional and train the Saudi program trainee (Residents) and interns. Additionally, the department has created trainings for interns and residents in Obstetrics and Gynecology.

### Services

- General Obstetrics/Gynecology and Maternal Fetal Medicine.

## Emphasize:

- Empowered patients to be healthy and reduce their chance of infections and disease through Awareness days Gynecology and Breast-Feeding Day each year.

## Provide:

- By opening first visit clinics, consultants, and made possibility of having chance to set easy clinic Appointment within 2 weeks.

## Implement:

- Patients could request preferred services by using the MNGHA application through their mobile.

## Statistical Information

|                   | TOTAL |
|-------------------|-------|
| OPD TOTAL PATIENT | 11098 |
| ASSESSMENT        | 4457  |
| IN PATIENT WARD   | 3149  |
| TOTAL DELIVERIES  | 1903  |
| CESAREAN SECTION  | 730   |

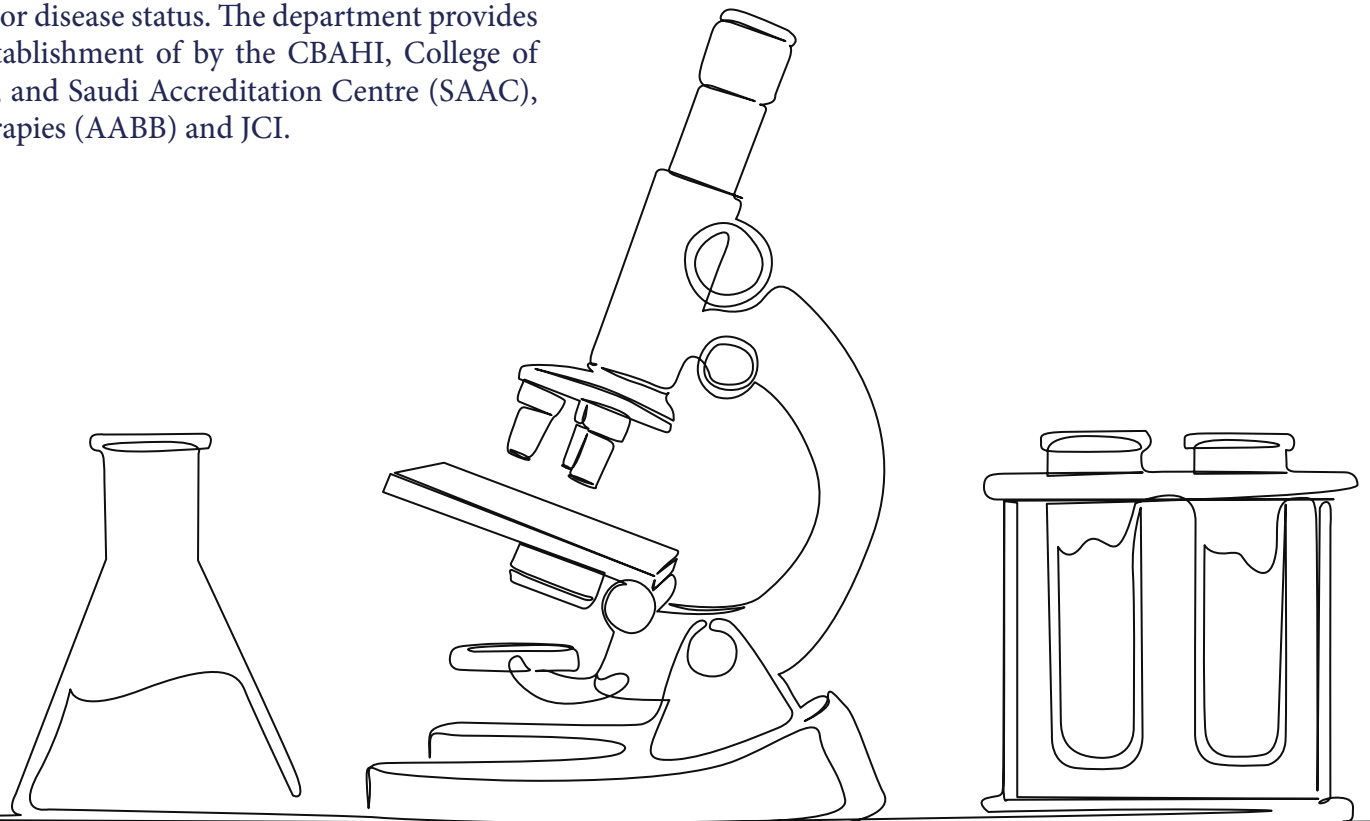




# Pathology and Laboratory Medicine

## Introduction:

The Pathology and Laboratory Medicine is one of medical departments in the hospital that provides all routine clinical laboratory qualitative and quantitative assays of blood, body fluids and secretions, urine, feces , and tissues used to detect, diagnose, treat or monitor disease status. The department provides all its services in accordance to the standards Establishment of by the CBAHI, College of American Pathologists (CAP), ISO 15189 (A2LA), and Saudi Accreditation Centre (SAAC), Association for Advancement of Blood and Biotherapies (AABB) and JCI.



# Pathology and Laboratory Medicine

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Deliver:

- Chemistry Section test menu has been expanded by including new tests such as: AFP, CEA, Free PSA, Haptoglobin, Transferrin and Total Bile Acids. These tests were introduced to decrease the turnaround time, to improve the quality and to serve our patients.
- Hematology Section test menu has been expanded by including new tests such as: Antithrombin, Factor VIII, Lupus Anticoagulant, Protein C, Protein S, von willebrand antigen, von willebrand activity.
- Expanded Laboratory services by Commissioning of New Molecular Section, New Toxicology Section, New Flow Cytometry Section and new toxicology section.

## Promote:

- Blood Bank: equipment was updated by the procurement of NEO Iris that can process bigger number of specimens and ECHO Lumena. This comes because of the expanding demand on the Transfusion and donation services. The procurement of new blood products processing system (Reveos) in November 2023.
- POCT Implemented project of new device (NOVA Statstrip Glucose) in critical sites.
- Educational activities: 119 Webinars, workshops and conferences have been announced through the laboratory Educational Team.
- The laboratory conducted 9 monthly lectures that were presented by lab staff.

## International awards, recognition, contributions :

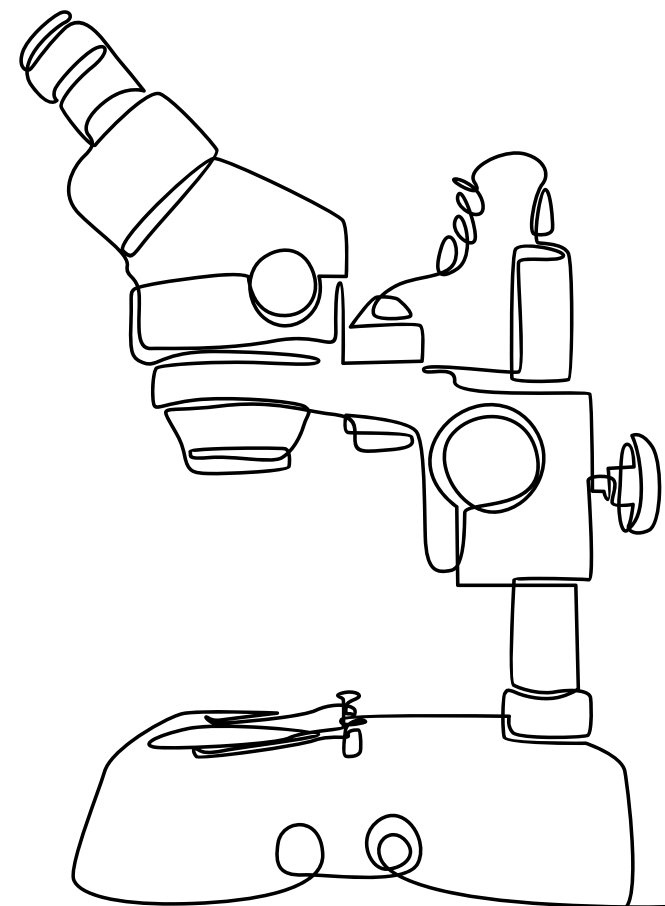
- AABB (Association for the Advancement of Blood & Biotherapies)
- ISO 15189 from (A2LA: Assessment Accreditation Services).
- CAP (College of American Pathologists).
- JCI (Joint Commission International).

## National awards, recognition, contributions:

- ISO15189:2012 and ISO22870:2016 from Saudi Accreditation center (SAAC).
- Central board for accreditation of healthcare institutions (CBAHI).

## Statistical Information:

The total laboratory workload is: **2,467,254**

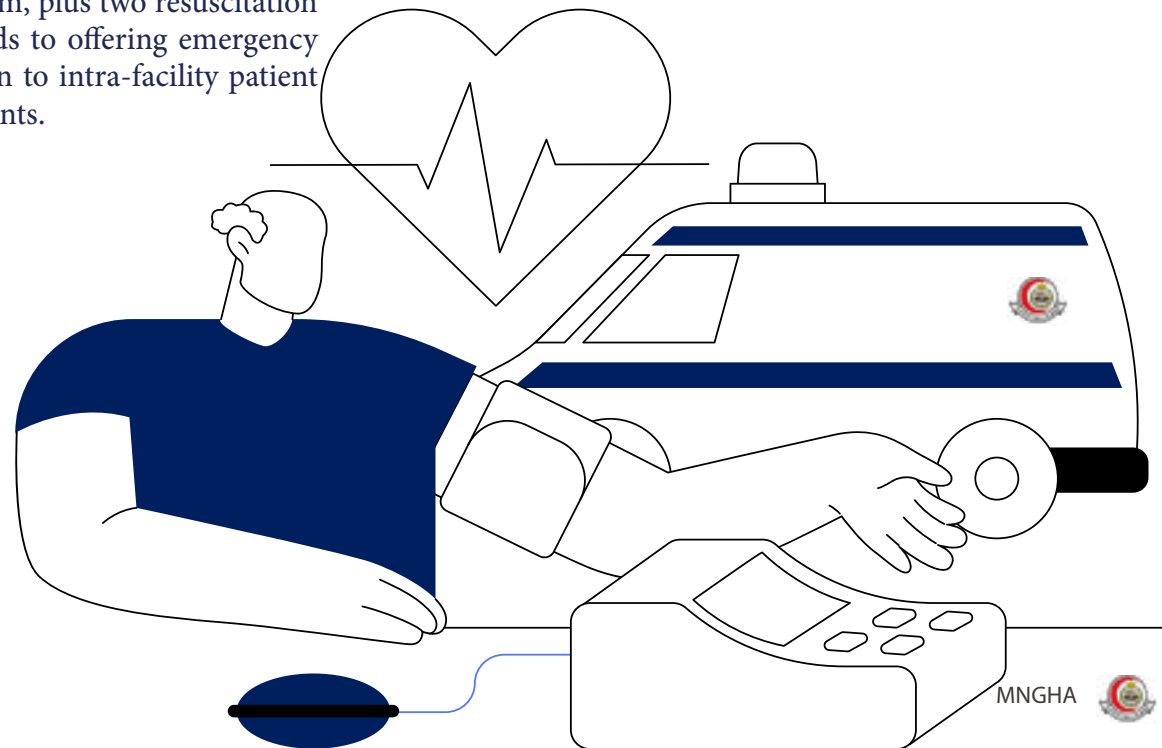


# Emergency Medicine

## Introduction:

The focus of emergency medicine is on recognizing, evaluating, and caring for patients who are acutely ill or injured. Emergency Medicine requires a broad base of medical knowledge clinical and technical skills since its fast-paced with high-pressure accordingly Emergency physicians must be prepared to manage all patients of all ages and a nearly infinite variety of conditions and degrees of illness often before a definite diagnosis is made and within time-restricted circumstances.

24/7, the Emergency Department is the front gate that takes care of sick patients. There are 17 beds and a triage area in it. One trauma room and one isolation room, plus two resuscitation beds. In addition of standalone flu clinic. Our commitment extends to offering emergency response within the PMBAH premises' geographic area. In addition to intra-facility patient transfers, we also handle hospital entrance for non-ambulatory patients.



# Emergency Medicine

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Emphasize:

- Vaccination for influenza campaign.
- Explain information on the services offered by the hospital's Emergency Room and Primary Health Care Center.
- Comprehensive campaign to the public on using Tele-health medicine to reduce patient visits in ED.

## Achieve:

- Guide military police during Disaster Drills.
- Educated and trained EMS Soldier Medics.

## Provide:

- Improved non-emergency long distance patient transfer service by decreasing the waiting time.
- New ED Flow Implementation to Reduce Waiting Time and Overcrowding.
- Significant increase in number of patients visiting the emergency department (reaching up to 70,000) visits from January to October 2023.

## Promote:

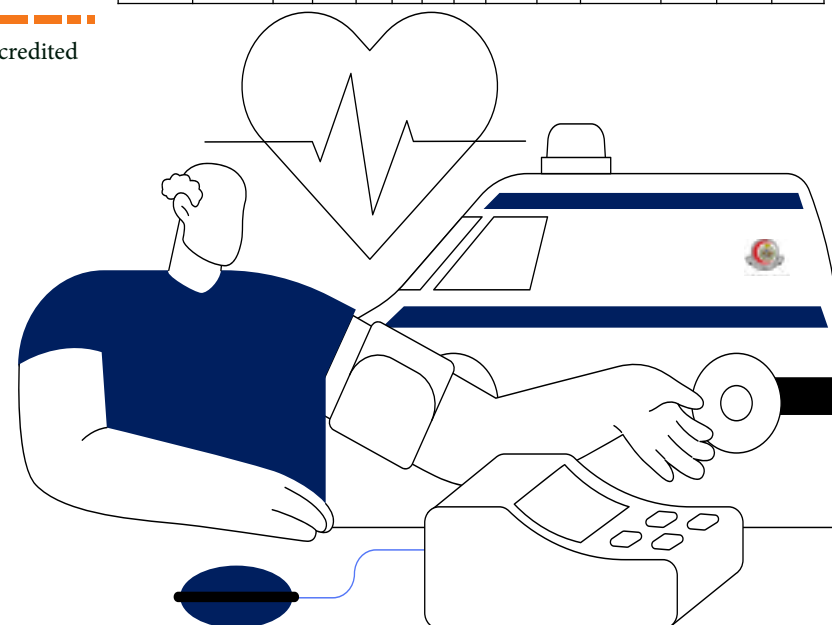
- Contributed in recognition of PMBAH by SCFHS as a training center and the accreditation of Emergency Medicine residency training center.
- Establishment of system for to control and monitor medical items for proper utilization and planning to reduce cost.
- Triage course for the doctors and nurses.
- Obtained two new ultrasound Machines.
- Emergency medicine research ingenuities Program.
- Initiate objective oriented training manual for SCDP Paramedic program.
- Opened channel for direct communication with Red Crescent to enhance mutual aid and cooperation.

## Research:

Approval of (5) scientific research published in accredited scientific journals.

## Statistical Information:

| DISCHARGED TYPES |               |       |      |       |      |      |      |           |      |              |                 |           |                |
|------------------|---------------|-------|------|-------|------|------|------|-----------|------|--------------|-----------------|-----------|----------------|
| MONTH            | ADMISSION     | DAM A | LWBS | ABS C | PH C | TW E | DO A | SENT HOME | L&D  | FLU CLINIC   | >4 HRS OVERSTAY | TRANSF ER | TOTAL PATIENTS |
| JAN              | 431 (8.4%)    | 80    | 154  | 29    | 0    | 16   | 0    | 4397      | 298  | 1401=2.7%    | 362             | 36        | 5097           |
| FEB              | 402 (9.2%)    | 68    | 149  | 15    | 0    | 8    | 1    | 3714      | 286  | 876=2%       | 293             | 40        | 4354           |
| Mar              | 475(9.4)      | 69    | 148  | 26    | 0    | 11   | 0    | 4319      | 367  | 1069=21%     | 373             | 0         | 5048           |
| APR              | 403(7.2%)     | 71    | 201  | 23    | 0    | 5    | 0    | 4724      | 339  | 1322=23%     | 366             | 0         | 5528           |
| MAY              | 504(7.5%)     | 69    | 320  | 28    | 0    | 4    | 0    | 5685      | 382  | 2133=31%     | 484             | 0         | 6701           |
| JUN              | 457 (8.0%)    | 60    | 197  | 29    | 1    | 5    | 1    | 4949      | 401  | 1389= 24%    | 417             | 0         | 5693           |
| JULY             | 475 (7.6%)    | 68    | 292  | 35    | 2    | 11   | 1    | 5326      | 438  | 1539= 25%    | 431             | 0         | 6193           |
| AUG              | 480 (8.0%)    | 72    | 260  | 22    | 12   | 13   | 1    | 5133      | 507  | 1325=22%     | 458             | 0         | 6001           |
| SEP              | 444 (8.4%)    | 51    | 222  | 23    | 5    | 9    | 1    | 4488      | 374  | 976= 18.5%   | 377             | 0         | 5248           |
| OCT              | 490 (8.2)     | 73    | 199  | 23    | 7    | 3    | 0    | 5160      | 421  | 1491 = 25%   | 376             | 0         | 5909           |
| NOV              | 500(8.2)      | 63    | 233  | 37    | 7    | 4    | 0    | 5094      | 381  | 1749= 28%    | 361             | 0         | 6096           |
| DEC              | 518(8.0%)     | 86    | 254  | 44    | 2    | 2    | 1    | 5515      | 368  | 2060=32%     | 431             | 0         | 6427           |
| TOTAL            | 5579<br>8.20% | 830   | 2629 | 394   | 36   | 91   | 6    | 58504     | 4562 | 17330<br>25% | 4729            | 76        | 68295          |



## Pediatrics Department

### Introduction:

The department provides in-patient and outpatient services to Ministry of National Guard Hospital dependent children from birth until 14 years old.

Children are referred from Labour room, emergency department, and primary health care and other subspecialty.

The department provides the following Pediatric Subspecialty Services:

- Pediatric Endocrinology and Cardiology, Nephrology and Neurology (outreach clinic).
- Gastroenterology (Part- time /outreach clinic).
- Haematology/Oncology (Part –time).
- Infectious Disease and Genetic/Metabolic.



# Pediatrics Department

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Emphasize:

- Contributed regularly to Pediatric cardiac charity mission organized by king Salman charity centre.
- Improved RSV immunoprophylaxis coverage in high-risk infant.
- Participated in world sepsis day 2023.

## Deliver:

- Provided the specific medication and easy access to day-care facility to Support Duchene muscular dystrophy patients.
- Provided new specific therapy for children with X-linked Hypophosphatemia.
- Establishment of a Pediatric playroom.
- Maintained and enhanced the newborn screening program.
- Administered surfactant by SALSA technique.

## Promote:

- Supported the Pediatric cardiology service in KAMC-Jeddah.
- Used new ultrasound machine in Pediatric intensive care unit, it is a standard of care service to assists in the safe and efficient insertion of central lines in critically ill patient's especially difficult vascular access.
- Participated in manual of Pediatric cardiac care 2023 edition.
- Reaccreditation and expanded the number of training seats for Pediatric residency training program from 3 to 9.
- Participated in Madinah Pediatric conference 2023 and in Med GO, Madinah Gynaecology, and Obstetric conference 2023.
- Accreditation for Neonatal Fellowship Program.

## Statistical Information:

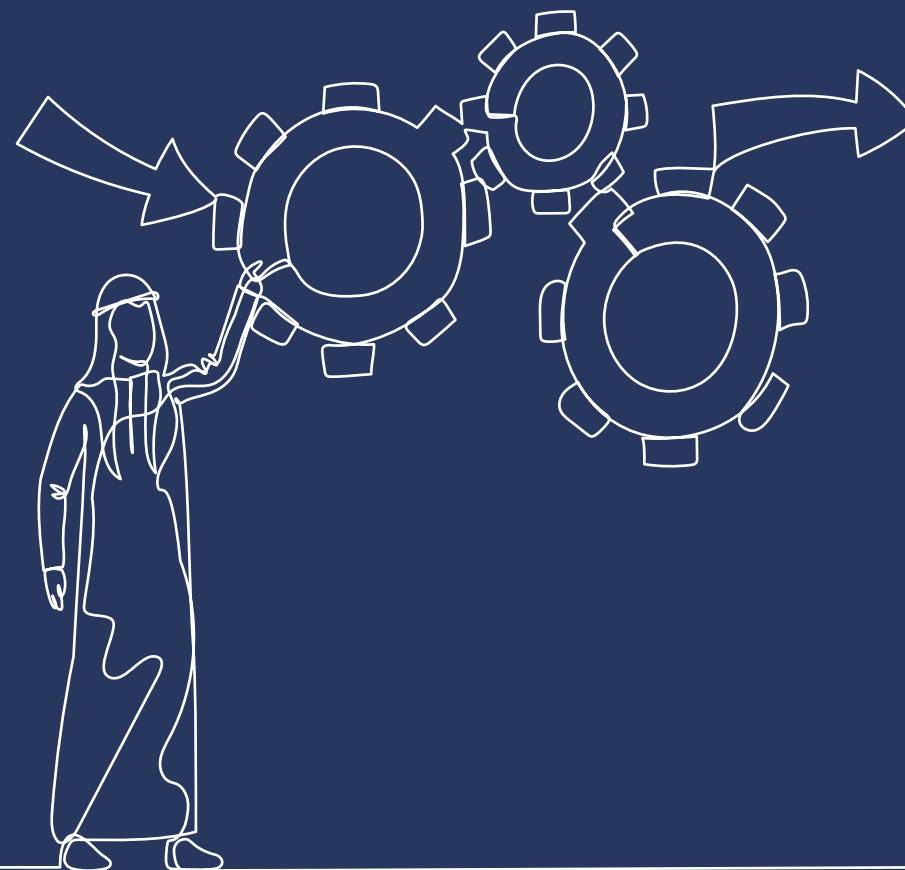
- The average admission rate per year: 1,169 patients to PW, 74 patients to PICU, 1,223 to NICU.





الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Operations



# Clinical Nutrition Services

## Introduction:

The clinical Nutrition Services Department provides medical nutrition therapy by performing nutritional assessments and optimizing patient care to improve patient life style. And provides the highest standards of nutritional care according to the latest guidelines, patient diagnosis and treatment plan for acute or chronic diseases by full coordination with the medical team and patient family a multidisciplinary approach.

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

### Emphasize:

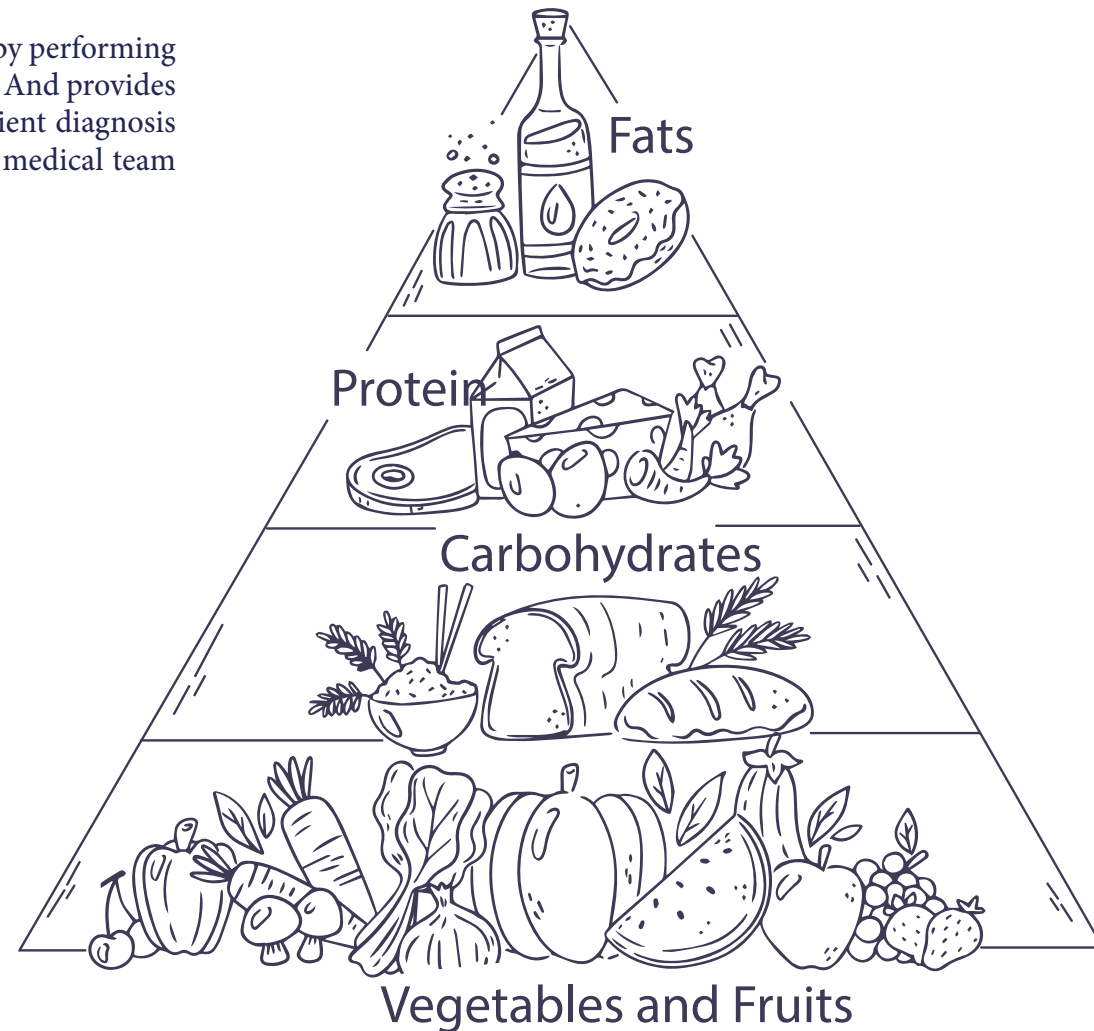
- Research Participation topic: Replaced Protein via Enteral Nutrition in a Stepwise Approach in Critically Ill Patients Randomized Controlled Trial (REPLENISH Trial).
- Provided diabetes awareness posters to all PMBAH staff via distribution email.

### Provide:

- Training programs for interns at Taibah University.
- Clinical Nutrition Services provided total number of 1140 for the outpatients and total number of 2908 for Inpatients.
- Percentage rate of referrals assessed within 24 hrs. by Dietitian for inpatient is 95.3%.

### Deliver:

- Added new clinics under Clinical Nutrition Services
- Provided Gluten-free products for Celiac disease patients.
- Clinical Nutrition Services has provided training for 37 students from Taibah University.





# Health Information Management

## Introduction:

Health Information Management is a support service whose primary purpose is to contribute to the quality of patient care through the development and maintenance of a comprehensive Medical Record System.

Services and functions shall be developed and implemented in such a way that confidentiality, privacy, and data security considerations are respected at all stages of gathering and processing the healthcare information.

The system shall also provide health information to support and promote the related goals and activities of the health care facility in the areas of education, training, research, facility management, and decision-making.

### Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

#### Emphasize:

- Awareness about the importance of the patient information privacy and confidentiality through training courses to all PMBAH staff in order to ensure compliance with privacy regulations and protect patient data.

#### Deliver:

- Benefited from the WeCare system and paying attention to patients' requests and ensuring that they are completed within three working days, before the period specified in the WeCare system.

#### Promote:

- Improved the workforce to create a more resilient HIM workforce and a more sustainable healthcare system through promotions, scholarships, and professional training such as Clinical Documentation Improvement course, and courses such as Privacy and Confidentiality, Customer Services and IBM SPSS Statistics.



## Nursing Services

### Introduction:

The Nursing Services Department at the Ministry of National Guard Health Affairs has a diverse and talented workforce committed to providing exemplary care in a quaternary hospital setting with all specialties and is affiliated with a world-renowned academic research facility.

The Nursing Governance and Accountability Board and functions autonomously in relation to maintaining professional nursing standards and scope of practice while collaborating in partnership with medical and allied health leaders in the development of program-specific strategies, goals, policies, and standards of care govern the department.

### Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

#### Deliver:

- Zero medication error happened in the ICUs.
- Zero fall in OBGYNE ward.
- Commissioned Pediatric Step down Unit: 6 Beds.
- Started commissioning of Surgical Intensive Care Unit: 6 Beds.
- Achieve 94.7 % compliance with Close Loop Medication Administration.



# Patient Services

## Introduction:

Patient services are one of the essential parts of the MNGHA hospitals, with its main function being to provide Saudi National Guard personnel, MNGHA employees, and their eligible dependents with the highest quality of healthcare service in all areas covered by patient services and continuous quality improvements.

### Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

#### Deliver:

- Implemented the Comprehensive Employee project by training all Registration Section staff to be capable of providing all required services to patients thru one desk.

#### Promote:

- Initiated Quality section to verify registrations of files.

#### Implement:

- Implemented wheelchair-lending system with SMS feature.
- Activated an automated burial system and releasing the deceased patient's body.
- We solved the issue of deceased patients receiving messages about appointments and orders. They will now be cancelled automatically.



## Pharmaceutical Care Services

### Introduction:

Pharmaceutical Care Services provides comprehensive patient care through ambulatory care, decentralized inpatient care, and clinical pharmacy services. It offers a unique and extensive array of clinical and product services that are focused on providing quality care in accordance with CBAHI and JCI Standards.



# Pharmaceutical Care Services

Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

## Emphasize:

- Participated in World Pharmacist Day event.
- Published two quality and safety articles in periodic pharmacy bulletins.
- Conducted patient counselling lectures to increase staff awareness and prevent medications errors.
- Participated in “Fall Prevention” symposium and campaign.

## Provide:

- Initiated Paediatric Critical Care Response Team (PCCRT) response drug bags that manages high-risk patients demonstrating the early signs of deterioration in clinical status.
- Average preparation time of Medical Day Care and Haemodialysis units’ orders has been reduced to average of 30 minutes in 2023.
- Percentage of compliance with STAT orders turnaround time reached 98%.
- Percentage availability of life saving medications reached 100%.
- Medication’s error due to dispensing reached less than 0.02%.
- Increased the total barcoded unit dose medications to reached 72%.
- Achieved the target override percentage of less than 5%.

## Deliver:

- Started a medication delivery service for PMBAH patients in and out of Madinah.
- Attained 85 percent compliance with the USP Chapter 797 guidelines, which are regarded as one of the highest international standards for sterile compounding of non-hazardous medications and fluids.
- Attained 80% compliance with the USP 800-chapter guidelines, which are considered one of the highest international standards for sterile compounding of hazardous and chemotherapy medications.
- Developed action plan to improve patients’ satisfaction in response to patient experience survey results and patients complains.
- Full implementation of the new SFDA regulations related to handling and disposal of empty vials/ampules of psychotropic medications.
- Managed the expedited return and quarantine of 40,000 recalled items in 27 hospital locations.
- Initiated formulary request for Lorazepam 2mg/ml injection in response to shortage of 4mg/ml concentration.

## Promote:

- Participation in the followings:
  1. “Basic Medication Safety” training program.
  2. “General Nursing Orientation” training program.
  3. “Moderate Sedation” training and certification program.
  4. “Pain management” nursing workshop.
  5. “Pharmacist Role in Code Blue” workshop.
  6. Nursing medication administration workshop and presenting a lecture about Failures in medication administration.
  7. “Moderate Sedation” nursing workshop.
- Conducted education sessions about the new DatixCloudIQ (DCIQ) system for reporting medication errors and safety incidents.

- Conducted two training sessions for Logistics and Contracts Management department (LCM) staff about management of cytotoxic spills.
- Review and coordinating (7) journal club sessions conducted by pharmacy interns.
- Organized and participated in 6 sessions of “Pharmacist Role in Code Blue” workshop.
- Expanded the use of Repeater Pump (Baxter®) to include intravenous (IV) premixes doses preparation.
- Active use of medication exchange programs with other hospitals to minimize medication shortages and decrease wastage caused by overstock or expiration.

## Implement:

- Profiled Automated Dispensing Cabinets (ADCs) in the Emergency Rooms (ER) ensuring that the right patient gets the right medication.
- The Pharmacy Information System’s automation of the Identify, Situation, Background, Assessment, and Recommendation (ISBAR) tool leads to improved communication.
- Utilized ‘Jira’ tracking software to closely monitor and track orders for Medical Day Care and Haemodialysis units.
- Proposed a new digital medication delivery process to improve medication tracking and reduce wastage.
- By integrating with BESTCare, the profiling mood can be activated in the Emergency Room (ER) ADCs.
- The percentage of compliance with the Closed Loop Medication Administration project has reached 95%.
- The percentage of Narcotic and Controlled medication stocked on the floor inside ADCs has reached 100%.
- Leded the implementation of new “Paging Notification” system to minimize medications orders processing time as well as facilitate communication with physicians.
- The Medical Day Care and Haemodialysis units are using ‘Jira’ software to improve medication queuing and tracking.



## Support Services

### Introduction:

Support Services Department oversees and is responsible for support services activities and functions related to staff housing, transportation and vehicle maintenance, fire protection services, food services contracts and operations, safety management, and environmental services, with contracted services such as food services, housekeeping, public health, laundry, horticulture roads and grounds, hazardous materials services, and transportation services.

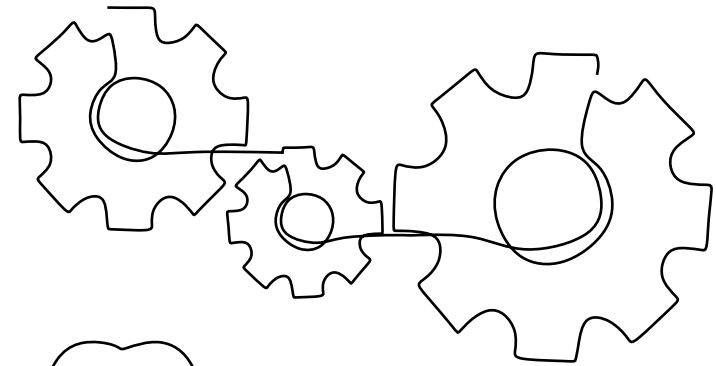
#### Prince Mohammed Bin Abdulaziz Hospital – Al Madinah

##### Provide:

- Facility Management and Safety (FMS) inspection rate increased facilitated in closing 17.1% of the total discrepancies, with 17.7% non-compliance and 82.2 % of compliance.
- (FMSRAD) system for improvement.

##### Implement:

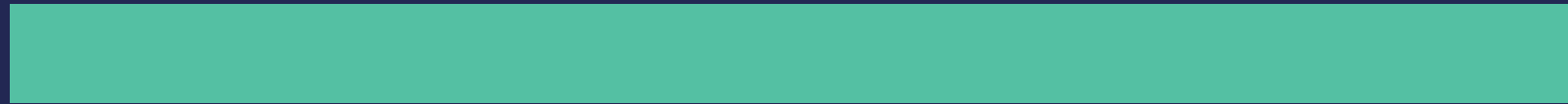
- Food Services Department PMBAH have been using the E-Incidents Portal to reduce the use of paper work and to easily tract and recover any incident.





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Ministry of National Guard Health Affairs  
MNHGHA

# Al Ahsa





# AL AHSA



## ACCESS TO CARE

Establishment of Surgical Endoscopy Unit



Expansion of the Nuclear imaging department



Establishment of Specialized colorectal Service and Pediatrics Orthopaedic Service



Establishment of Pediatric Emergency Medicine services







# AL AHSA



## SERVICE EXCELLENCE



Establishment of the intensive care nursery (ICN)



Establishment of Mental Health Program Maternal Care



The Pathology and Laboratory Department was re-accredited by the College of American Pathologists (CAP)



Transfusion Medicine was accredited by the Association for the Advancement of Blood & Biotherapies (AABB)



الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

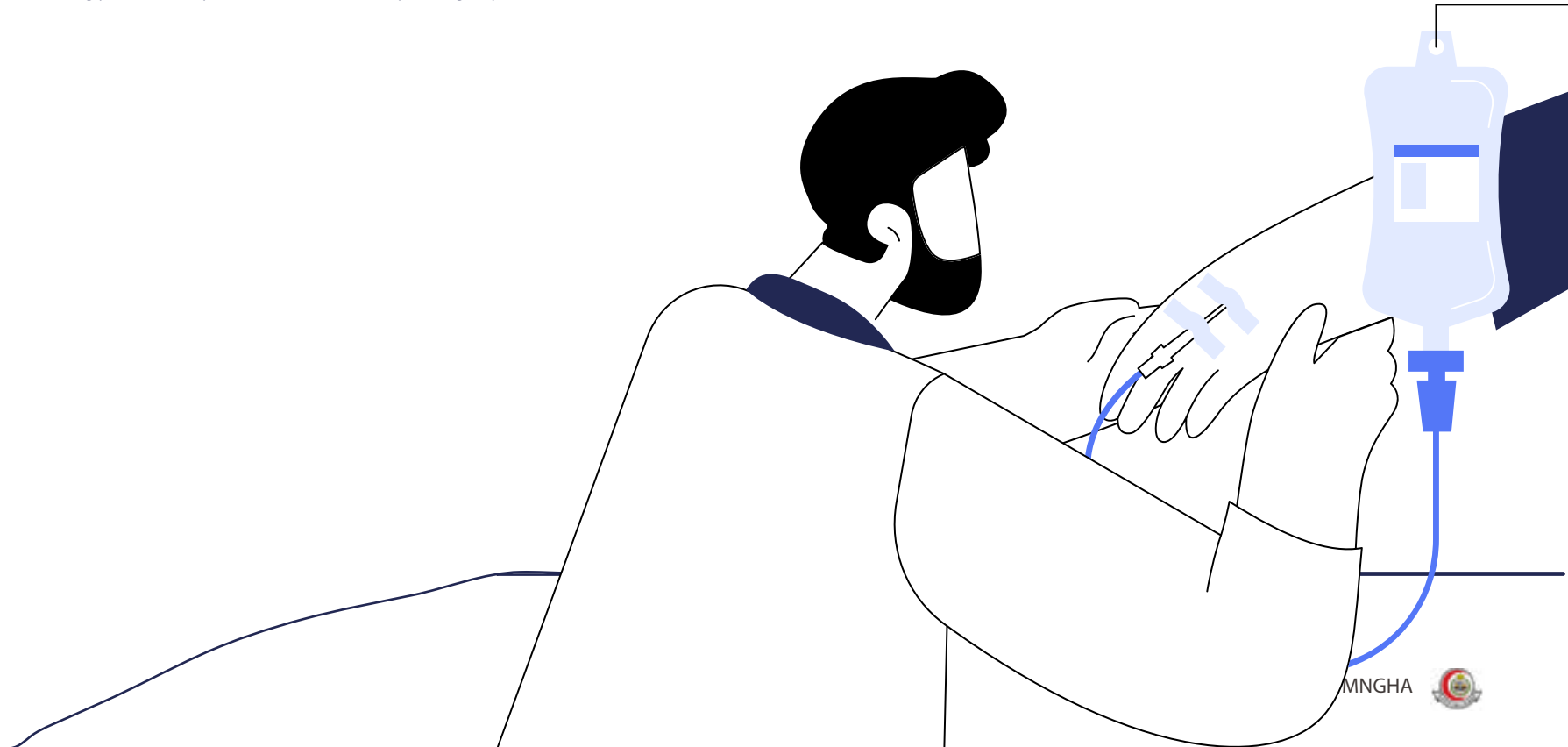
# Medical Services



## Anesthesia Department

### Introduction:

Anesthesia Department at King Abdulaziz Hospital Al Ahsa is part of the MNGHA, one of the largest health care providers in the Kingdom of Saudi Arabia. It consists of a 200-bed tertiary center providing state-of-the-art anesthesia services, interventions, and pain management for adults, children, and neonates. Anesthesiology Department focused on establishing excellence in patient care, medical education and clinical research to meet the Strategic Plan of the National Guard Health Care System and our staff rendered their service to the patients, working as experts in providing the Anaesthesia in Pre-operative Clinics, in the main Operating theatres, Obstetrics and Gynecology specialty theatres and Day Surgery Unit.

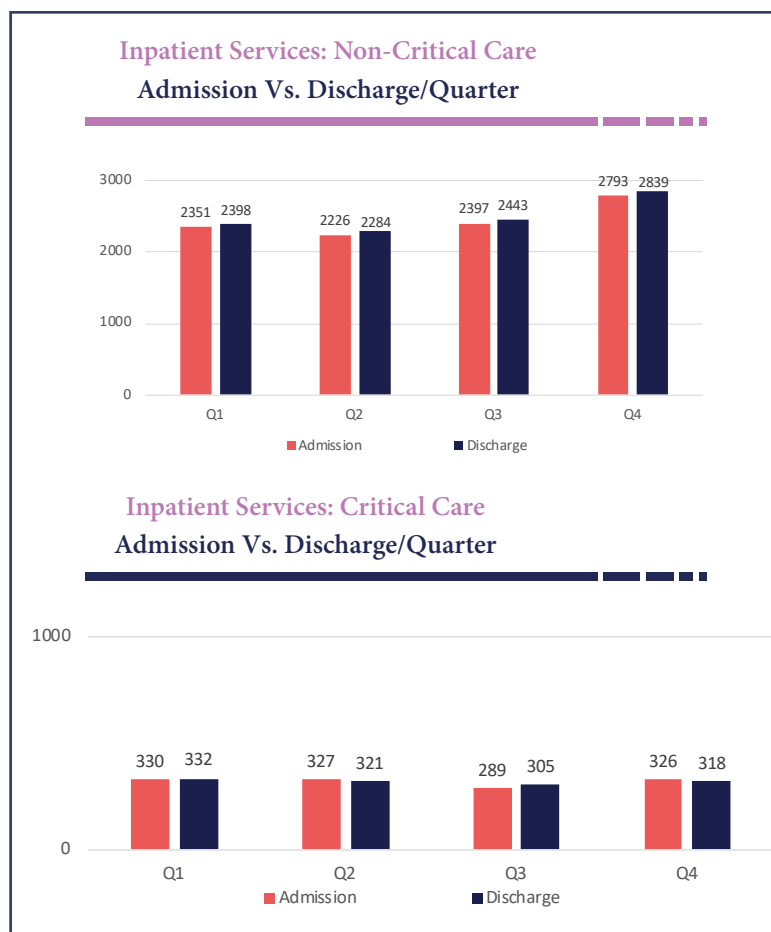


# Bed Management

King Abdulaziz Hospital – Al Ahsa

## Deliver:

- Improved bed capacity by 10% compared to the year of 2022.
- Improved bed utilization by dealing with up to 68% of refusal/difficult to discharge cases.



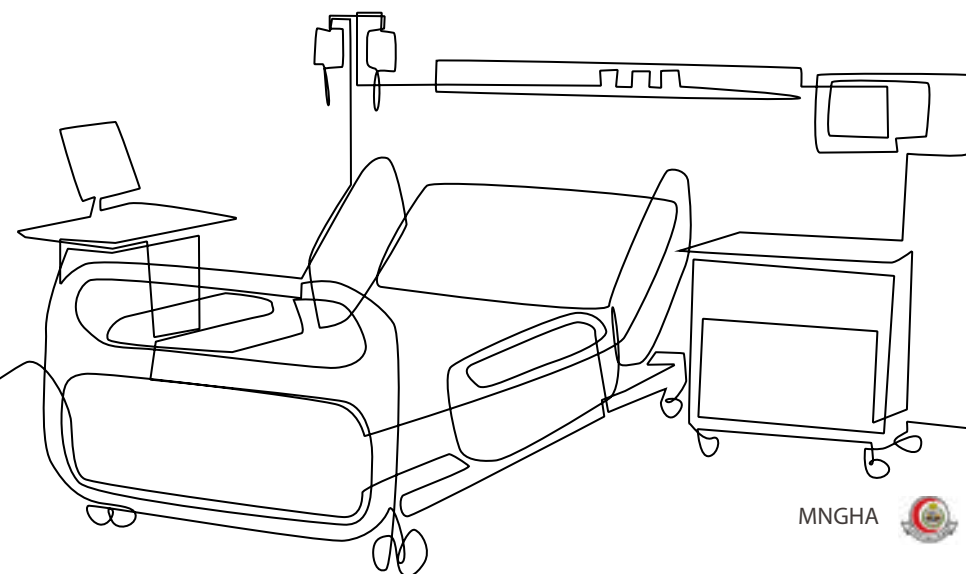
## Statistical Information:

Total Beds (Critical + non-Critical)

**222**

Non-Critical  
Beds: **153**

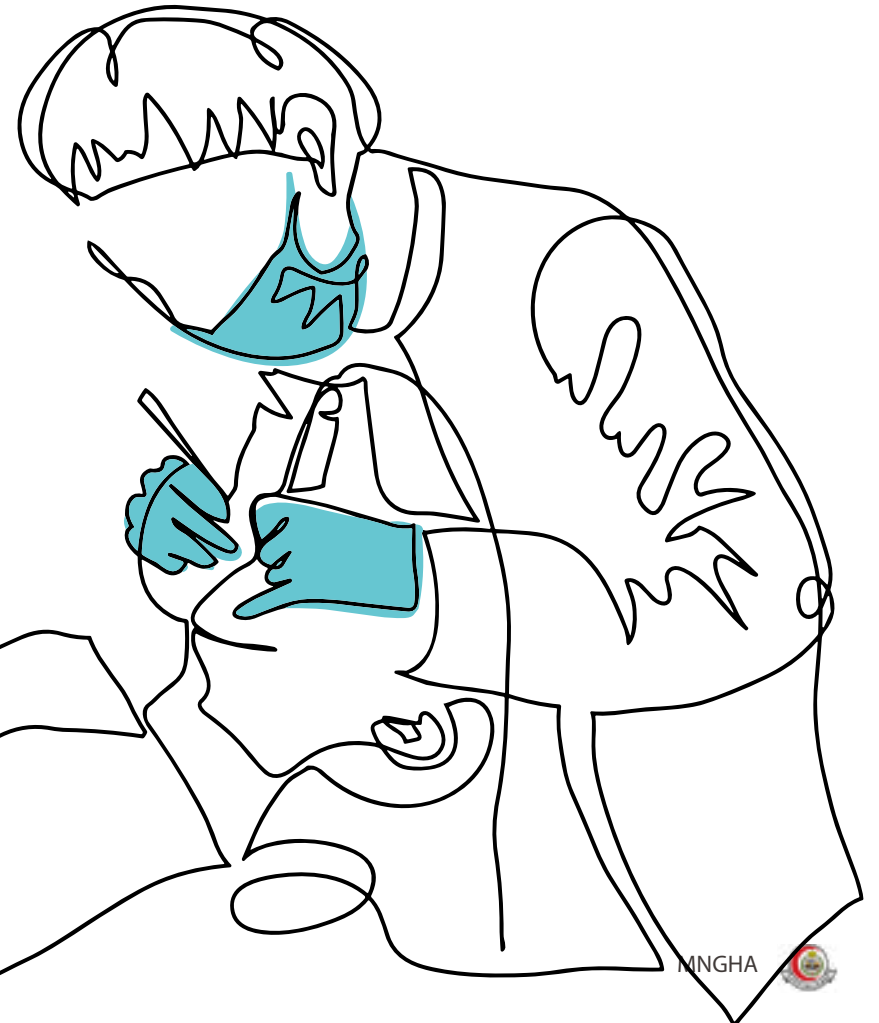
Critical Beds: **69**



## Dental Services

### Introduction:

Dental Services at King Abdulaziz Hospital is providing the National Guard personnel and their dependents with the highest quality of primary, secondary and tertiary dental and maxillofacial services, while ensuring accuracy and proper utilization of our available resources. This includes emergency dental care for non-Saudi hospital staff and their dependents. The department takes care of business center patients, including those from Per Capita Aramco, after work hours.



## Dental Services

King Abdulaziz Hospital – Al Ahsa

### Emphasize:

- Participated in the Diabetic Day conducted by the Medical Services, KAH and Hand Hygiene Awareness Day.

### Achieve:

- The Southern Border Clinic is after regular working hours from 5:00pm to 8:00pm, Eight (8) clinics sessions in a weekly basis.

### Deliver:

- Eighteen (18) New clinical sessions were Establishment of after hiring new staff as following:
  - Seven (7) Endodontics.
  - Eight (8) Prosthodontics.
  - Three (3) Oral & Maxillofacial.

### Promote:

- Ten (10) Digital Sensor for Intro-Oral Radiographs received this year.
- New Fourteen (14) Dental Chairs installation to replace the obsolete one.
- New Milling Machine plus Panoramic X-Ray Machine is already awarded.

### Implement:

- New Dental Server Installation to store the Dental Imaging Data.

### Statistical Information from January to December 2023

| Specialty                           | Total Booked Patient | PS           | NS          | WI          | DS/OR      | PS+WI+OR/DS  |
|-------------------------------------|----------------------|--------------|-------------|-------------|------------|--------------|
| Oral & Maxillofacial Surgery (OMFS) | 2252                 | 1483         | 769         | 375         | 43         | 1901         |
| Pedodontics                         | 1952                 | 1442         | 510         | 138         | 167        | 1747         |
| Orthodontics                        | 2651                 | 2243         | 408         | 191         | 0          | 2434         |
| Prosthodontics                      | 1664                 | 1377         | 287         | 70          | 0          | 1447         |
| Periodontics                        | 1615                 | 1145         | 470         | 15          | 0          | 1160         |
| Adv. Restorative Dentistry          | 665                  | 560          | 105         | 23          | 0          | 583          |
| Endodontics                         | 2209                 | 1620         | 589         | 105         | 0          | 1725         |
| General Practitioner (GP)           | 5322                 | 3967         | 1355        | 531         | 0          | 4498         |
| Dental Hygiene (DH)                 | 3902                 | 2734         | 1168        | 42          | 0          | 2776         |
| <b>TOTAL</b>                        | <b>22232</b>         | <b>16571</b> | <b>5661</b> | <b>1490</b> | <b>210</b> | <b>18271</b> |



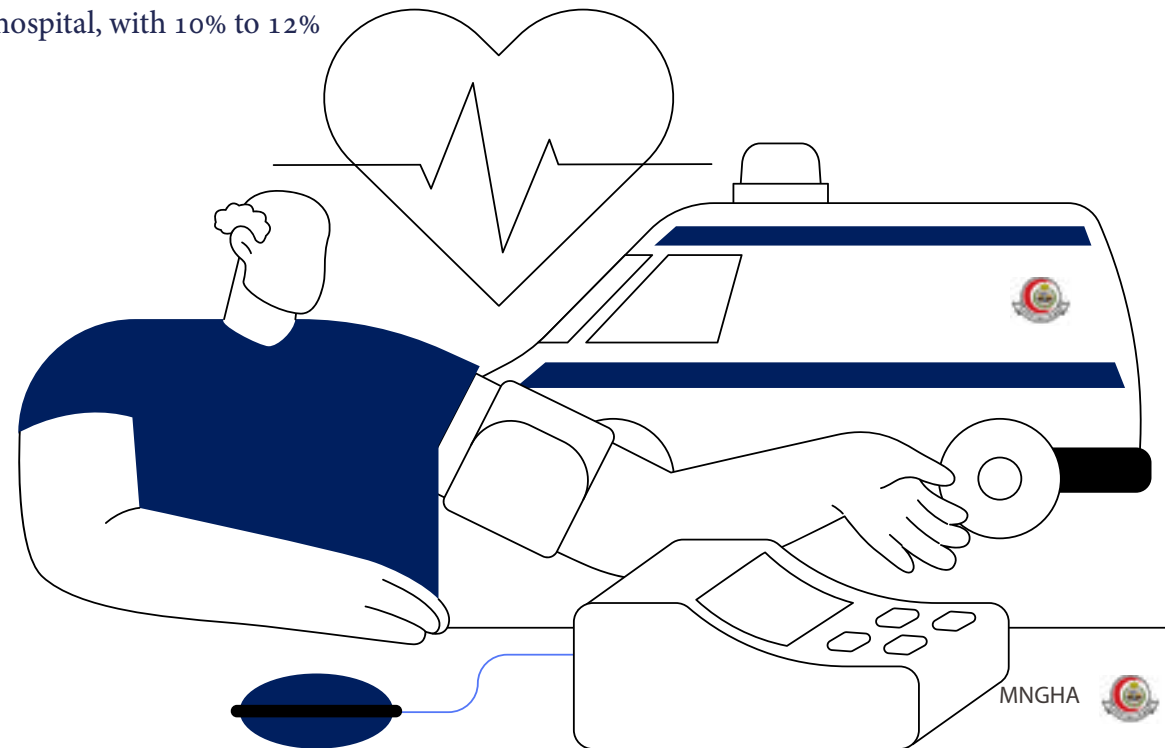
# Emergency Medicine

## Introduction:

The Emergency Medicine Department provides care to all eligible patients who are presented to the department. The continued development and expansion changes in our state-of-the-art facility are best summarized by our ongoing restructuring efforts and the successful operations of our services. Residents, interns from multiple universities, medical students, EMS students, and nurses receive education from the Emergency Medicine Department.

Around 17 clinical beds are available at the ER, including one resuscitation room and one isolation room. About 5000 to 60000 people visit the ER every month, with a daily average of 200 to 220.

The emergency room is the main source of patient admission to the hospital, with 10% to 12% being admitted daily.



# Emergency Medicine

King Abdulaziz Hospital – Al Ahsa

## Deliver:

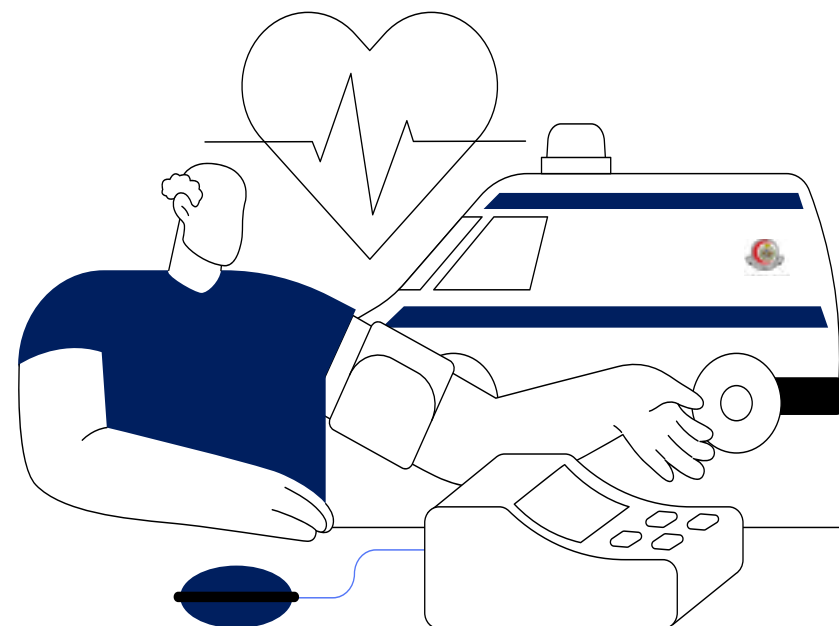
- We have reached an agreement that is mutually understood with Prince Sultan Cardiac Center, the nearest cath-lab to our hospital.
- Enhanced access to unavailable services for ER patients by establishing official agreements with the local hospitals in Al Ahsa, apart from ER GREATS Projects.
- Establishment of an Urgent Care Clinic that is covered by Family Medicine Physicians.
- Performed Emergency Ultrasound procedures in our Emergency Department.

## Promote:

- Updated clinical pathways and new clinical procedures and treatment protocols.

## Statistical Information:

| 2023 Statistics |        |        |       |       |        |        |        |       |       |       |        |        |
|-----------------|--------|--------|-------|-------|--------|--------|--------|-------|-------|-------|--------|--------|
| Item            | Jan    | Feb    | Mar   | Apr   | May    | Jun    | Jul    | Aug   | Sept  | Oct   | Nov    | Dec    |
| Visits          | 5239   | 5065   | 4947  | 4918  | 5383   | 4358   | 4373   | 4536  | 4920  | 6583  | 5355   | 5949   |
| Admit           | 527    | 491    | 520   | 470   | 550    | 474    | 484    | 359   | 369   | 608   | 573    | 625    |
| DAMA            | 95     | 94     | 89    | 108   | 122    | 91     | 97     | 121   | 106   | 146   | 107    | 108    |
| LWBS            | 217    | 238    | 121   | 168   | 272    | 106    | 107    | 166   | 210   | 355   | 76     | 151    |
| Boarding        | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0     | 0     | 0     | 0      | 0      |
| Return          | 47     | 20     | 12    | 26    | 51     | 30     | 44     | 36    | 29    | 29    | 16     | 24     |
| Trauma          | 370    | 433    | 185   | 187   | 364    | 0      | 169    | 159   | 131   | 182   | 156    | 141    |
| Av/Day          | 163.55 | 180.89 | 14.45 | 161.5 | 155.06 | 161.47 | 141.06 | 162.1 | 149.7 | 149.7 | 162.27 | 162.27 |
| Deaths          | 1      | 2      | 0     | 5     | 1      | 0      | 0      | 0     | 0     | 0     | 2      | 2      |





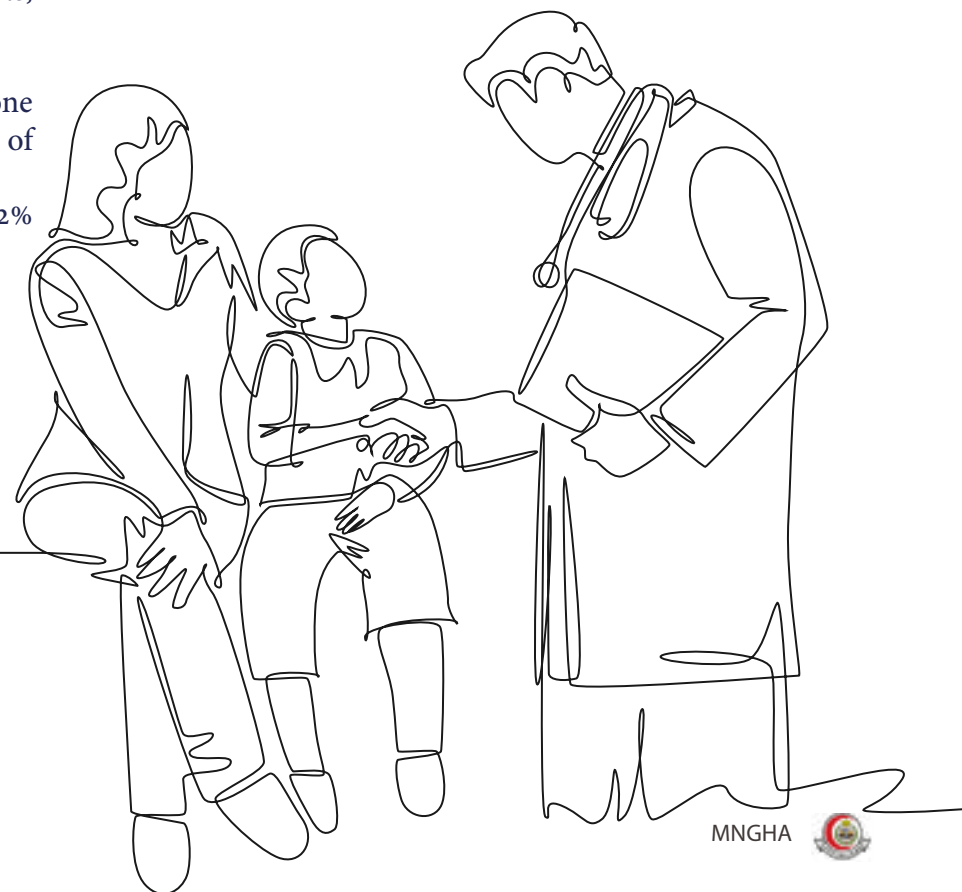
## Family Medicine & Primary Healthcare Centers

### Introduction:

The Emergency Medicine Department provides care to all eligible patients who are presented to the department. The continued development and expansion changes in our state-of-the-art facility are best summarized by our ongoing restructuring efforts and the successful operations of our services. Residents, interns from multiple universities, medical students, EMS students, and nurses receive education from the Emergency Medicine Department.

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The emergency room is the main source of patient admission to the hospital, with 10% to 12% being admitted daily.



# Family Medicine & Primary Healthcare Centers

King Abdulaziz Hospital – Al Ahsa

## Emphasize:

- Flu vaccine campaign in military battalions and Drug Combat exhibition campaign.
- Booth of Shingrix and flu vaccines and heat related illnesses.

## Achieve:

- Provided medical care in military shooting field all the year.
- Equipment and operation of family medicine clinic in military training course for about 8 months.

## Deliver:

- Expanded FM clinical care capacity through increase number of slots per clinic.
- Activated screening clinic and new preventive and family medicine services including obesity clinic and geriatric care.
- Utilized PHC main clinic after complete renovation.
- Reviewed and Urgi care.
- Implemented integrated multidisciplinary care for diabetes and obesity.
- Activated further clinical services like Ultrasound, retina examination & ECG.
- Expanded dental services.

## Promote:

- Implemented comprehensive screening program and environmental health in all schools.

## Implement:

- Activated the SRS electronic system for managing incidents and complaints.

## Scientific research:

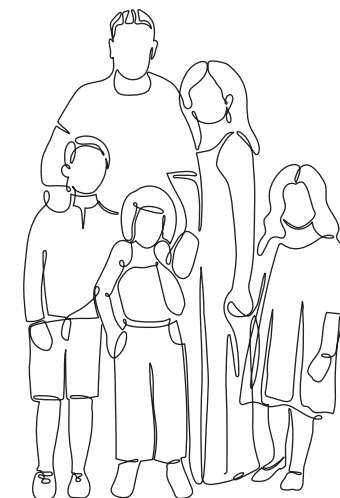
- Approved research proposal: Study Title: Utilization of care services among frequent attenders to primary health clinic, A mixed study design 2023.

## Statistical Information

| Clinic Name   | Number |
|---|--------|
| EHC-KAH   | 25838  |
| Antenatal Clinics                                     | 434    |
| Virtual Clinics                                       | 1324   |
| Family Medicine –Business Center -KAH– Day Clinic     | 9459   |
| Family Medicine –Business Center-KAH – Evening Clinic | 2225   |
| Family Medicine Protocol Clinic-KAH                   | 805    |
| Vaccination   | 2163   |
| RAT test  | 883    |

No. of completed visits “seen patients per month” in PHC Al Ahsa, January to December 2023

| JAN   | FEB   | MAR   | APRIL | MAY   | JUNE  | JULY  | AUG   | SEPT  | OCT    | NOV   | DEC   | TOTAL  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|--------|
| 9,116 | 8,034 | 7,738 | 4,282 | 9,601 | 6,010 | 5,984 | 7,561 | 7,649 | 10,113 | 7,085 | 8,180 | 91,353 |



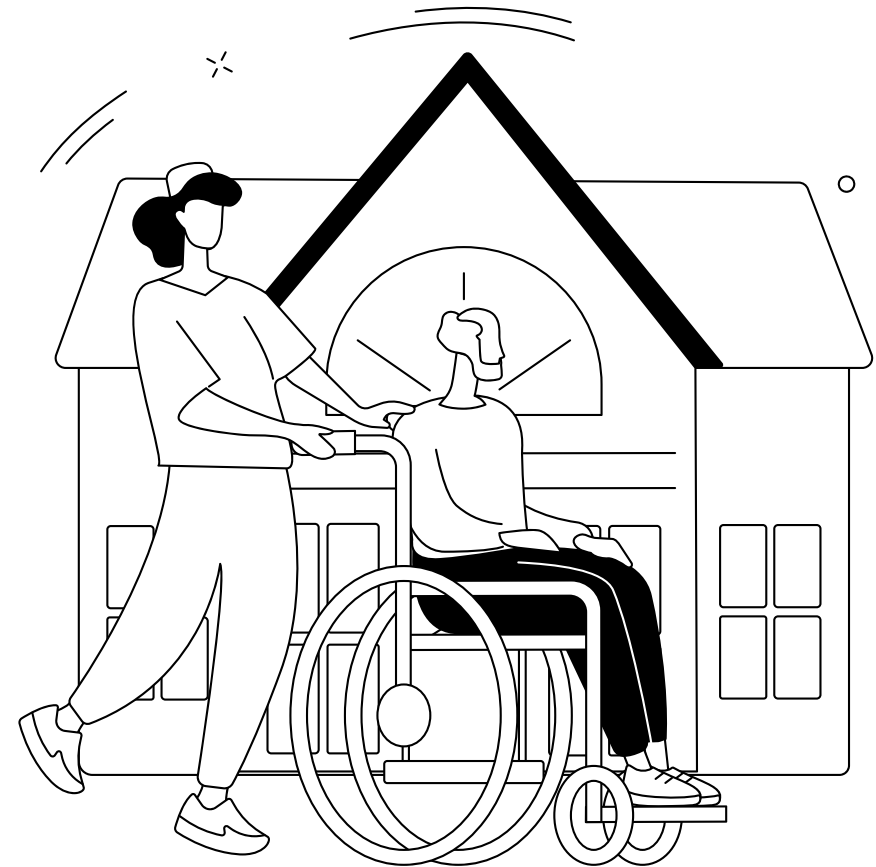
## Home Health Care

### Introduction:

The Home Health Care Program is a hospital-based, community program, which was established in July 2008 to facilitate discharges from the hospital and for continuation of patient's care. It developed to include as goals, not only to decrease hospital length of stay but also to reduce ER visits, readmission to hospital, visits to clinics and laboratories and also as an alternative to hospitalization. Services include nursing, respiratory therapy, social assessment and physician consultation.

HHC staff visit patients at home to provide:

- Education and training: to patients, families, and caregivers.
- Reinforcement: to help patients & families to cope with permanent disability.
- Monitoring and supervision: of clinical situation and chronic disease control.



# Home Health Care

King Abdulaziz Hospital – Al Ahsa

## Enhance:

- Participated in flu vaccine campaign in collaboration with Infection Control department and in Herpes Zoster vaccine campaign in collaboration with Infection Control department
- Collaboration with KAIMRC for preceptor ship of students.
- Healthcare education to all HHC patients to prevent infection, falls, wound development, etc.

## Provide:

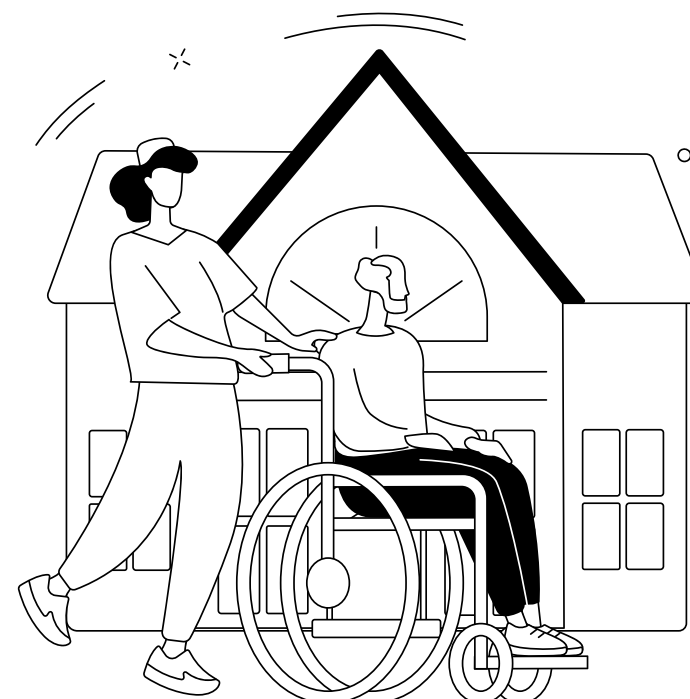
- Assess referral patient within 24 hours.
- Admitted patients within maximum 72 hours from the day of discharge or referral.
- Increased coverage to 40 KM from KAH.
- Improved 32% in wound care healing from the total number of patients with wounds compared with 2022.
- Reduced the number of Hospital admission length of stay by 57%.

## Deliver:

- Expanded HHC services to include all KAH Employees and their independents.
- The percentage of accepted referrals in 2023 is 67% from a total of 87 referrals.
- Performed a multi-dispanary approach as an initial assessment for all HHC new admission patients.
- Data up to October 2023:
- Collaborated with OB/Gyne Department to establish HHC visit for OB/ Gyne patients at home.
- Collaborated with the Materials Management Department to deliver supplies to HHC patients at home.
- 65.5% of HHC Patient is diabetic and 86.6% were categorized as controlled.
- The percentage of patients on warfarin is 2% of HHC patients.
- 67% of repeated infection treated at home by HHC staff.
- Tracheostomy care and management and Palliative Pain management (narcotic administration).
- Negative pressure wound dressing.

## Statistical Information

|  |       |
|--|-------|
| Total No. of Newly Registered HHC Patients   | 64    |
| Total No. of Served HHC Patients   | 175   |
| Total No. of HHC Teams Visits  | 2297  |
| Total No. of HHC Visits by Type of Program (I.e., palliative, wound care, catheter, NG Tube, etc.) | 54064 |
| HHC Staff  | 18    |
| How many teams   | 4     |



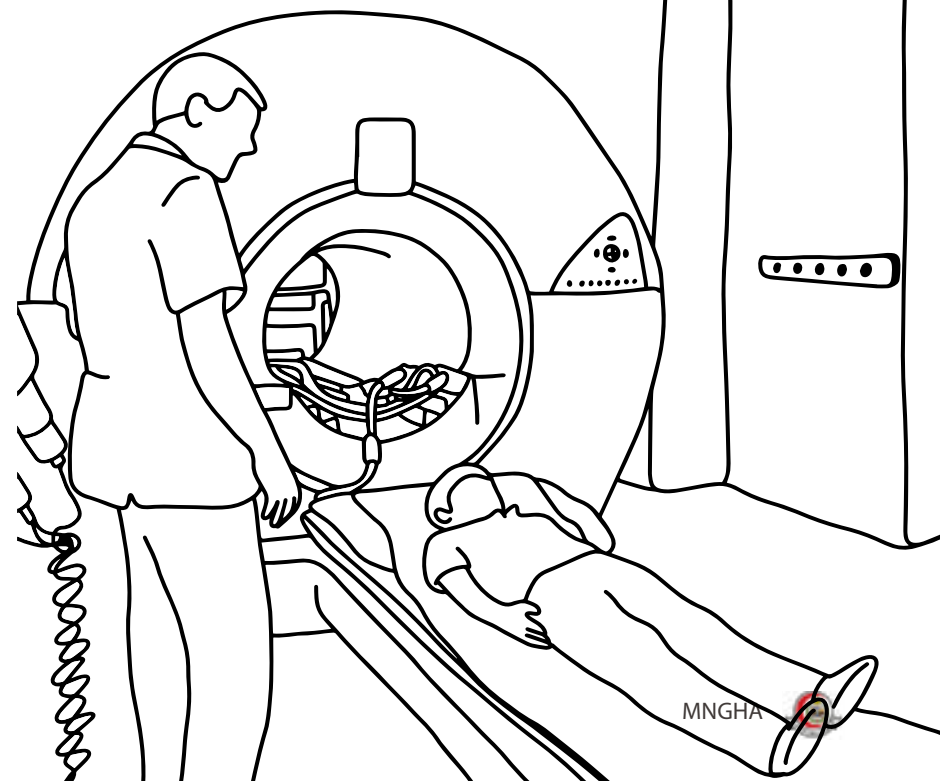
## Medical Imaging

### Introduction:

The Medical Imaging Department provides a comprehensive range of high-quality Diagnostic, Interventional and Therapeutic Radiology. The management is responsible to the MNGHA and community to maintain its service excellence through its up-to-date Radiological practices in order to provide quality and excellence in our Radiological and Imaging Services and to support the clinical programs.

Medical Imaging provides a 24-hour service for most radiological procedures:

- General X-ray
- Ultrasound.
- Angio
- Mammography/ Stereotactic Biopsy System.
- CT scan (128 Slice + Dual Energy)
- MRI (1.5 & 3T)
- Fluoroscopy.
- Nuclear Medicine (with SPECT)
- Lithotripsy



## Medical Imaging

King Abdulaziz Hospital – Al Ahsa

### Achieve:

- Performed Pre-Employment for Military Personnel.

### Provide:

- Less than 2 week waiting lists for CT & Ultrasound.
- ER Turnaround Time (TAT) 20 mins for General, CT and Ultrasound studies from performed to prelim report.
- Departmental TAT of approx. 5 hours. (In-patients & Out-patients).
- Implemented Point of Care Testing to provide a quicker service and shorter examination times for patients.

### Deliver:

- Advancement in Nuclear Medicine Service with new SPECT CT unit.
- Commencement of a dedicated Sedation Day for paediatric and adult MRI bookings thereby reducing bed occupancy requirements.

### Promote:

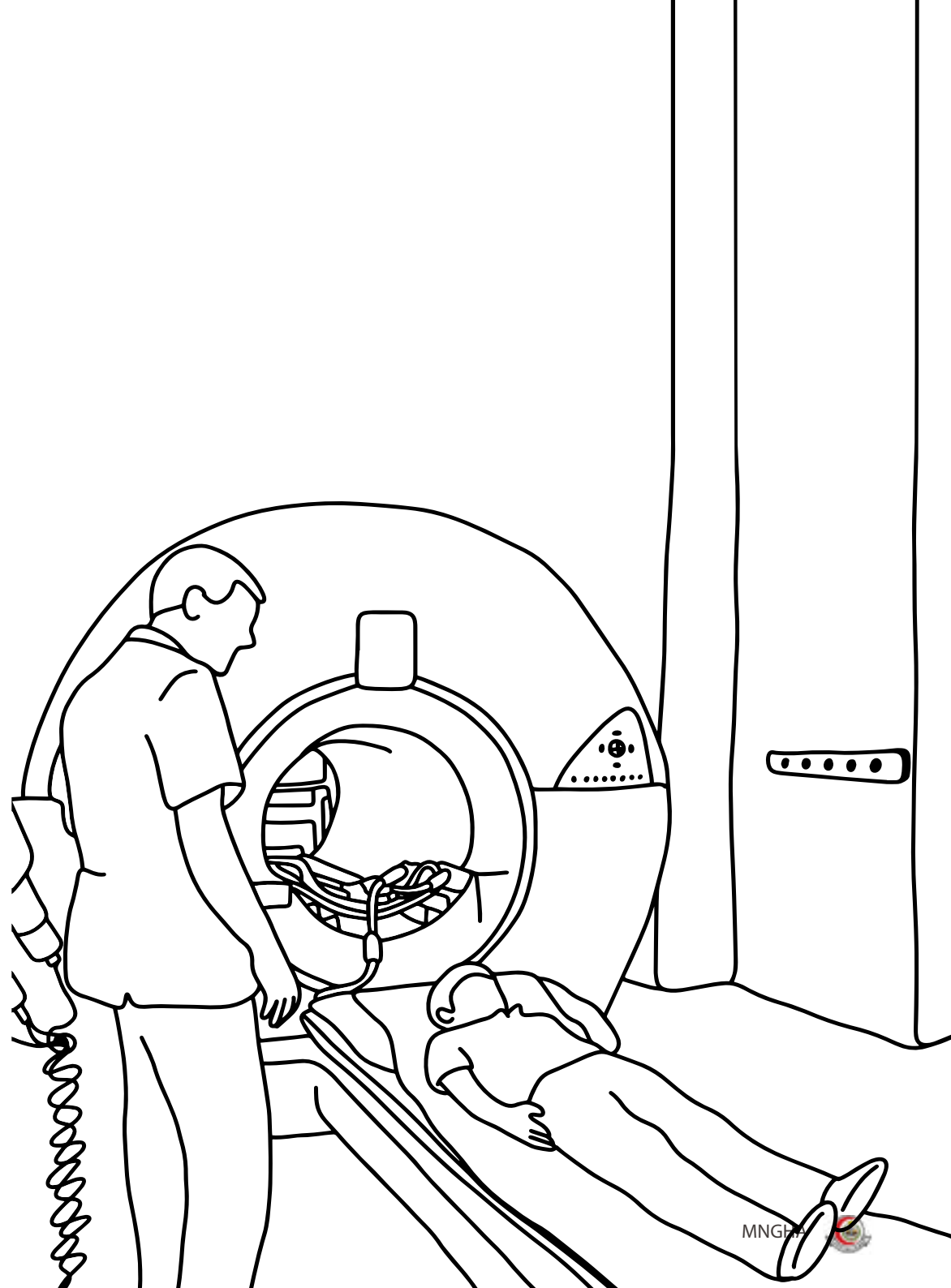
- Use of “Dosewatch” system in major items of equipment to reduce radiation dose to population.

### Implement:

- Establishment of Business Intelligence dashboards for statistical data across MNGHA have been Establishment of, as part of the PACS renewal project.

### Statistical Information:

- Total Performance exam: (74,798)



# Medicine Department

King Abdulaziz Hospital – Al Ahsa

## Introduction:

The Department of Medicine at King Abdulaziz Hospital, Al Ahsa is committed to the excellence in adult medicine care to all National Guard Employees and their dependents and to Eligible Saudi Citizens living in the Eastern Region. Thirteen different specialties are being offered by the department, along with teaching, continued medical education, and research for residents, staff physicians, and interns. Additionally, the department is actively involved in raising public awareness through educational events.

CBAHI and JCIA (Joint Commission International Accreditation) have recognized that the hospital, which has 300 beds and modern facilities, is a tertiary care institution. The Saudi Commission also accredits the Department of Medicine for Health Specialties as a training center for the Saudi and Arab Boards.

## Emphasize:

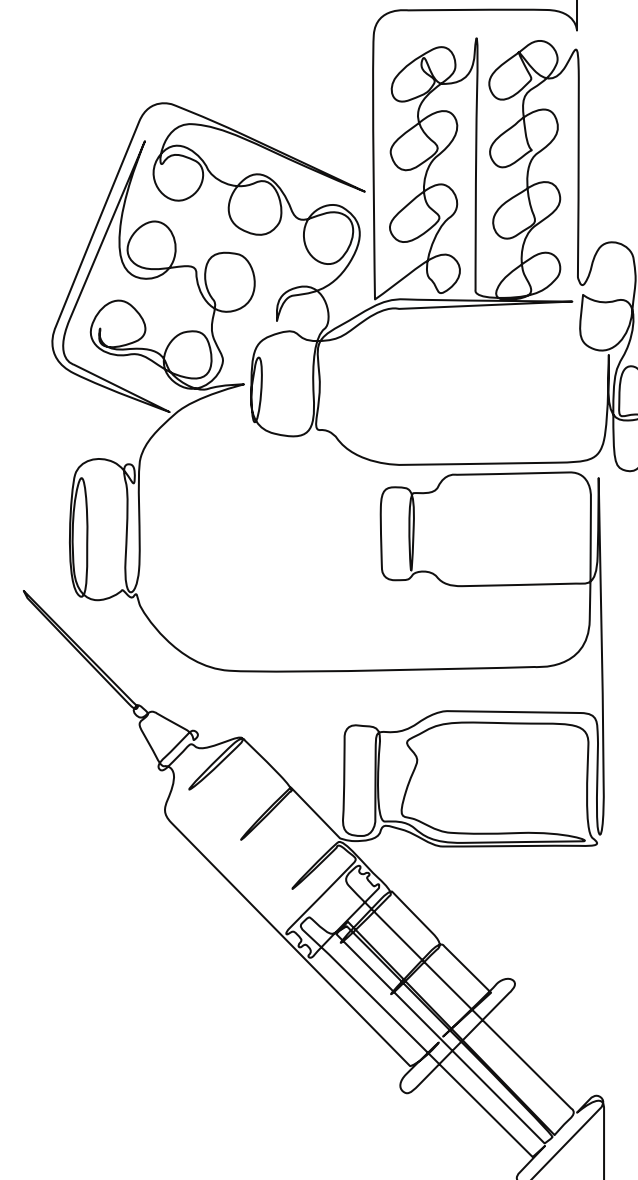
- Kidney Day 2023-March 15, 2023.
- Breast Cancer Awareness-October 25, 2023.
- World Stroke Day-October 31 2023.

## Deliver:

- First Visit Clinic for outpatient clinic for each subspecialty.
- Electrophysiology Services.
- Clinical Pathways:
  - Syncope Pathway for Medical Admission.
  - Chest Pain Pathway.
  - Clinical Pathway for AKI, ABCDE Approach.
  - Adult Suspicion of Sepsis Screening Tool.

## Statistical Information:

| UNITS                               | TOTAL ADMISSIONS |
|-------------------------------------|------------------|
| Medical                             | 886              |
| Medical                             | 500              |
| Female Medical Ward                 | 961              |
| Long Term Care                      | 10               |
| Oncology Inpatient/Medical/Chemo    | 1076 / 276       |
| Cardiology Inpatient                | 637              |
| Step-Down- Medicine/Cardio          | 22               |
| Intensive Care Unit Total Admission | 344              |



# Obstetrics & Gynecology

King Abdulaziz Hospital – Al Ahsa

## Introduction:

The Department of Obstetrics and Gynecology, King Abdulaziz Hospital, Al Ahsa, E.R. organizes its efforts to achieve excellence in patient care and medical education, while upholding the mission of the Ministry of National Guard Health Affairs.

Scope of Services:

- In-patient, Out-Patient and Business Centre.

(Ambulatory Care, Labor and Delivery, General Obstetrics and Gynaecology, Ultrasound Section)

Units/Section:

- Ward 1: 36 Beds (Gynaecology, Postpartum and New Born, Antepartum, High Dependency Unit (HDU).
- Labor and Delivery: 10 Beds (2 Assessment Rooms, 4 Single Rooms and 2.
- Double Delivery Rooms). Due to COVID-19, Hepa Filters are available for 4 beds in L&D.
- Labor and Delivery Operating Rooms (2 OR Suites and 2 PACU Beds 1 holding area).
- Clinics (Daily except Tuesday PM and Thursday AM).

## Provide:

- Most of patients are given appointments within 4 weeks by the Consultants.

## Promote:

- Institutionalize an effective Patient Education Program.
- Contribution to Antenatal Education.
- Contribution to Breast Feeding Friendly Hospital.

## Statistical Information

| Year 2023                   | Total |
|-----------------------------|-------|
| Deliveries                  | 1553  |
| Live Births                 | 1562  |
| Cesarean Section            | 458   |
| In-Patient Ward I-Admission | 1080  |
| Trans-in                    | 1575  |
| OPD                         | 8444  |
| Infertility                 | 167   |
| First Visit Clinic          | 1165  |
| Evening Business Centre     | 1334  |
| Operating Room              | 668   |

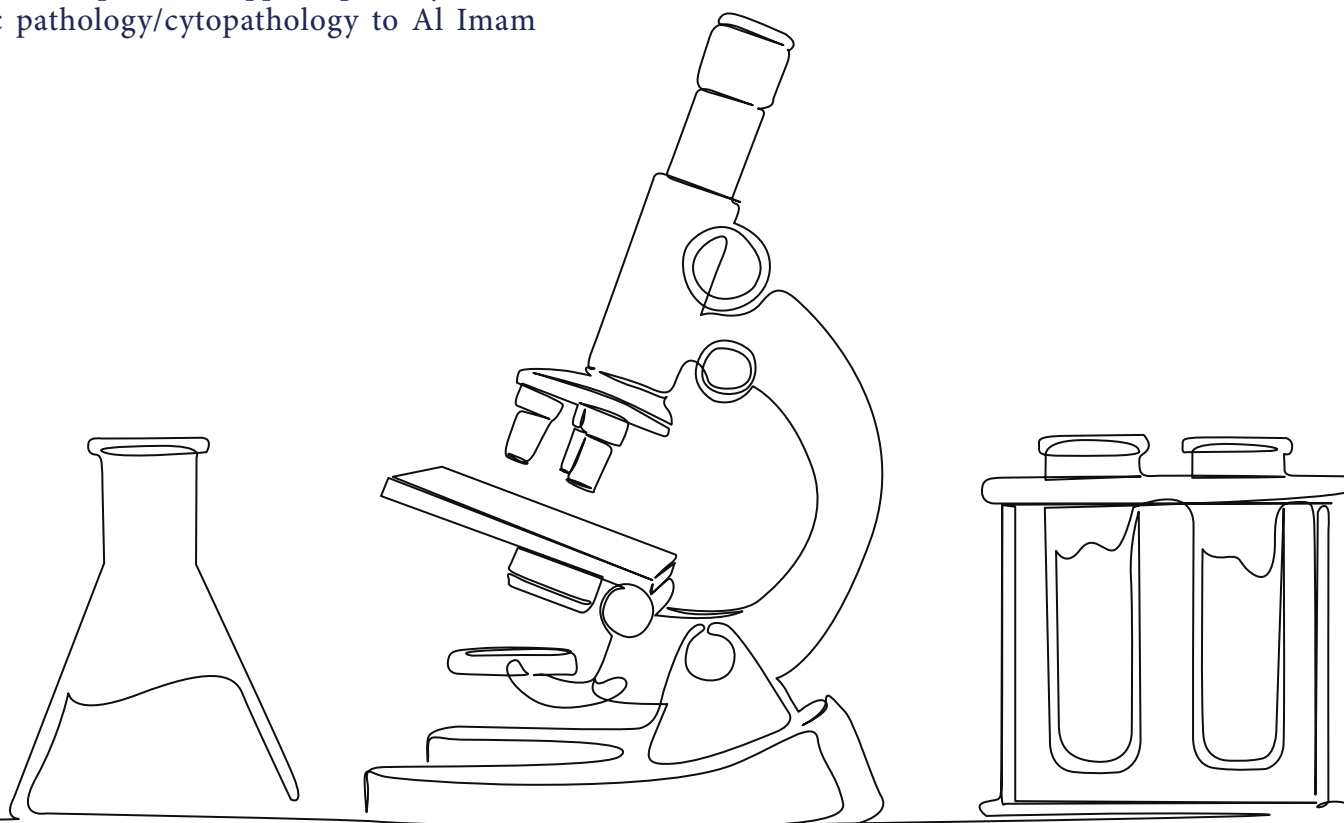




## Pathology and Laboratory Medicine

### Introduction:

The Department of Pathology and Laboratory Medicine at King Abdulaziz Hospital is a modern medical laboratory in this tertiary care center. The College of American Pathologists (CAP) accredits it since April 2009. It serves ambulatory and inpatients, supports primary health clinics, and provides full coverage of anatomic pathology/cytopathology to Al Imam Abdulrahman Bin Faisal Hospital in Dammam.



# Pathology and Laboratory Medicine

King Abdulaziz Hospital – Al Ahsa

## Implement:

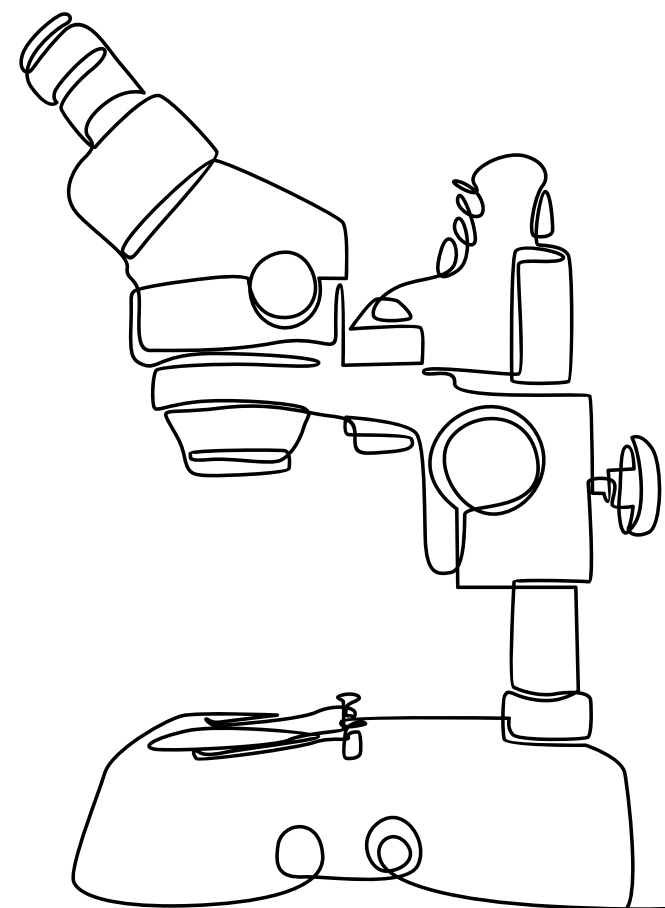
- Implemented Total Laboratory Automation To improve the excellent quality of patient care, include a reduction of human errors in specimen handling and faster turnaround times from collection to result reporting.

## Statistical Information:

|                   | RAW     | WLU                                     |
|-------------------|---------|---|
| HEMATOLOGY        | 631489  | 1536496                                 |
| CHEMISTRY/HORMONE | 1743674 | 1353769                                 |
| RECEIVING         | 2139768 | 5179000                                 |
| URINALYSIS        | 50185   | 129278                                  |
| HISTOLOGY         | 190189  | 1467858                                 |
| CYTOLOGY          | 15478   | 91437                                   |
| MICROBIOLOGY      | 173375  | 765668                                  |
| SERO/IMMUNO       | 209213  | 1209006                                 |
| POCS              | 225327  | 476590                                  |
| TOXICOLOGY        | 62071   | 197250                                  |
| Blood Bank        | 330326  | No measure unit on new Med. Info system |
| Total             | 6907629 | 15090883                                |

Blood Donors & Blood Transfused From 01 January to 31 December 2023

|                                     |             |
|-------------------------------------|-------------|
| Registered Donor:                   | 5503 Donors |
| Collected Donor:                    | 3869 Units  |
| Blood/Blood Product Transfused:     | 3628 units  |
| Emergency Blood Release – Class I:  | 62 Case     |
| Emergency Blood Release – Class II: | 31 Case     |



# Pediatrics Department

## Introduction:

The Department of Pediatrics & Neonatology Services at King Abdulaziz Hospital, Al Ahsa provides exemplary care of infants and children in Al Ahsa.

The Department is striving to provide the highest standard of care. Both the medical and nursing health care team are committed and dedicatedly working together in collaboration towards the process of maintaining the Joint Commission International Accreditation standards, CBAHI and in consistent with mission and vision of National Guard Health Affairs.

## Statistical Information:

### King Abdulaziz Hospital – Al Ahsa

#### Provide:

- Reengineer Discharges to Reduces 30-days Readmissions Rates in Pediatric Ward.
- Decreased the chronic In-Patients percentage in pediatrics/Neonatology units.

#### Deliver:

- New Clinical Pathways.

#### Promote:

- New Departmental Quality clinical projects: (Sedation Protocol Vs withdrawal syndrome, VAP Project, PEWS.)
- Residency program:
  - 1-Reaccreditation for 4 Years after SCFHC visit
  - 2-Increase in acceptancy capacity from 9 to 11 per year
  - 3- Conducted different academic activities for the residents

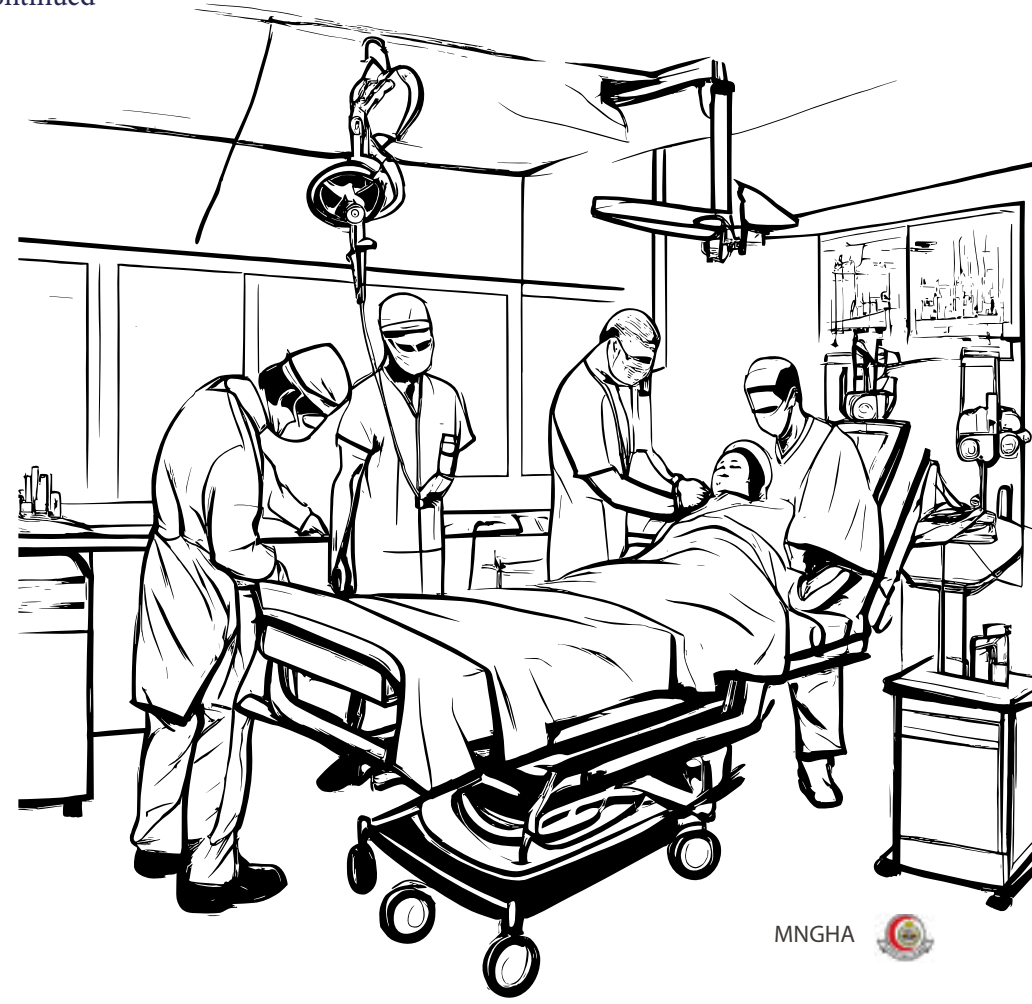
| Summary Of Daily Inpatient Census (2023) |     |     |     |     |     |     |     |     |     |     |     |     |       |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| UNIT                                     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Total |
| ICN                                      | 222 | 205 | 247 | 241 | 266 | 223 | 243 | 197 | 148 | 225 | 252 | 178 | 2647  |
| NICU                                     | 216 | 223 | 261 | 254 | 251 | 223 | 241 | 170 | 149 | 182 | 206 | 153 | 2529  |
| Ward4                                    | 817 | 774 | 714 | 612 | 708 | 528 | 485 | 536 | 563 | 742 | 722 | 906 | 8107  |
| Stepdown                                 | 136 | 121 | 114 | 79  | 105 | 105 | 41  | 77  | 97  | 127 | 135 | 152 | 1289  |
| PICU                                     | 106 | 74  | 88  | 54  | 83  | 104 | 50  | 70  | 74  | 100 | 76  | 82  | 961   |



## Surgery Department

### Introduction:

The department of Surgery at King Abdulaziz Hospital, Al Ahsa is committed to the provision of Quality Patient Safety to all National Guard employees and their dependents and to all eligible Saudi Citizens. The Medical Services within the Ministry of National Guard Health Affairs Organization includes our department as an autonomous division. We are providing a high level of patient care and services in different subspecialties under Surgery department, in addition to teaching and continued medical education to the Surgery staff, Saudi Residents under the program and Interns.



## Surgery Department

King Abdulaziz Hospital – Al Ahsa

### Achieve:

- Consultant/Associate consultant providing coverage in military mission covering Southern Borders.

### Provide:

- Resolved waiting list in most of the surgical specialities.

### Deliver:

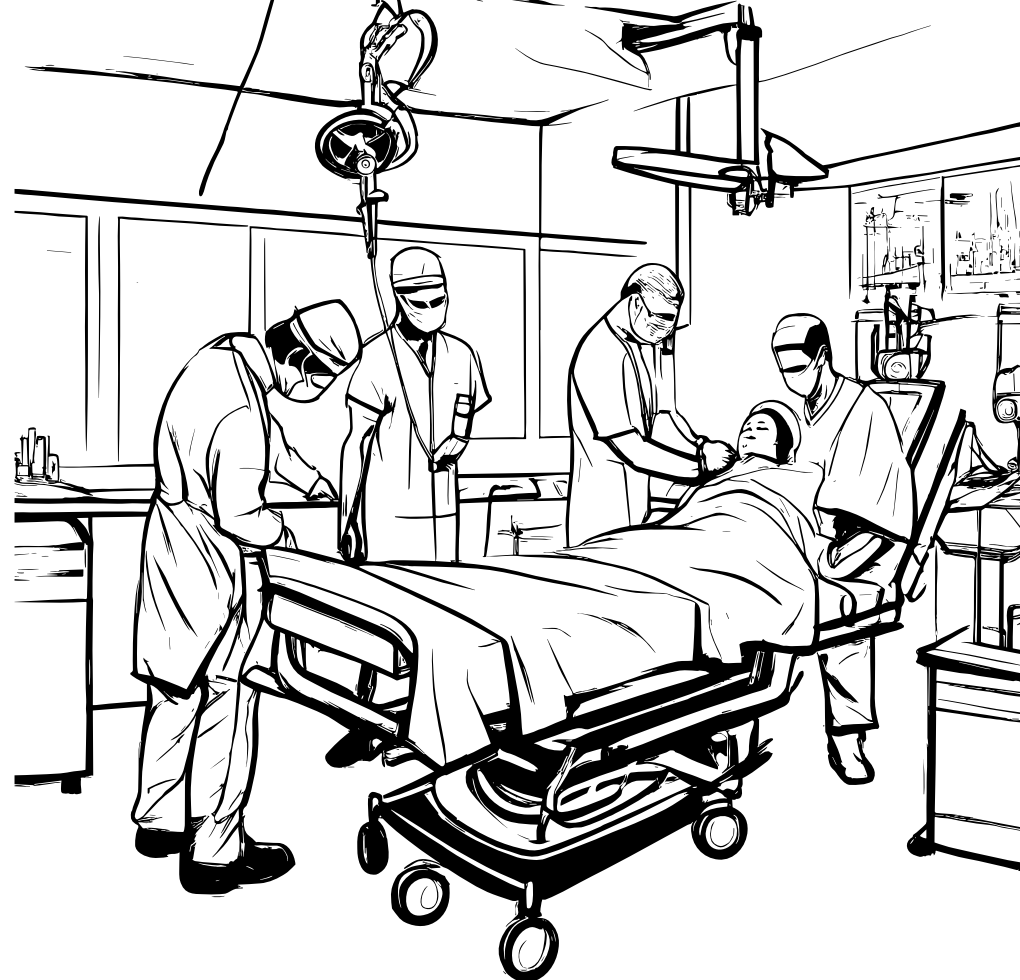
- First Visit OPD Implementation.
- Outreach OR Initiative for Plastic Surgery.
- Maintain full coverage in Vascular and Neurosurgery Services.

### Promote:

- Developed Educational Material.
- Created Referral Pathway and Guidelines.
- Surgery Participation in the Emergency Department GREATS Project.
- Sustainability of Orthopaedic, Urology and General Surgery Residency Programs.

### Implement:

- Surgical Oncology AL Ahsa Platform Webinars.
- Shadow Clinic.
- Virtual Clinic.



### Statistical Information:

| 2023<br>Stats | Outpatient Stats |         |                 |                 | Admission | Surgical Procedures |     |       |       | Circumcision in Ward 1 | Circumcision in DSU |
|---------------|------------------|---------|-----------------|-----------------|-----------|---------------------|-----|-------|-------|------------------------|---------------------|
|               | New Ref          | Walk in | Outpatient Seen | Business Center |           | OR                  | DSU | Other | L & D |                        |                     |
| Jan           | 719              | 1020    | 3581            | 797             | 74        | 252                 | 130 | 53    | 34    | 3                      | 17                  |
| Feb           | 660              | 900     | 3064            | 540             | 190       | 165                 | 101 | 48    | 25    | 5                      | 6                   |
| Mar           | 613              | 967     | 3014            | 702             | 187       | 185                 | 107 | 57    | 27    | 4                      | 26                  |
| Apr           | 212              | 521     | 1503            | 375             | 88        | 41                  | 46  | 36    | 1     | 0                      | 6                   |
| May           | 721              | 1051    | 3578            | 779             | 61        | 203                 | 148 | 54    | 33    | 5                      | 14                  |
| Jun           | 485              | 765     | 2571            | 554             | 51        | 172                 | 95  | 51    | 28    | 3                      | 10                  |
| Jul           | 518              | 547     | 2456            | 521             | 179       | 173                 | 56  | 51    | 37    | 1                      | 12                  |
| Aug           | 912              | 633     | 3335            | 625             | 238       | 273                 | 82  | 44    | 19    | 1                      | 18                  |
| Sep           | 1205             | 707     | 4151            | 652             | 220       | 203                 | 85  | 53    | 26    | 0                      | 13                  |
| Oct           | 1425             | 885     | 4249            | 841             | 217       | 246                 | 144 | 54    | 35    | 0                      | 13                  |
| Nov           |                  |         |                 |                 |           |                     |     |       |       |                        |                     |
| Dec           |                  |         |                 |                 |           |                     |     |       |       |                        |                     |
| TOTAL         | 7470             | 7996    | 31502           | 6386            | 1505      | 1913                | 994 | 501   | 265   | 22                     | 135                 |



# OUTPATIENTS DEPARTMENT

## Introduction:

Outpatient Department (OPD) has a total of 55 clinic room and 9 procedure rooms. These are located in:

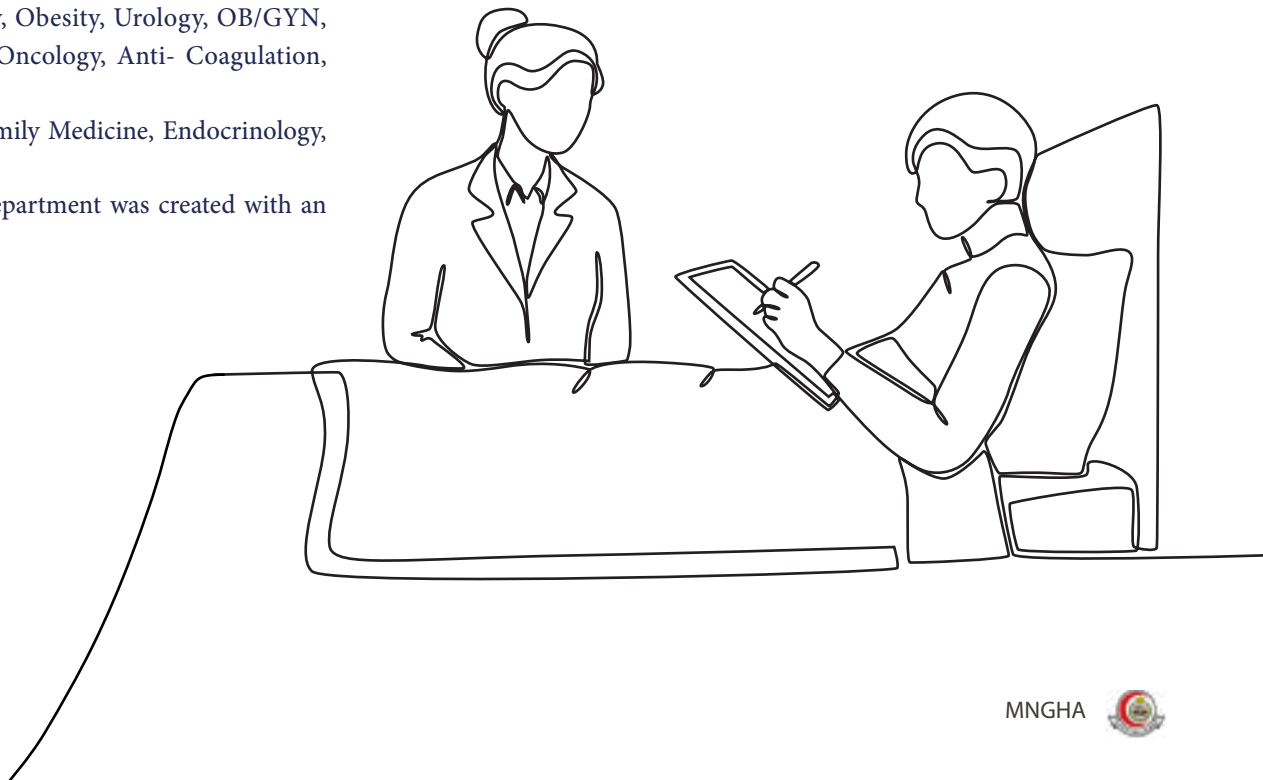
- Main Hospital: 30 Clinic Rooms accommodating 60 clinic slots per day (OPD 1) plus 3 procedure rooms.
- Business Center Building (OPD2): 25 Clinic Rooms accommodating 50 clinic slots per day (OPD2 - ground and 2nd floor) plus 6-procedure room.

The patient population is MNGHA customers who are newborn to geriatrics (male and female) with physiologic problems from either different health disciplines booked, walk-in, referred or follow-up appointment.

OPD 1 has a large number of specialty clinics like ENT, Audiology, Anesthesia, Pain Clinic, Sleep Clinic, Breast Clinic, Internal Medicine, Vascular, Nephrology, General Surgery, Neurology, Obesity, Urology, OB/GYN, Orthopedic, Neurosurgery, Plastic Surgery, Infectious Disease, Hematology, Oncology, Anti- Coagulation, Cardiology, Gastroenterology, Pulmonology, Rheumatology, pediatrics clinics.

OPD 2 has a large number of specialty clinics like Employee Health Clinic, Family Medicine, Endocrinology, Dietician, Ophthalmology, optometry, Dermatology, Psychiatry.

Following the HAC Resolution (ACC Efficiency: Change Model), outpatient department was created with an OPD chairman and three main sections under the umbrella of OPD.



## OUTPATIENTS DEPARTMENT

King Abdulaziz Hospital – Al Ahsa

### Emphasize:

- Flue campaign participation by giving the flu vaccine to patients during their clinic visits.

### Provide:

- Eligibility Response Time by activating escalation to make response time within 5 working days.
- Increased the OPD clinics utilization to nearly 100% in all days.
- Improved nursing clinic patient flow by increasing the number of clinics from 10 clinics per week to 24 clinics per week (140% increase).
- Increased the number of follow-up clinics for MRPs with high waiting list.
- Increased in the number of clinics from 261 clinics in 2022 to 383 in 2023 (46.7% increase).

### Deliver:

- First visit (FV) clinic created to all MRPs and in all non-physician run clinics (111 FV clinics were opened – Compliance more than 93%.
- Improved EHC patient flow by adding extra physical and virtual clinics to accommodate more patients.
- Standardization of session duration (8-12 AM & 1-5PM) done.
- Converted 1 procedure room in dermatology to a clinic and 1 storeroom in ophthalmology to a clinic.

### Implement:

- Activate Ehala System.
- Auto-booking referral system Establishment of with minimal waiting list in FV clinics.

### Statistical Information:

| Outpatient Depart. (OPD)     | Jan-23 | Feb-23 | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 | Sep-23 | Oct-23 | Nov-23 | Dec-23 | Total  |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Booked Patient Visits</b> | 11638  | 10527  | 10481  | 5280   | 12298  | 8905   | 9724   | 12249  | 12729  | 15086  | 15470  | 15152  | 139539 |
| <b>No Show</b>               | 3527   | 2816   | 3238   | 1680   | 3601   | 2628   | 2706   | 3216   | 3088   | 3905   | 4210   | 3863   | 38478  |
| <b>Over Booking</b>          | 4672   | 3183   | 4069   | 2321   | 4614   | 3713   | 2528   | 2343   | 2343   | 3252   | 3026   | 3609   | 39673  |
| <b>Follow-up</b>             | 6371   | 5245   | 5642   | 2932   | 6817   | 5004   | 5410   | 6829   | 7416   | 8696   | 8636   | 8320   | 77318  |
| <b>New Referral</b>          | 1718   | 2840   | 1601   | 652    | 1855   | 1359   | 1616   | 2295   | 2786   | 2413   | 2712   | 3026   | 24873  |
| <b>Business Center</b>       | 62     | 59     | 65     | 57     | 64     | 80     | 78     | 59     | 59     | 59     | 87     | 63     | 792    |
| <b>Total Seen</b>            | 12783  | 10894  | 11312  | 5921   | 13311  | 9990   | 9546   | 11376  | 11984  | 14433  | 14286  | 14898  | 140734 |



# ICU DEPARTMENT

King Abdulaziz Hospital – Al Ahsa

## Introduction:

ICU unit is Division in Medicine Department. It has 10 bed and overflow to CCU and ER if needed. ICU team is covering CCRT, Code Blue and Critical Care consultation in addition to inpatient services, furthermore all Cardiology patients who need mechanical ventilation support, are admitted under ICU care. ICU service is provided to surgical, OB & Gyne and medical patients.

### Statistical Information

| Inpatient  | Source |
|--|--------|
| ○ Total No. of Admission by Unit                     | 344    |
| ○ Total No. of Patients Admitted from ER By Cause    | 90     |
| ○ Total No. of Patients Admitted from OR By Cause    | 18     |
| ○ Total No. of Patients Admitted from Wards by Cause | 59     |
| ○ Bed Occupancy Rate By Unit                         | 66%    |





# ONCOLOGY DEPARTMENT

King Abdulaziz Hospital – Al Ahsa

## Introduction:

Oncology Service is a combined service with Hematology and a Subspecialty under Medicine Department. The service consisting of 3 Oncology Consultants, 1 Oncology Staff physician, 2 Hematology Consultants, 1 Hematology Assistant Consultant.

### Statistical Information

Total patient seen in Outpatient Clinic:

|                              |       |
|------------------------------|-------|
| Hematology outpatient clinic | 949   |
| Hematology FV clinic         | 69    |
| Oncology outpatient clinic   | 258   |
| Oncology FV clinic           | 36    |
| Oncology Day Unit            | 2,463 |

Total Inpatient Admission:

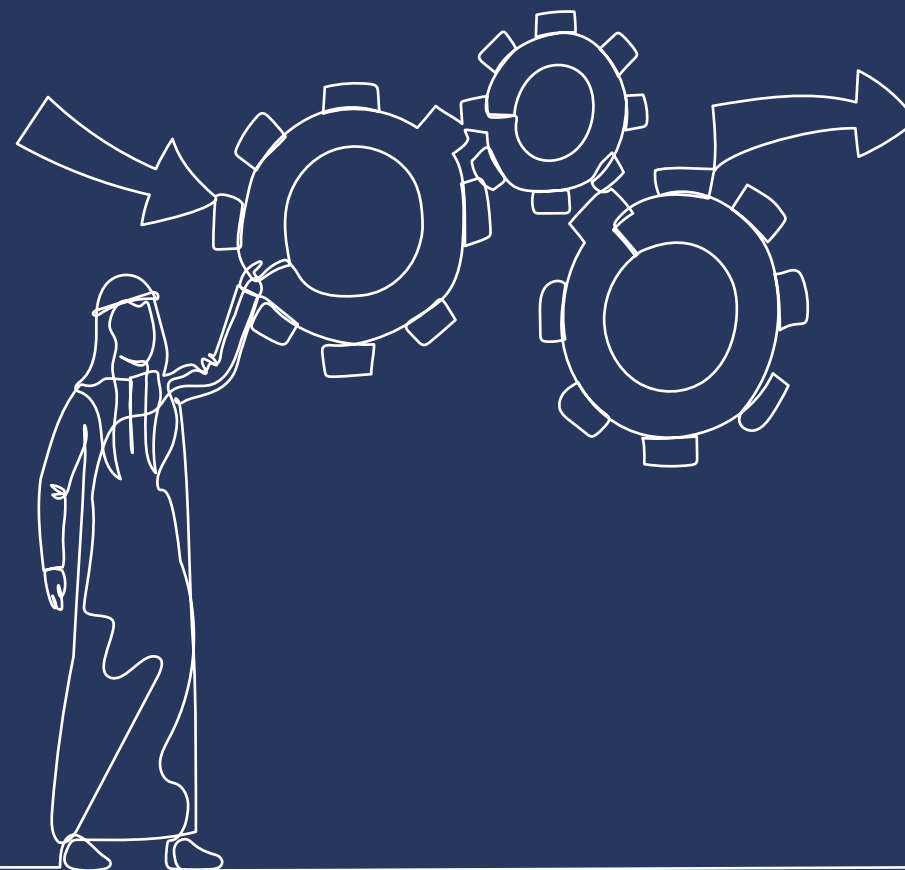
|              |       |
|--------------|-------|
| Medical      | 1,076 |
| Chemotherapy | 276   |





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Ministry of National Guard Health Affairs  
MNGHA

# Operations



# Clinical Nutrition Services

## Introduction:

The Clinical Nutrition division continued the nutritional therapy for all admitted and outpatients including participating in health care provision by Identifying patients at high nutritional risk and preventing malnutrition among hospitalized patients, providing specific nutritional care services to inpatients and outpatients completed through assessment, diagnosing, planning, implementation, counseling/ education, and evaluation, support and promote nutrition education in the community.

The Clinical Dietitians work with multidisciplinary health care teams in different areas of specialization such as patients requiring Enteral Nutrition (TF), Pediatric patients, Neonatal Intensive Care Unit, Medical/Surgical Patients, Endocrine and Diabetes, Gestational Diabetic patients, Intensive Care patients, Step Down patients, Patients in Hemodialysis and Coronary care Unit patients.

In addition, Clinical Nutrition is participating in evaluating, Training, and educating students, health care providers and the University graduates with specialty of Clinical Nutrition.

Clinical Nutrition has achieved the objective of terminating the pending appointments in all the Clinical Nutrition clinics by reaching Zero (0) pending appointment. This objective was reached by adding additional Clinical Nutrition Clinics (virtual and regular clinics) in addition of First Visit clinics. The new referral is now scheduled within two weeks of the referral date.

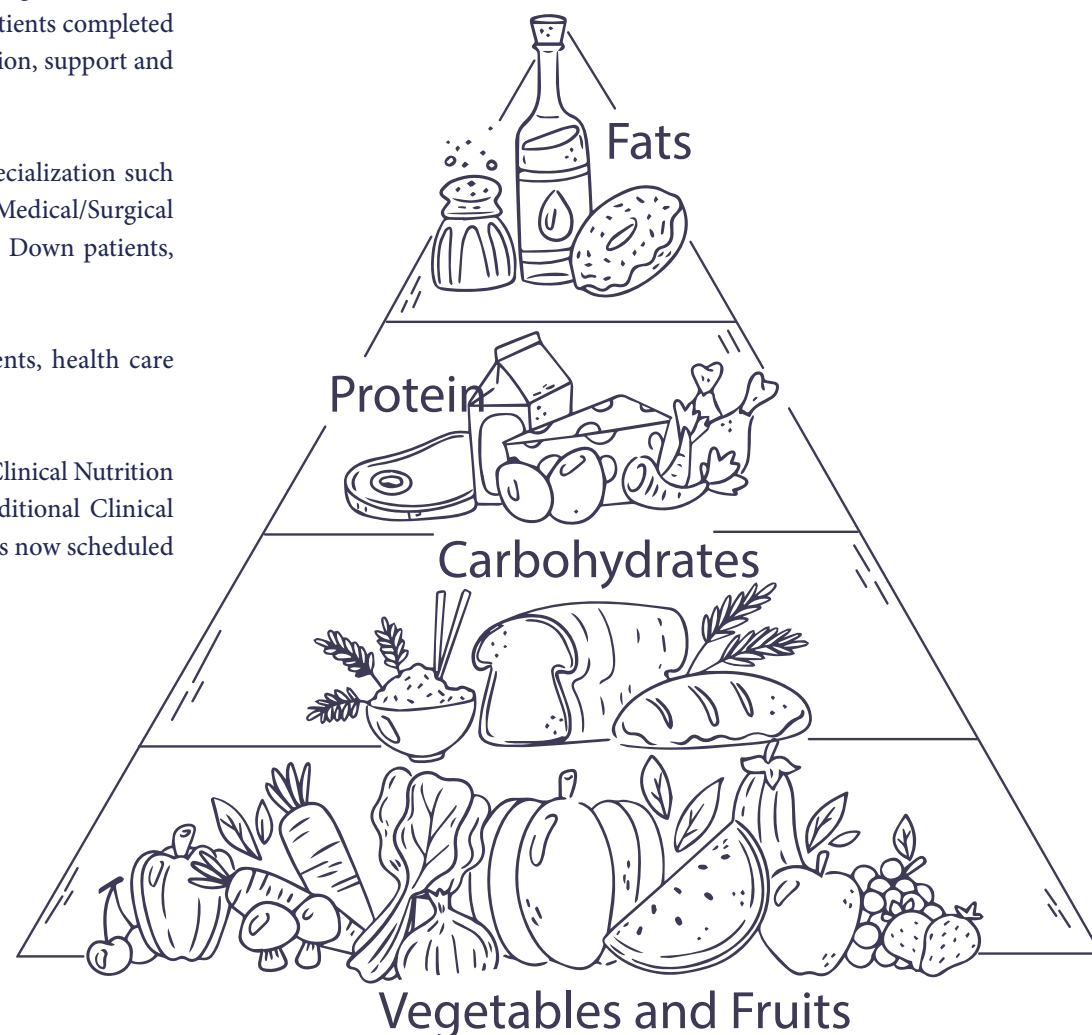
### King Abdulaziz Hospital – Al Ahsa

#### Emphasize:

- Participated in a number of public awareness activities implemented in King Abdulaziz Hospital.

#### Implement:

- Converted two clinics to be virtual clinics in addition of three previous clinics to be five virtual clinics.



# Health Information Management

## Introduction:

Health Information Management is a support service whose primary purpose is to contribute to the the quality of patient care through the development and maintenance of a comprehensive Medical Record System.

Services and functions shall be developed and implemented in such a way that confidentiality, privacy, and data security considerations are respected at all stages of gathering and processing the healthcare information.

The system shall also provide health information to support and promote the related goals and activities of the health care facility in the areas of education, training, research, facility management, and decision-making.

## King Abdulaziz Hospital – Al Ahsa

### Implement:

- 91% of the whole (Paper-Based) records digitalized into Bestcare.
- 98% the Level of Automation in Release of Information Unit such as:
  - Sick leave SEHA Platform.
  - Bilingual Medical Reports
  - Birth Notices MOH system
  - Death Notices MOH system
  - Notification of visits (OPD, Emergency, Day Case etc.)
  - Admission & Discharge notifications
  - Patients' Sitter Notifications
  - Maternity Leave.



## Nursing Services

### Introduction:

Nursing Services at King Abdulaziz Hospital, Al Ahsa comprises a dynamic, innovative team that embraces challenges and identifies opportunities for professional growth and development that include, but are not limited to, Nursing Education, Nursing Management, Pediatric Nursing, Emergency Nursing, Surgical and Peri-Operative Nursing, Neonatal Nursing, Midwifery, Critical Care Nursing, Medical Nursing, Ambulatory Care Nursing and Renal Dialysis Nursing. All organizational health technologies are implemented at KAH and monitored for desired outcomes. Nursing takes pride in its organizational engagement and commitment.

Nursing actively participates in all disciplines to ensure operational efficiency and optimal patient care and safety.



## Nursing Services

King Abdulaziz Hospital – Al Ahsa

### provide:

- Reduced Waiting List for Endoscopy:

| Initial                   | Current |
|---------------------------|---------|
| <b>Surgery = 150</b>      | 82      |
| <b>Medicine /GI = 610</b> | 348     |

- Achieved 100% compliance in the 'door to ECG' (KPI).
- Paediatric Early Warning (PEWS) Score Training and Paediatric Rapid Response Teams (PRRT): Compliance with Regional Directives: In strict compliance with regional directives, we initiated the implementation of the Paediatric Early Warning (PEWS) Score Training and Establishment of Paediatric Rapid Response Teams (PRRT). These initiatives are designed to detect early signs of deterioration in pediatric patients, enabling a quick and effective response to critical situations.
- Reducing the events of extravasation and infiltration and control the complications by Implementation of Comprehensive Action Plan: Infiltration/Extravasation incidence rate below 1% (threshold set at 3%).

### Deliver:

- 99% of nurses and midwives comply with Saudi Commission for Health Specialties (SCFHS) registration targets.
- 98% of nursing services comply with the appropriate mandatory certifications.
- 97% Compliance with appropriate mandatory workshops.
- 100% compliance with the appropriate Part 1 generic competencies target for Nursing Services.
- Patient experience with the nurse manager is rounded to 96%.
- A Nursing IV Team has been established to prevent patients from being exposed to multiple IV attempts and escalating difficult to cannulate patients early.
- Rollout of Comprehensive Geriatric Nursing Assessment tool and patient assessment documentation pathway to ensure coordination of management of care (medical, psychosocial, and functional limitations) of a frail older person in order to develop a coordinated plan to maximize overall health with aging.
- WOC nurses run a specialty wound clinic in the OPD for complicated wounds, which is staffed four days per week to effectively accommodate patients.
- Environmental Care Rounds: 90% of the identified items have been immediately corrected. 10% are in progress and 10% are minor major requests.

- Safety rounds are conducted in each other's units monthly, which is 95%.
- Sustainability of Fresh Eyes (Labor & Delivery) - Intrapartum Patient Safety:
  - Devising New Guidelines: In the Maternal and Child Health (MCH) department, taken innovative steps to enhance intrapartum patient safety with the introduction & the sustainability of the "Fresh Eyes" initiatives.
  - DPP 46800-03: Guidelines on Cardiotocography (CTG): We developed new guidelines, referred to as DPP 46800-03, specifically focusing on Cardiotocography (CTG) Fresh Eyes Procedures. These guidelines provide clear and comprehensive instructions for all staff regarding the Fresh Eyes approach, which enhances the accuracy of CTG interpretation and minimizes errors in CTG analysis.
  - Adopting the Fresh Eyes approach, we prioritize the prevention and early detection of deviations from the norm in CTG traces. This proactive approach contributes to improved intrapartum patient safety and reduces the risk of adverse outcomes during Labor and delivery.



## Nursing Services

King Abdulaziz Hospital – Al Ahsa

### Promote:

- Designed a new one-day training workshop for nurses that concentrates on the fusion of all digital health solutions and their integration with BESTCare-HIS. Partnership with HTM and ISID experts is essential for this workshop.
- Successfully implemented PEWS 20 training for all nurses, doctors, and respiratory therapists in neonatology, paediatrics, and ward 1, achieving a 100% attendance rate.
- Approved LEAD programs under NED 2023:
  1. Adult Mechanical Ventilator and Pediatric & Neonatal Mechanical Ventilator.
  2. Advance Obstetrics and Gynaecology Patient Care.
  3. Advance Peri-Operative Practice.
- Nursing Education Initiatives 2023:
  1. Long-Term Patient Care Education drive and Elderly Patient Care Education drive.
  2. International Stroke awareness Day.
  3. Nursing Staff Ambulance Orientation Initiative.



### Implement:

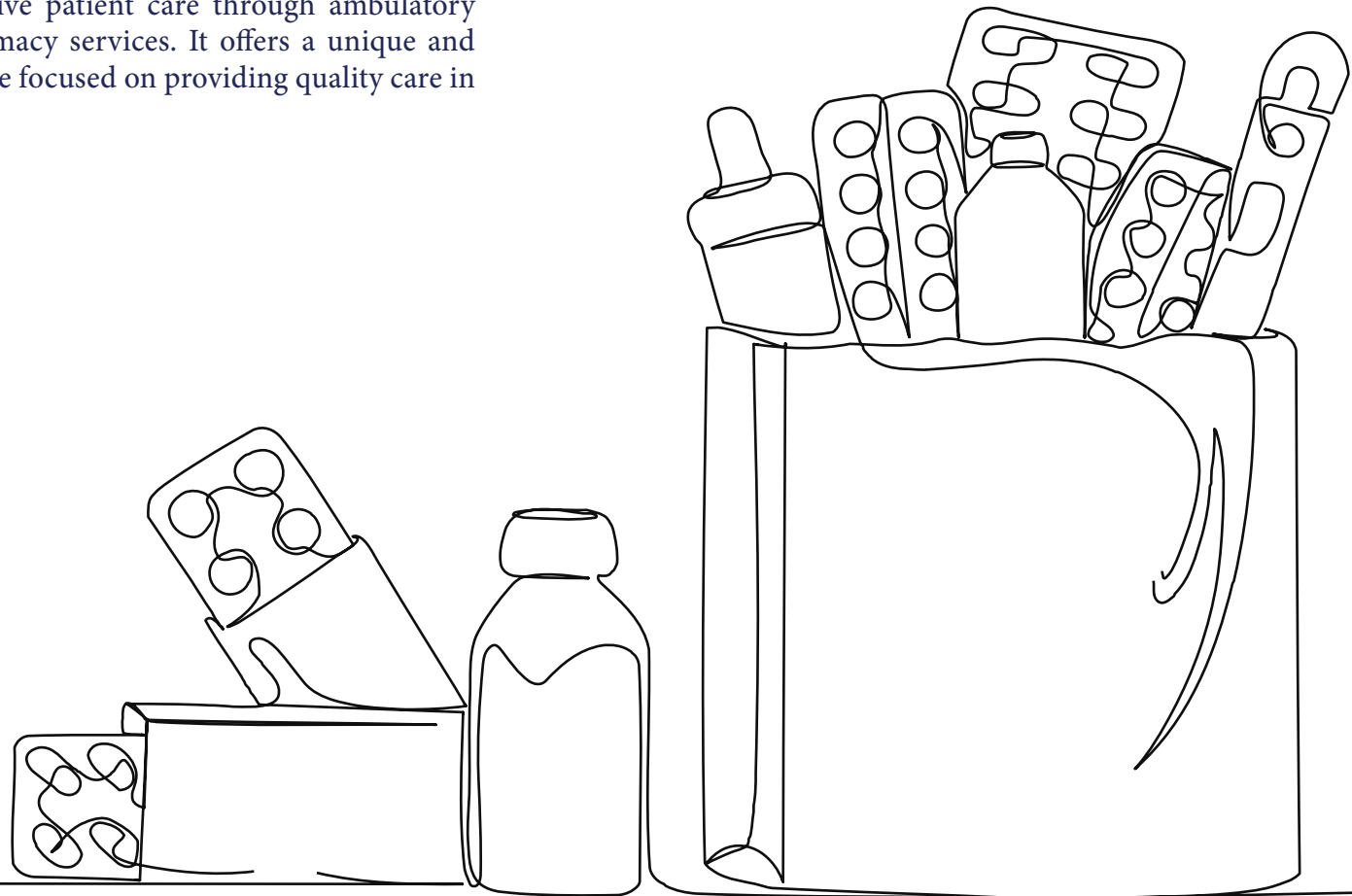
- Streamlined redundant nursing documentation to create a more user-friendly BESTCare-HIS/ electronic medical record.
- Mechanisms have been optimized to unify end-user support for reporting device and integration failures on one platform.
- HIMSS EMRAM (Electronic Medical Record Adoption Model) Bar Coding Scanner for Formula Milk: Compliance with Corporate Standards: In strict compliance with corporate standards and in alignment with our commitment to leveraging technology for improved patient care, we successfully implemented the HIMSS EMRAM (Healthcare Information and Management Systems Society) Electronic Medical Record Adoption Model.



## Pharmaceutical Care Services

### Introduction:

Pharmaceutical Care Services provides comprehensive patient care through ambulatory care, decentralized inpatient care, and clinical pharmacy services. It offers a unique and extensive array of clinical and product services that are focused on providing quality care in accordance with CBAHI and JCI Standards.





## Pharmaceutical Care Services

King Abdulaziz Hospital – Al Ahsa

### Emphasize:

- Engaged in public health and education programs, initiating campaigns to disseminate new knowledge include:
  - Diabetic medication in Ramadan campaign
  - Kidney awareness day, Osteoporosis awareness day, Breast cancer awareness day, Stroke awareness day and Diabetic day.
  - Pilgrimage and Diabetes.
  - World patient safety.
  - Safe utilization of medications.

### Archive:

- Delivery medication through SMSA to Military patients and their independents when required inside and outside the city including Southern board, etc.

### Provide:

- Botulinum toxin injection for Hyperhidrosis and Migraine guidelines.
- COVID-19 Antiviral Paxlovid (Nirmatrelvir and Ritonavir) guidelines.
- Oseltamivir (Tamiflu®) Prescribing Guideline for the Treatment of Seasonal Influenza.
- Prophylaxis of Venous Thromboembolism (VTE) Guideline & Protocol.
- MNGHA application (Portal, IVR).
- We care service.

### Deliver:

- Golden hour antibiotic dispensing for septic paediatric in Emergency department (ER).
- Hemodialysis Patients education clinic “التثقيف الدوائي”.
- Establishment of several operational workflow and clinical guidelines:
  - Recalled lifesaving medications mitigation guidelines.
  - OR workflow improvement and declining unscheduled medication (Emergency) dispensing from ADCs to 17%.
  - Medication Off-label Indication in Ob/ Gyn guide to ensure safe medication prescribing.
  - Ceftriaxone intramuscular (IM) guide in the PHC.
  - Expired medication disposal process and workflow as per government regulations
  - medications supply monitoring indicators immediately.

### Promote:

- Closed loop medication administration (CLMA).
- Total Parenteral Nutrition compounding machine.
- Basic Medication Safety Program.

### Implement:

- Medication management process for Virtual clinic patients.

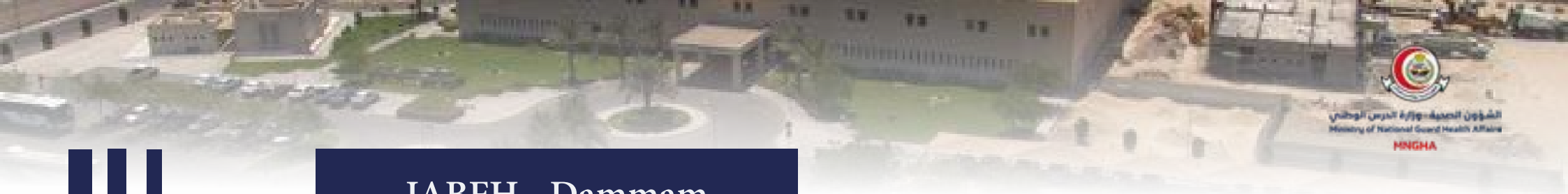




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# Dammam





# IABFH - Dammam

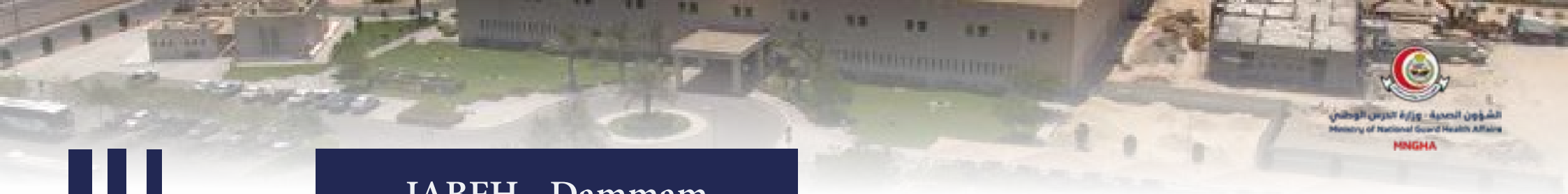


## ACCESS TO CARE

Establishment of EP/PHC slots for OB and PHC/EP slots for paediatric patients for reassessment/ follow up after ED visit



Provided direct daily PHC booking slots for emergency department in order to increase accessibility of care from Emergency department



# IABFH - Dammam



## SERVICE EXCELLENCE

Transfusion Medicine was accredited by Association for the Advancement of Blood & Biotherapies (AABB)



Refilling medications by phone and providing home delivery via SMSA



Pathology and Laboratory Department was re-accredited by College of American Pathologists (CAP)





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Ministry of National Guard Health Affairs  
MNGHA

# Medical Services



## Anesthesia Department

### Introduction:

The Anesthesia Department is dedicated to deliver excellent medical services to all surgical branches to cover all areas in the hospital over 24-hours giving an unwavering commitment with continuous improvement of our medical services, staff, expertise, teamwork, innovation and vision for the future. Based on the belief that all people have the right to high standard of health care, we will work together using the latest technology, evidence-based practice and join cooperation with international medical systems to provide distinguished Department of Anesthesiology, both inside and outside the Kingdom. As currently we have (4) OR along with daily Anesthesia Clinic, 24h coverage service and providing pain services for L&D ward and the hospital. Sedation for cases outside OR in day surgery, ICU, Radiology & ER dept. covering code blue 24h and difficult vein access for 24h in the hospital.

Achievements among MNGHA  
Imam Abdulrahman Bin Faisal Hospital – Dammam

### Implement:

Anesthesia Machine Integration in BESTCare System: New System for digital automatic recording of Intra-Operative Anesthesia monitoring.

### Statistical Information

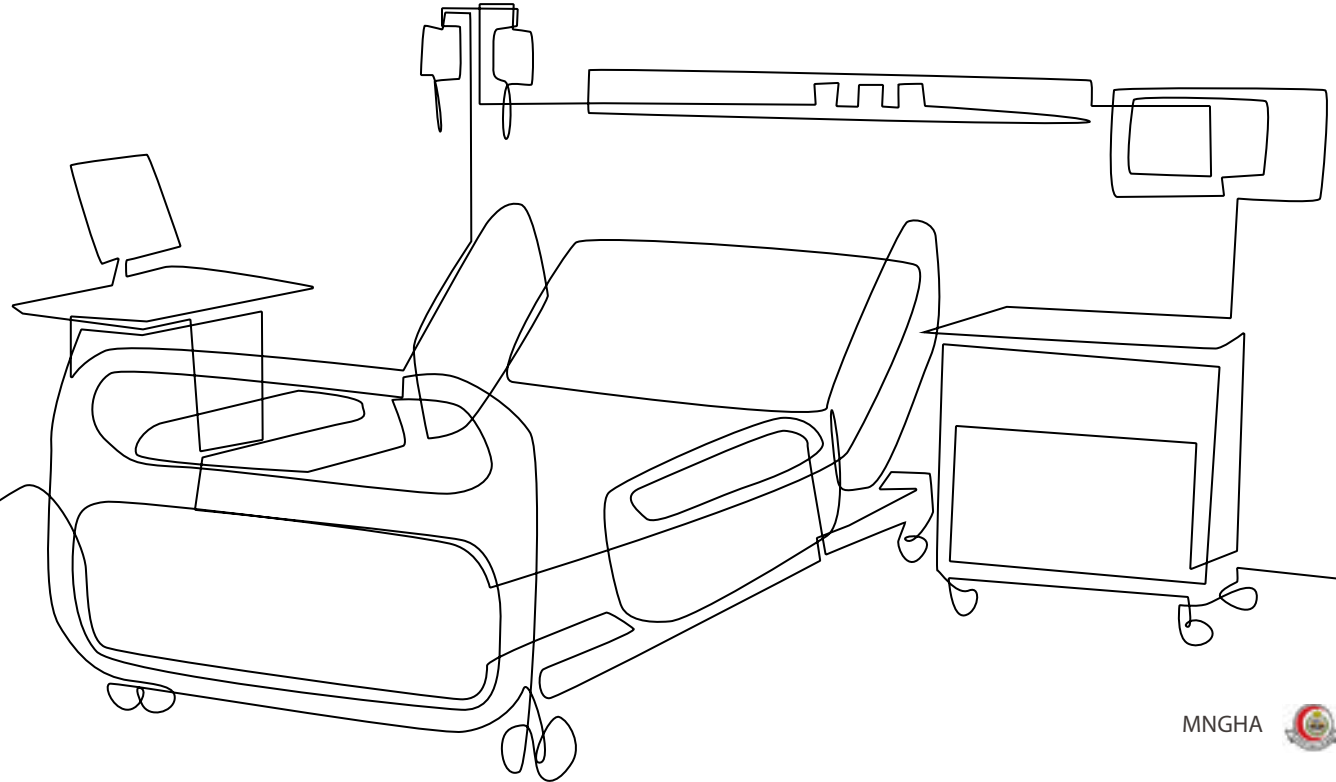
Number of Cases [January – December 2023]:  
OR: Elective Cases: 2573 / Emergency Cases: 637 - L&D Epidural: 271 - Clinic:  
**2516.**



# Bed Management

## Introduction:

Bed Management Department is leading a collaborative process of assessment, planning, facilitation and care coordination to meet individual patients/families' needs through a comprehensive communication with different departments and services to promote a cost-effective discharge process while maintaining high quality standards of clinical care. Two sections under the department (Case Management, and Admission office on process to be included under bed management Department).



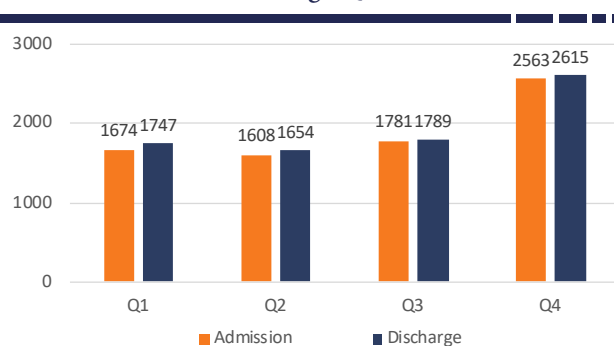
# Bed Management

Imam Abdulrahman Bin Faisal Hospital – Dammam

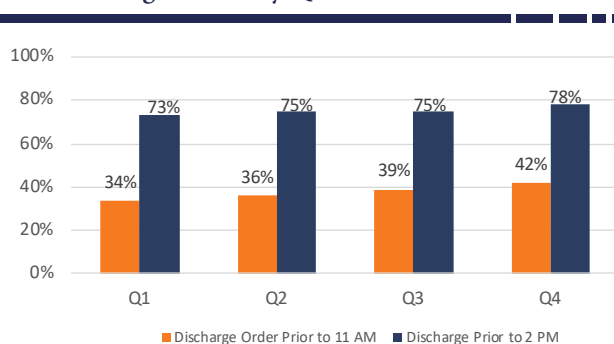
## Promote:

- The bed management supervisor and case management officers and bed management officers had bed management training program at KAMC in Riyadh.

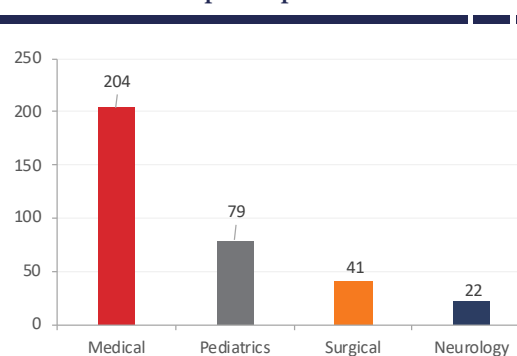
Admission Vs. Discharge/Quarter



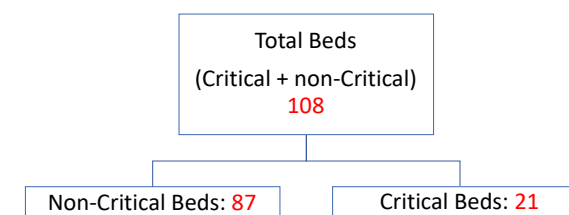
Discharge Efficiency/Quarter



Admission per Department/Annual



## Statistical Information:

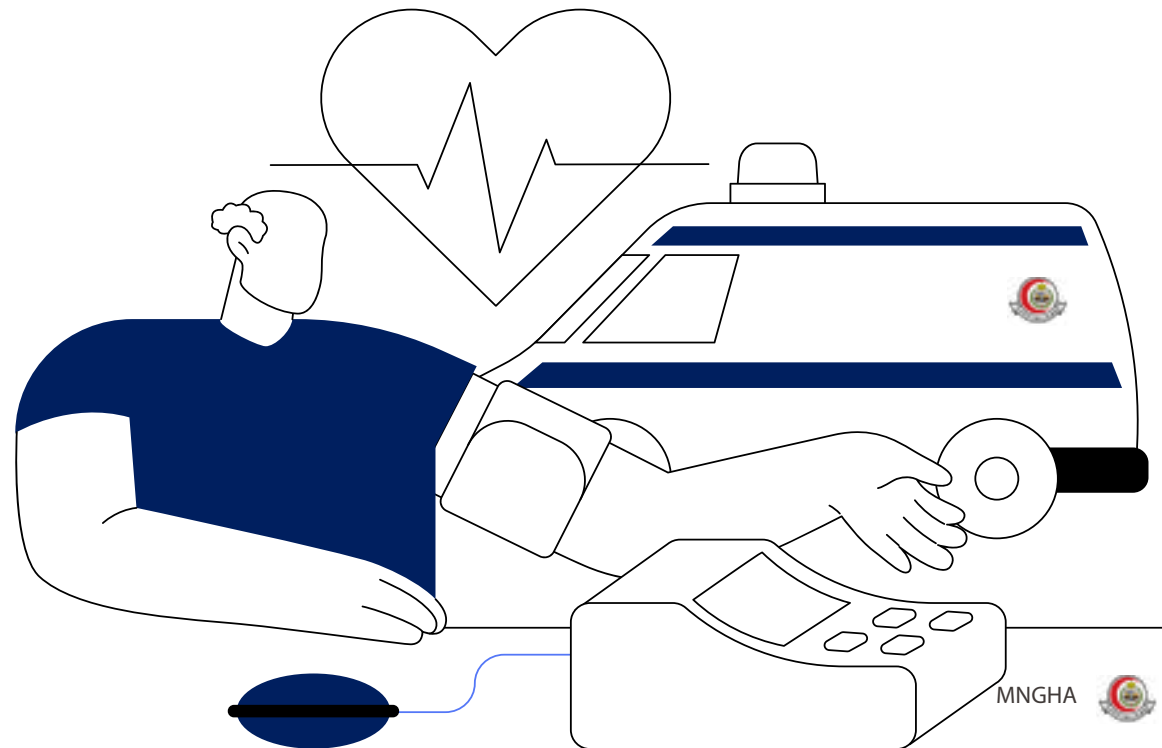




# Emergency Medicine

## Introduction:

The Emergency Medicine Department provides care to all eligible patients who is presented to the department. Our state-of-the-art facility continued to experience developmental and expansion changes, which are best summarized by the continued ongoing restructuring efforts and the successful operations of our services. The Emergency Medicine Department provides education to Residents, Interns from several universities, medical students, EMS Students and Nurses.



# Emergency Medicine

Imam Abdulrahman Bin Faisal Hospital – Dammam

## Emphasize:

- Improved awareness among NGHHA community of emergency access and EMS hotline through educational material, lectures, and national and social events.

## Deliver:

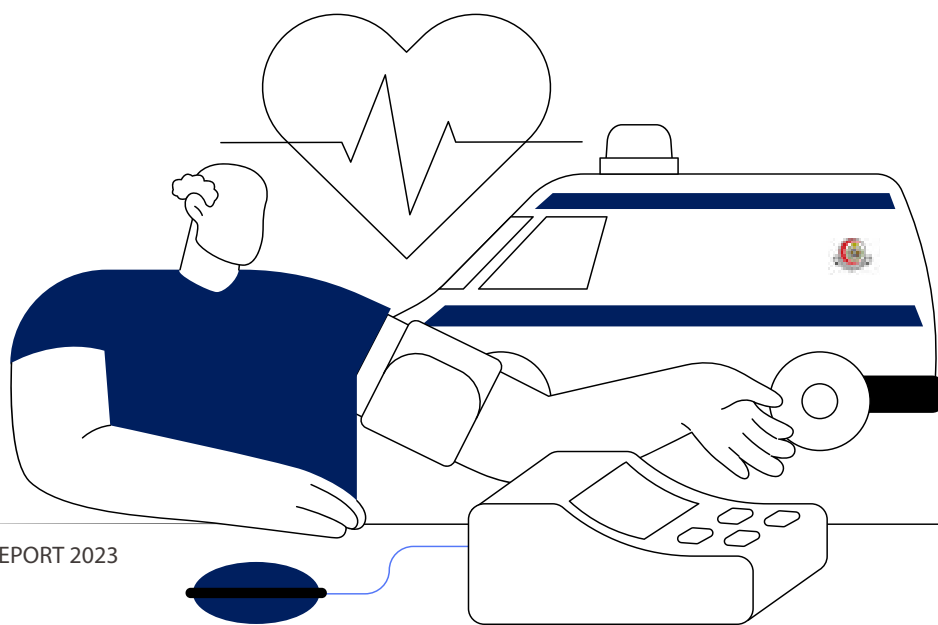
- Establishment of Emergency Command Center.

## Promote:

- CPDP and EMS staff development program.

## Implement:

- Distributed a QR code for King Fahad Residential City for emergency contacts.



## Statistical Information:

| TOTAL ER VISIT |
|----------------|
| 71282          |

| PEDIA    | TOTAL |
|----------|-------|
| 0-12-MOS | 3505  |
| 1-14-YRS | 19313 |
| TOTAL    | 22818 |

| ADULT | TOTAL |
|-------|-------|
| 14-60 | 44308 |
| 60+   | 4156  |
| TOTAL | 48464 |

| Total AMA |
|-----------|
| 550       |

| Total LWBS |
|------------|
| 3778       |

| RETURN TO ED | TOTAL |
|--------------|-------|
| 24 HRS       | 3124  |
| 72 HOURS     | 2905  |
| ONE MONTH    | 16942 |
| NO RETURN    | 50964 |

| TRANSFER       | TOTAL |
|----------------|-------|
| LONG DISTANCE  | 68    |
| SHORT DISTANCE | 678   |
| OTHER-MISSION  | 0     |
| TOTAL          | 746   |

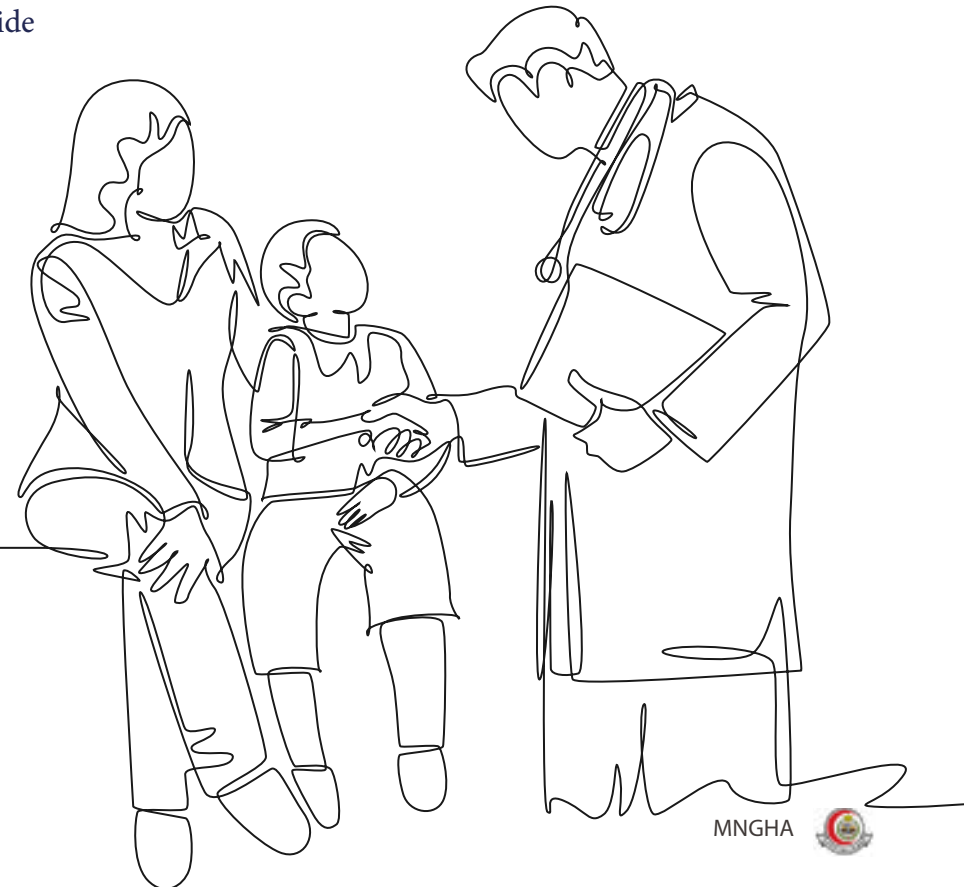


## Family Medicine & Primary Healthcare Centers

### Introduction:

Primary health care clinics were established in King Fahd Residential City, Dammam, in the year 1410 AH, which corresponds to 1989 AD.

Given the importance of health services provided through health centers and to achieve the goals and strategies of health affairs, which confirm that primary health care is the basis of the health system. These clinics are dedicated to serving National Guard employees both inside and outside of the residential city.



# Family Medicine & Primary Healthcare Centers

Imam Abdulrahman Bin Faisal Hospital – Dammam

## Emphasize:

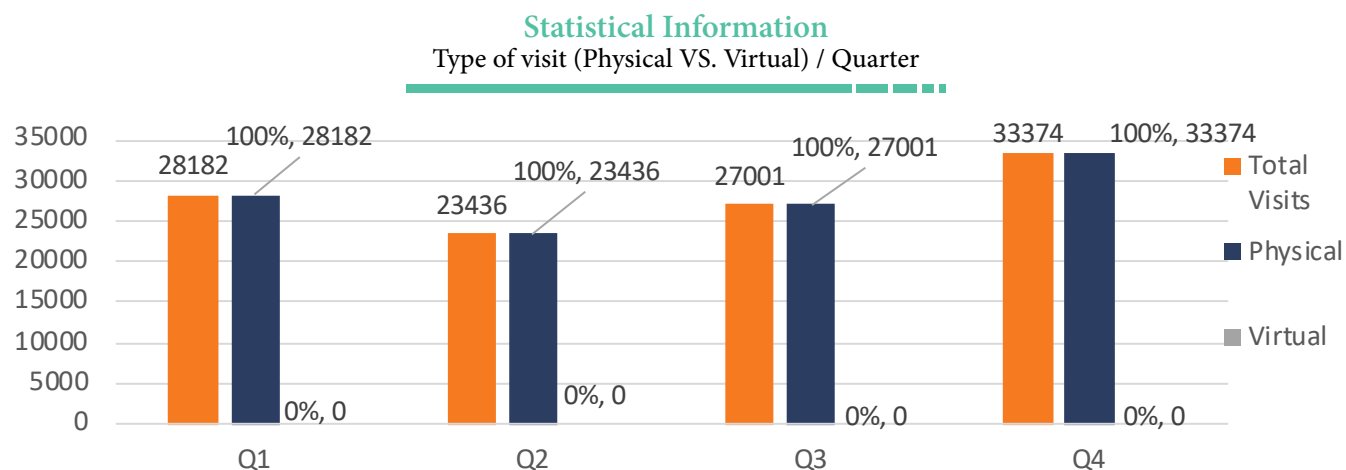
- Initiation Influenza campaign and educational lectures for health promotion, and prevention

## Deliver:

- Added walk in clinics for urgent care 8 am – 11 pm) to decrease the crowdedness of category 4 and 5 in emergency department.
- Initiate a 2nd HHC visiting Team to provide the requested services & deliver patients' needs since October 2023.

## Implement:

- Activated Booking clinics and Family medicine Consultant on-call to ensure best quality of care.



## Medical Imaging

### Introduction:

The Medical Imaging Department provides a comprehensive range of high-quality Diagnostic, Interventional and Therapeutic Radiology. The management is responsible to the MNGHA and community to maintain its service excellence through its up-to-date Radiological practices in order to provide quality and excellence in our Radiological and Imaging Services and to support the clinical programs.

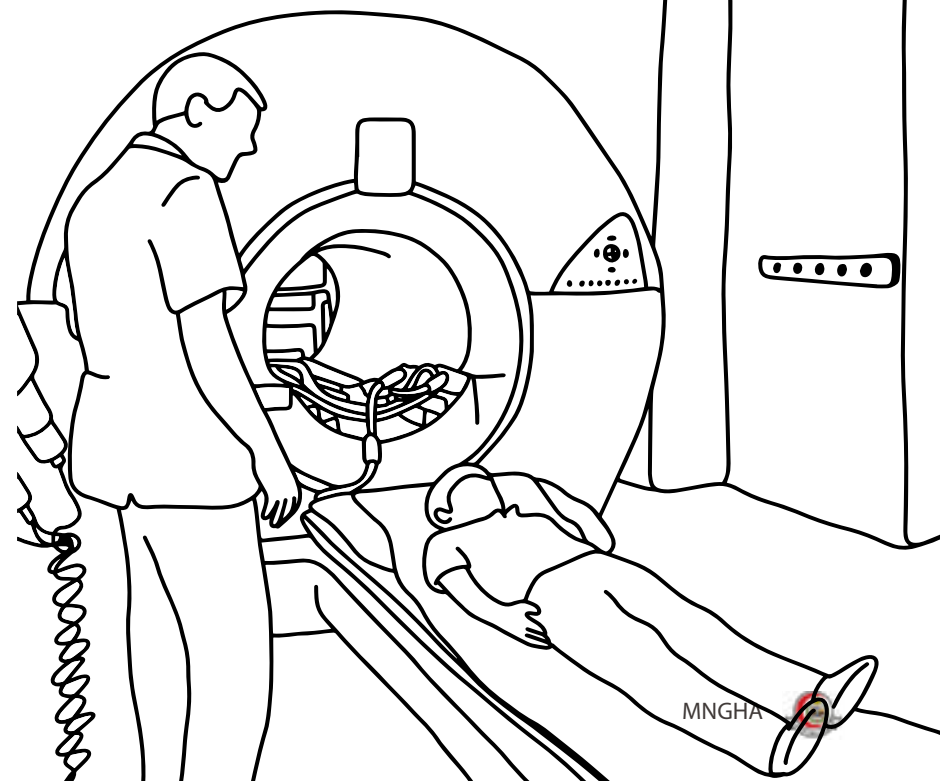
### Imam Abdulrahman Bin Faisal Hospital – Dammam

#### Promote:

- Additional new ultrasound machine was delivered in order to provide good quality of service by scheduling more patients.

#### Statistical Information

|                           | Total        |
|---------------------------|--------------|
| X-ray                     | 32303        |
| Fluoroscopy/OR            | 578          |
| Mammogram                 | 296          |
| Lithotripsy               | 22           |
| DEXA (BMD)                | 466          |
| CT Scan                   | 3738         |
| Ultrasound                | 9236         |
| MRI                       | 2883         |
| Special Procedures        | 149          |
| <b>TOTAL EXAMINATIONS</b> | <b>49661</b> |



# Obstetrics & Gynecology

Imam Abdulrahman Bin Faisal Hospital – Dammam

## Introduction:

Department of Obstetrics & Gynaecology in Al Imam Abdulrahman Bin Faisal Hospital, Dammam is dealing with all Ob/Gyne problems both acute and cold cases for outpatient and inpatient.

We are dealing with a high-risk patient, some of them they just present as an emergency including the continuous rising percentage of un booked and non-eligible patients and it is a common fact that such patients are problem prone, difficult to manage and complication is expected.

### Provide:

- Implemented of First Visit Clinic.

## Statistical Information

|                   | Total |
|-------------------|-------|
| Admissions        | 1,390 |
| No. of Deliveries | 1,084 |
| Cesarean Section  | 327   |
| OR                | 459   |
| OPD               | 8,485 |
| ER                | 2,231 |

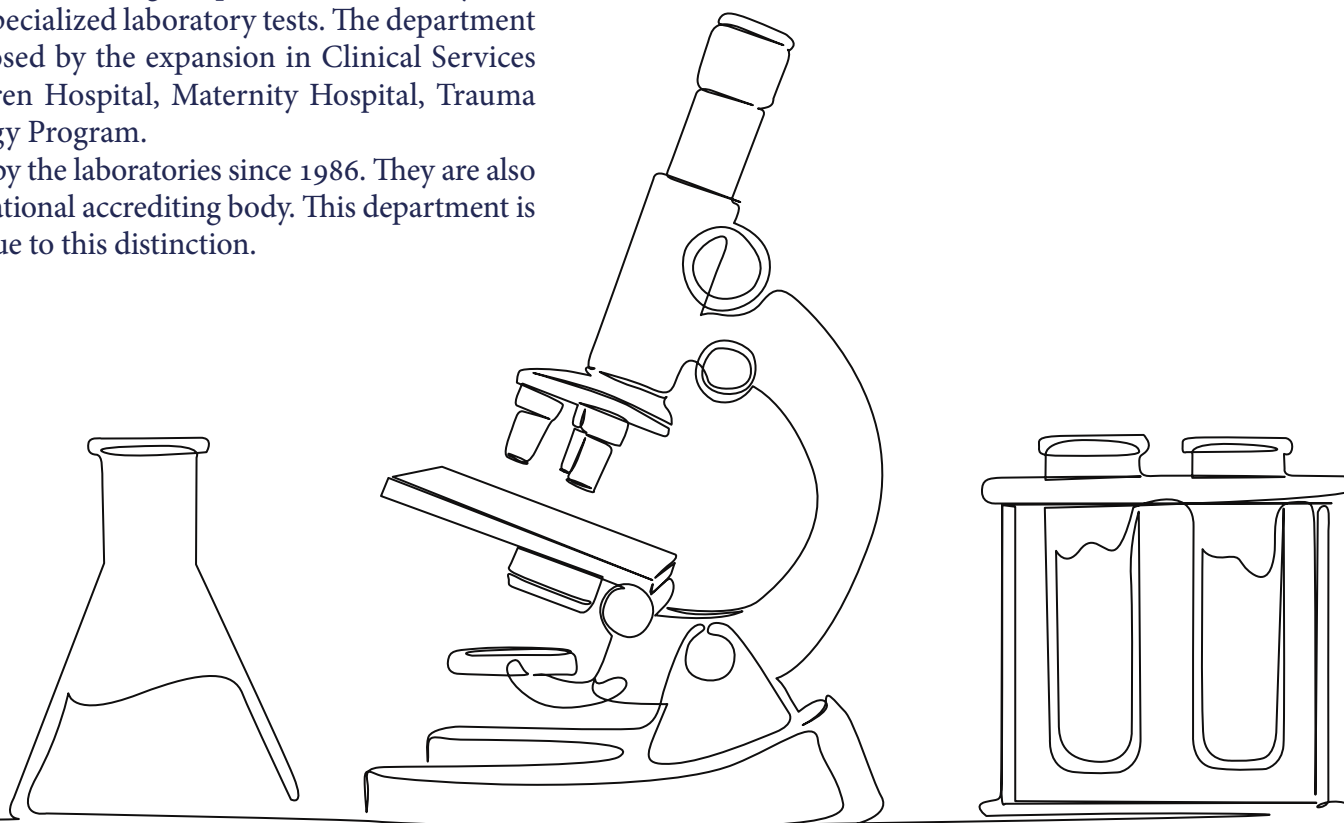


## Pathology and Laboratory Medicine

### Introduction:

The Department of Pathology and Laboratory Medicine is dedicated to providing state-of-the-art Laboratory services with reputable and internationally recognized institutions. This department for patients with MGHA and eligible patients in a tertiary care and referral medical center provides complex and specialized laboratory tests. The department is continuously evolving to meet the challenges posed by the expansion in Clinical Services including Organ Transplantation, Specialty Children Hospital, Maternity Hospital, Trauma Center, Neurosciences and comprehensive Oncology Program.

Compliance with CAP/AABB has been maintained by the laboratories since 1986. They are also accredited by the JCI and CLBB from CBAHI, the national accrediting body. This department is distinct in both the Kingdom and the Middle East due to this distinction.



# Pathology and Laboratory Medicine

King Abdulaziz Hospital – Al Ahsa

## National awards, recognition, contributions:

- Participated in International Laboratory Day, to highlight the importance of medical laboratories as vital part of healthcare system where it participates in providing accurate and trusted results, which helps in taking appropriate medical decisions. Additionally, to highlight the services/ tests provided by each laboratory sections that show the magnificent role of laboratory tests in variety of disease diagnosis.
- participated with total of (3) improvement projects' posters in Johns Hopkins Aramco Healthcare (JHAH) Quality Day, which took place on 19th - 20th March 2023.

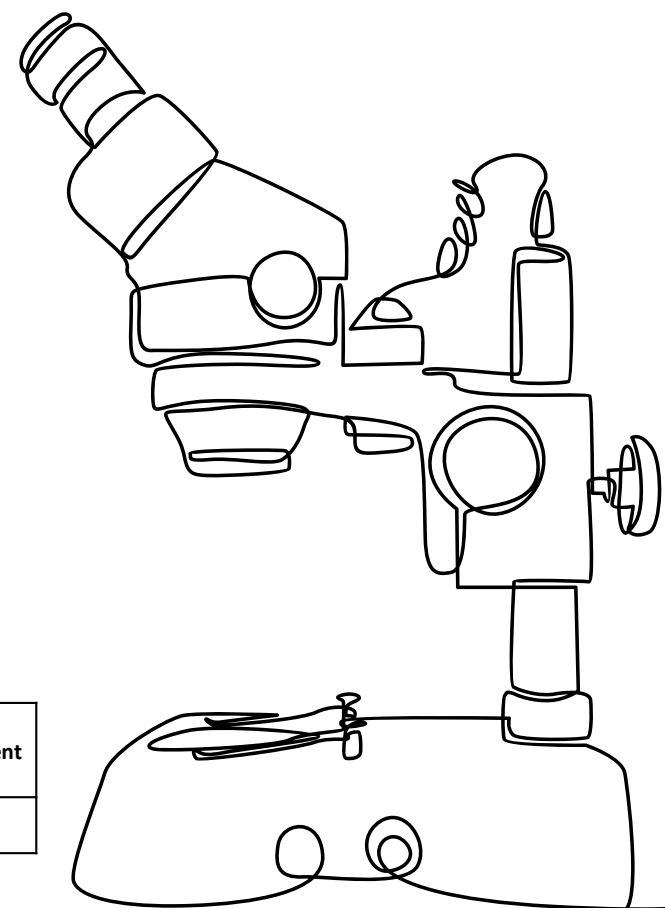
## Statistical Information:

| Microbiology Section   |           |
|--|-----------|
| Microbiology Tests Total                                       | 30,732    |
| TRANSFUSION MEDICAL SERVICES/IMMUNO-HEMATOLOGY PATIENTS' TESTS | 12,525    |
| IMMUNO-HEMATOLOGY DONOR TESTS                                  | 8,457     |
| TOTAL DONATIONS COMPLETED                                      | 1,327     |
| TOTAL PRODUCTS PREPARED  | 2,385     |
| TOTAL PRODUCT TRANSFUSED                                       | 1,315     |
| CORE LAB   |           |
| Core lab (Chemistry- Special Chemistry-Serology)               | 1,009,478 |
| Hematology & Coagulation                                       |           |
| Tests  | Tubes     |
| 116,888  | 78,144    |
| Toxicology   | 47,737    |

## Receiving Section:

### Annual Statistics for Total No. of LAB Samples & Patients

| No. of Blood Samples | No. of Samples other than blood: (Urine, Stool, Culture, Semen, Swab) | No. of Send Out | No. of FNA | No. of Donor samples | Total Samples | Total Patient |
|----------------------|---|-----------------|------------|----------------------|---------------|---------------|
| 212,731              | 30,670  | 1,694           | 52         | 5,219                | 248,384       | 64,622        |





## Pediatrics Department

### Introduction:

The Department's clinical care objective is to offer the highest achievable evidence-based care to a pediatrics population (neonates, infants and children up to 14 years of age) and their families in Eastern Region. Clinical services provided by the Division of General Pediatrics include outpatient clinics and associated inpatient care that provide continuous, comprehensive care, and consulting services that provide second opinions for challenging diagnoses.

The Pediatrics medical team aims to take a holistic and lifelong health of children in the Eastern Region with the understanding that each contact is an opportunity for health promotion, education and disease prevention. We emphasize the multidisciplinary approach, family-cantered care, and patient safety.

IABFH Dammam hospital's Pediatric Department is accredited by JCI and CBAHI. Our Pediatric Ward admissions range from 10-17, and we manage all kinds of children's diseases, and we serve over 32% of hospital emergency department visits. The Newborn services include NICU/ICN/NBN. Our Outpatient Department services are streamlined to ensure providing the best care for the prevalent diseases in children including; Pediatric Cardiology clinics, Pediatric Diabetic clinics, Pediatric Endocrine clinics, Neonatology clinic, Pediatric Infectious Disease clinic, Gastroenterology clinic, Refill (Meds Home Supply), in addition to the General Pediatric clinics and RSV clinic during winter season. A first clinic visit is necessary for all consultants in each specialty in OPD. We prioritize patient safety through successful programs and quality projects.



# Pediatrics Department

Imam Abdulrahman Bin Faisal Hospital – Dammam

## Statistical Information

|                   | Jan  | Feb  | Mar  | Apr  | May  | June | July | Aug  | Sept | Oct  | Nov. | Dec. | TOTAL |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| <b>Outpatient</b> | 539  | 527  | 427  | 183  | 609  | 475  | 262  | 386  | 468  | 599  | 475  | 531  | 5481  |
| <b>Ward 2</b>     | 113  | 95   | 98   | 98   | 152  | 107  | 105  | 61   | 106  | 117  | 71   | 98   | 2349  |
| <b>NBN</b>        | 84   | 91   | 81   | 84   | 111  | 89   | 104  | 89   | 89   | 98   | 108  | 104  | 1132  |
| <b>NICU</b>       | 4    | 4    | 2    | 5    | 6    | 10   | 8    | 3    | 3    | 1    | 2    | 4    | 52    |
| <b>ICN</b>        | 28   | 22   | 28   | 19   | 28   | 26   | 22   | 27   | 62   | 24   | 23   | 26   | 335   |
| <b>PICU</b>       | 10   | 5    | 8    | 5    | 7    | 2    | 4    | 4    | 9    | 9    | 9    | 7    | 79    |
| <b>SDU</b>        |      |      |      |      | 9    | 2    | 9    | 5    | 13   | 10   | 10   | 22   | 80    |
| <b>Endoscopy</b>  | 0    | 2    | 3    | 3    | 6    | 4    | 2    | 0    | 6    | 6    | 5    | 5    | 42    |
| <b>ER</b>         |      |      |      |      |      |      |      |      |      |      |      |      |       |
| <b>Pedia</b>      | 2202 | 2012 | 1692 | 1630 | 2051 | 1272 | 1025 | 1193 | 2513 | 3011 | 1902 | 2315 | 22818 |

|                     | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct. | Nov. | Dec. | TOTAL |
|---------------------|-----|-----|-----|-----|-----|------|------|-----|------|------|------|------|-------|
| <b>Gen. Pedia</b>   | 277 | 285 | 252 | 75  | 262 | 208  | 60   | 219 | 204  | 263  | 201  | 205  | 2511  |
| <b>Diabetic</b>     | 50  | 42  | 0   | 8   | 80  | 37   | 40   | 33  | 39   | 57   | 38   | 53   | 477   |
| <b>Endo</b>         | 82  | 93  | 38  | 26  | 114 | 68   | 89   | 68  | 56   | 135  | 81   | 108  | 958   |
| <b>Cardio</b>       | 39  | 23  | 24  | 22  | 79  | 67   | 17   | 27  | 54   | 24   | 48   | 54   | 478   |
| <b>Gastro</b>       | 37  | 16  | 55  | 21  | 45  | 55   | 24   | 34  | 69   | 50   | 44   | 48   | 498   |
| <b>Neonatal</b>     | 16  | 14  | 19  | 16  | 10  | 12   | 17   | 0   | 18   | 29   | 25   | 20   | 196   |
| <b>Inf. Disease</b> | 7   | 7   | 7   | 3   | 9   | 11   | 0    | 3   | 16   | 8    | 1    | 6    | 78    |
| <b>Urgent Care</b>  |     | 13  | 8   | 5   | 2   | 11   | 12   | 0   | 2    | 0    |      |      | 53    |
| <b>Refill</b>       | 6   | 11  | 14  | 7   | 8   | 6    | 3    | 2   | 10   | 12   | 3    | 6    | 88    |
| <b>RSV</b>          | 25  | 23  | 10  |     |     |      |      |     |      | 21   | 34   | 31   | 144   |
| <b>TOTAL</b>        | 539 | 527 | 427 | 183 | 609 | 475  | 262  | 386 | 468  | 599  | 475  | 531  | 5481  |

## Emphasize:

- Build up a healthy children status for all MNGHA employees' dependent.
- Monthly Health Awareness Campaign.

## Promote:

- Increased capacity of Pediatric Residency Training Program.

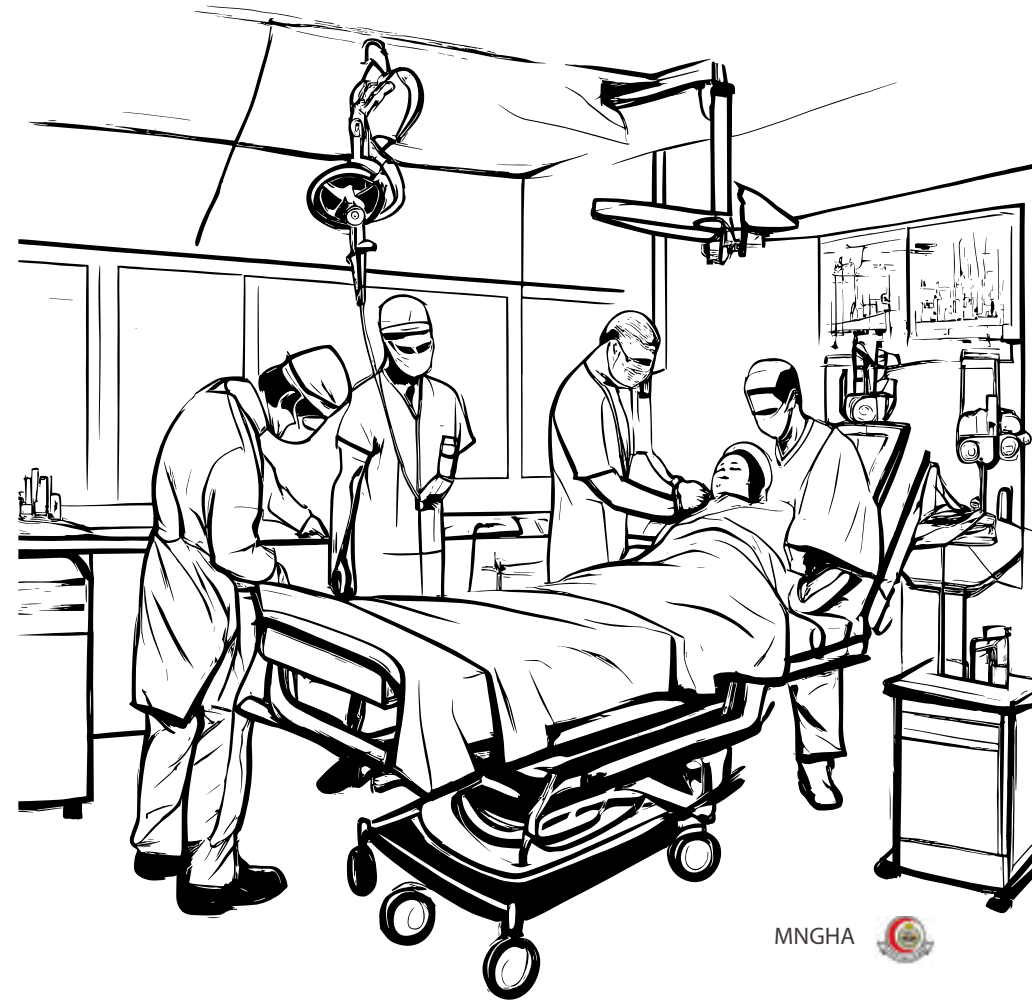


## Surgery Department

### Introduction:

One of the main clinical divisions responsible for patient care is the Department of Surgery, which is part of the Ministry of National Guard Health Affairs in Dammam. The department aims to provide the highest possible standard of patient care in surgery and related specialties.

Throughout its network of MNGHA hospitals, the Department of Surgery offers comprehensive and high-quality surgical care for adults and children 24 hours a day.



## Surgery Department

Imam Abdulrahman Bin Faisal Hospital – Dammam

### Provide:

- 85 %of OPD patients have appointment in first visit clinic with the period of 4 weeks Access to Care.
- The OR waiting list is markedly decreased to one month and the OR utilization increased from 62% to 81%.

### Promote:

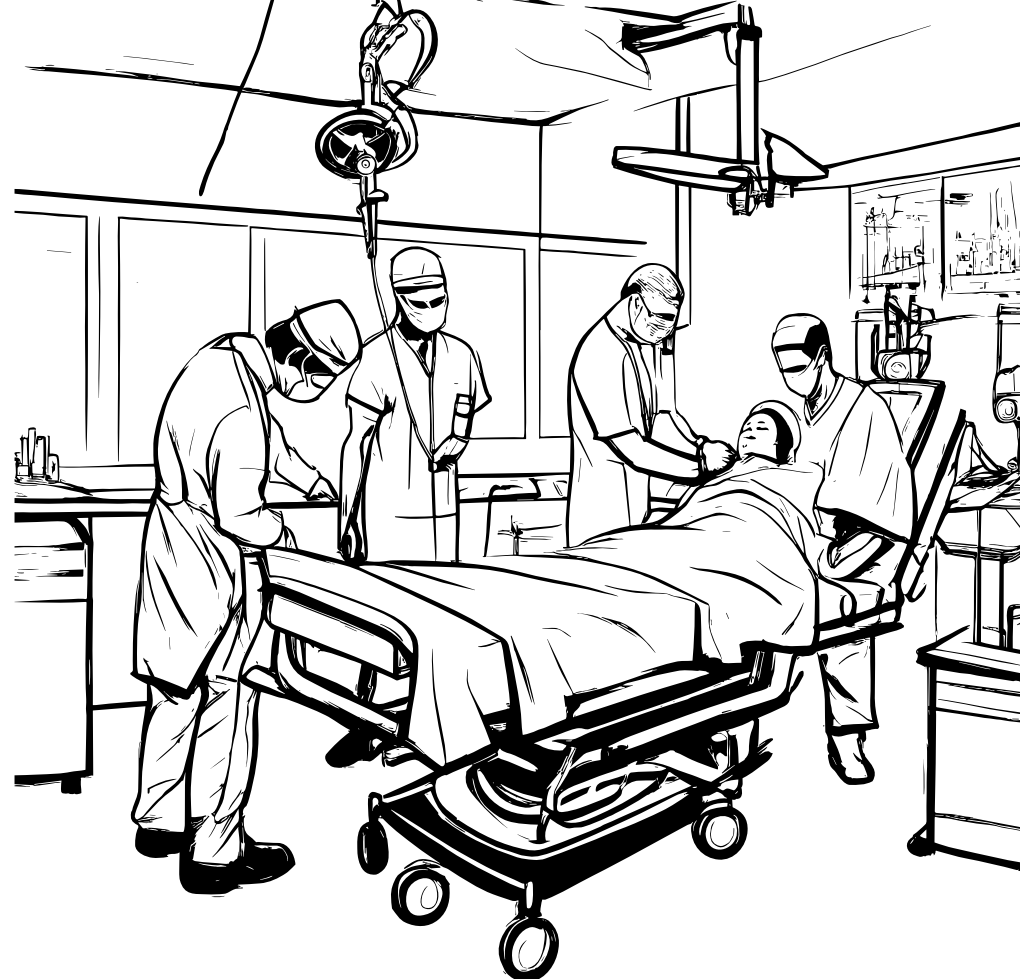
- New cases with high technical demands were performed (four laparoscopic pancreatectomies).
- Implemented of Laser treatment of haemorrhoids.
- Orthopaedics continue TKR treatment by using Cori robot.

### Implement:

- Implemented Shadow Clinic appointments.

### Statistical Information:

| 2023 (Jan to Dec)                                 | OR/DSU      | OUTPATIENT   | INPATIENT   |           |
|---|-------------|--------------|-------------|-----------|
| General Surgery and Obesity                       | 778         | 3284         | 845         |           |
| ENT   | 402         | 4736         | 274         |           |
| Orthopedics (including Spine and Pediatric Ortho) | 265         | 5771         | 293         |           |
| Ophthalmology                                     | 15          | 2536         | 3           | + 1 LASER |
| Urology   | 298         | 2984         | 268         |           |
| Neurosurgery                                      | 79          | 1140         | 45          |           |
| Pediatric Surgery                                 | 449         | 807          | 92          |           |
| Plastic Surgery                                   | 0           | 282          | 0           |           |
| Audiology   | 0           | 1302         | 0           |           |
| Optometry   | 0           | 1336         | 0           |           |
| Speech Therapy                                    | 0           | 541          | 0           |           |
| <b>TOTAL</b>                                      | <b>2286</b> | <b>24719</b> | <b>1820</b> |           |
| <b>OTHERS</b>                                     |             |              |             |           |
| ESWL  |             | 22           |             |           |



## Internal Medicine Department

### Introduction:

The Department of Medicine at Imam Abdulrahman Bin Faisal Hospital – Dammam is committed to the excellence in adult medicine care to all National Guard Employees and their dependents and to Eligible Saudi Citizens living in the Eastern Region. The department is providing high level of care and service in thirteen different specialties in addition to teaching, continued medical education and research to the residents, staff physicians and interns. Furthermore, the department is actively engaged in promoting public awareness through educational events.

**Daily Statistics OPD 2023 (Internal Medicine): 18061 visits**



### Statistics 2023

|                         | IP | OP |
|-------------------------|----|----|
| <b>TOTAL CASES</b>      | 27 |    |
| <b>IN - OUT PATIENT</b> | 26 | 1  |

|                                       | IP | DSU |
|---------------------------------------|----|-----|
| <b>IN - OUT PATIENT</b>               | 26 | 1   |
| <b>Adult Gastroenterology [IABFH]</b> | 16 | 1   |
| <b>Neurology [IABFH]</b>              | 10 | 0   |
| <b>Cardiac Sciences [IABFH]</b>       | 0  | 0   |
| <b>Internal Medicine [IABFH]</b>      | 0  | 0   |

|                                       | EL | EM |
|---------------------------------------|----|----|
| <b>ELECTIVE-EMERGENCY</b>             | 12 | 15 |
| <b>Adult Gastroenterology [IABFH]</b> | 3  | 14 |
| <b>Neurology [IABFH]</b>              | 9  | 1  |
| <b>Cardiac Sciences [IABFH]</b>       | 0  | 0  |
| <b>Internal Medicine [IABFH]</b>      | 0  | 0  |

|                                       | TOTAL |
|---------------------------------------|-------|
| <b>TOTAL CASES</b>                    | 27    |
| <b>Adult Gastroenterology [IABFH]</b> | 17    |
| <b>Neurology [IABFH]</b>              | 10    |
| <b>Cardiac Sciences [IABFH]</b>       | 0     |
| <b>Internal Medicine [IABFH]</b>      | 0     |



## Dental Services

### Introduction:

Being a part of Ministry of National Guard-Health Affairs, the aim if the Dental Services Department at Imam Abdul Rahman bin Faisal (IABFH) Hospital in Dammam is to provide the National Guard Personnel and their dependents with the highest quality of primary, secondary and tertiary dental services while ensuring accuracy and proper utilization of our available resources.

Currently, the following dental specialties are available at the hospital in Dammam:

- Orthodontics, Prosthodontics, Advanced Restorative Dentistry and Endodontics
- Periodontics, Pedodontics and Oral & Maxillofacial Surgery



## Dental Services

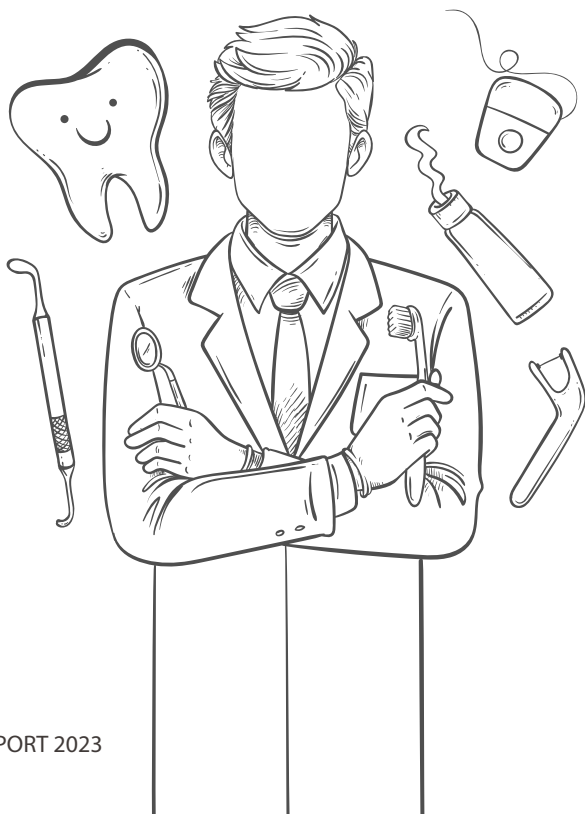
Imam Abdulrahman Bin Faisal Hospital – Dammam

### Provide:

- Introduced walk-in patients in our attempt to diversify provision of care and provide timely patient care.

### Deliver:

- Persuaded of providing the best & high-quality dental care without any disruption, we continued PHCC operations in the evening at Main hospital premises to deliver continuous care to PHCC patients.
- Evening dental clinics were provided to our patients to improve their access to care and provide flexibility.



## Statistical Information 2023

### IABFH

| Speciality                   | PS   | NS   | WN  | Total |
|------------------------------|------|------|-----|-------|
| Pedodontic                   | 542  | 124  | 71  | 613   |
| Pedodontic                   | 336  | 101  | 41  | 377   |
| Orthodontic                  | 1190 | 358  | 12  | 1202  |
| Orthodontic                  | 1461 | 253  | 7   | 1468  |
| Endodontic                   | 516  | 169  | 19  | 535   |
| Endodontic                   | 605  | 217  | 30  | 635   |
| Advanced Restorative         | 538  | 189  | 38  | 576   |
| Prosthodontic                | 147  | 38   | 4   | 151   |
| Oral & Maxillofacial Surgery | 330  | 155  | 30  | 360   |
| Periodontic                  | 241  | 92   | 0   | 241   |
| Periodontic                  | 402  | 99   | 4   | 406   |
| Hygien                       | 529  | 286  | 73  | 602   |
| Hygien                       | 232  | 262  | 40  | 272   |
| Total                        | 7069 | 2343 | 369 | 7438  |

### PHC

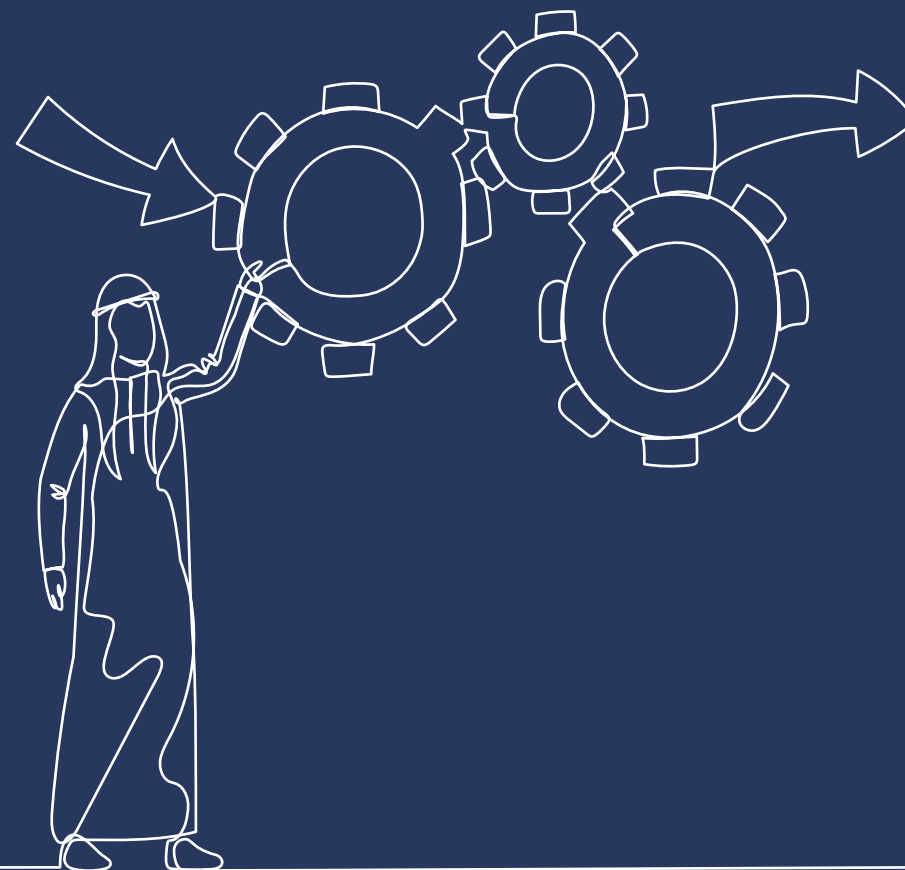
| Position        | PS   | NS   | WN   | Total |
|-----------------|------|------|------|-------|
| General Dentist | 275  | 79   | 390  | 665   |
| General Dentist | 354  | 95   | 405  | 759   |
| General Dentist | 502  | 109  | 322  | 824   |
| General Dentist | 607  | 125  | 349  | 956   |
| General Dentist | 685  | 115  | 387  | 1072  |
| Hygienist       | 676  | 257  | 1    | 677   |
| Hygienist       | 601  | 278  | 0    | 601   |
| Total           | 3700 | 1058 | 1854 | 5554  |





الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Operations





# Clinical Nutrition Services

## Introduction:

The Clinical Nutrition Department provides nutrition care and health education to patients and employees, participates in community programs, and provides nutrition training and education to both trainees and employees.

Clinical Nutrition Services Has Registered Dietitians working with a multidisciplinary team of health providers. It provides specific nutritional care services and counseling to both inpatient and outpatients, attending daily rounds, and managing complex nutrition therapies by planning and monitoring enteral feeding and parenteral feeding.

The department provides nutrition services to both inpatients (wards) and outpatients (OPD) in IABFH-DAMMAM. Also, as an extra support service, we cover two clinics in PHC as well as outline training programs for dietetic interns from different universities.

### Imam Abdulrahman Bin Faisal Hospital – Dammam

#### Emphasize:

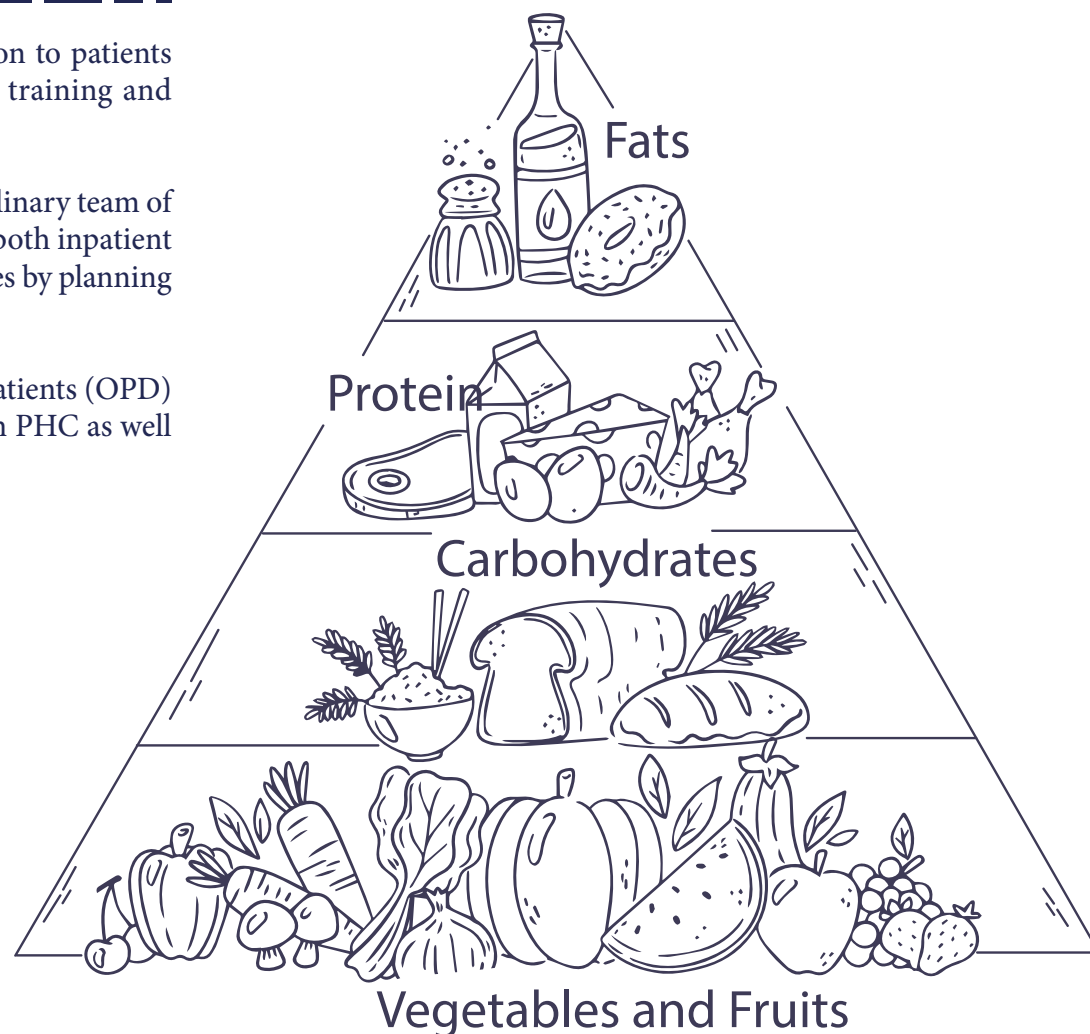
- Participated in Diabetes Awareness Day.

#### Promote:

- In-service education for Pediatrics medical staff.

#### Deliver:

- Establishment of 2 new specialized clinics: Pediatrics clinic & Carb counting clinic.



## Nursing Services

### Introduction:

The Nursing Services Department at the Ministry of National Guard Health Affairs has a diverse and talented workforce committed to providing exemplary care in a quaternary hospital setting with all specialties and is affiliated with a world-renowned academic research facility.

The Nursing Governance and Accountability Board and functions autonomously in relation to maintaining professional nursing standards and scope of practice while collaborating in partnership with medical and allied health leaders in the development of program-specific strategies, goals, policies, and standards of care govern the department.



## Nursing Services

Imam Abdulrahman Bin Faisal Hospital – Dammam

### Emphasize:

- Breastfeeding Awareness Day on Sept 12th 2023.
- Flu Vaccine Campaign on Oct 8th, 2023.
- Breast Cancer Awareness Day on Oct 30th 2023.

### Provide:

- Triage within 10 minutes: average 4.5 min.
- Level 3 seen within 30 minutes by physician: Average 58 minutes.
- Average length of stay (level 3): Average 2:04.
- ER Boarding Compliance: Benchmark-90%-average 81.5%.
- ECG to be done within 10 minutes of doctors' orders: 6 minutes.
- Unexpected return to ER: Benchmark 6.5% average 7.61 %.

### Deliver:

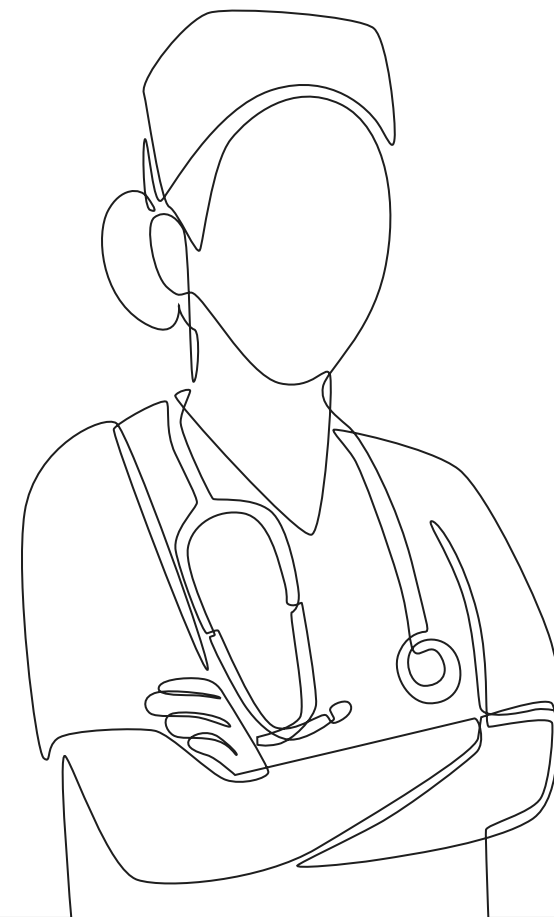
- Commissioned 4 bedded Step-Down unit March 2023.
- Commissioned Standards of Care and Safety department July 2023.
- O-EMARAM Stage 7/HIMSS7 lunching this year.
- CLMA% =53% in general.
- Close Loop blood transfusion = 100%.
- Close Loop Specimen Collection CLBC=95.24%.
- Express Breast Milk "EBM" = 98%.

### Promote:

- Smith & Nephew CORI for Robotic Total Knee Replacement.

### National awards, recognition, contributions:

- 1st place winner in Quality Improvement Project Poster at Johns Hopkins Aramco - Patient Safety Symposium, Project Name: (Reduction of Blood Culture Contamination Rate in ED to <3%).



## Patient Services

### Introduction:

Patient services are one of the essential parts of the MNGHA hospitals, with its main function being to provide Saudi National Guard personnel, MNGHA employees, and their eligible dependents with the highest quality of healthcare service in all areas covered by patient services and continuous quality improvements.

#### Imam Abdulrahman Bin Faisal Hospital – Dammam

##### Deliver:

- Relocated Registration & Admission office to more accessible and convenient location to patients.
- An office has been Establishment of with a designated staff for processing referrals and travel orders / compensation for Saudi patients and their sitters who are referred for treatment to MNGHA facilities outside their place of residence.

##### Implement:

- Activated automated MOH burial system to release the deceased patients' body.
- Activated medical eligibility automation system from HR department.



## Pharmaceutical Care Services

### Introduction:

Pharmaceutical Care Services provides comprehensive patient care through ambulatory care, decentralized inpatient care, and clinical pharmacy services. It offers a unique and extensive array of clinical and product services that are focused on providing quality care in accordance with CBAHI and JCI Standards.

#### Imam Abdulrahman Bin Faisal Hospital – Dammam

#### Implement:

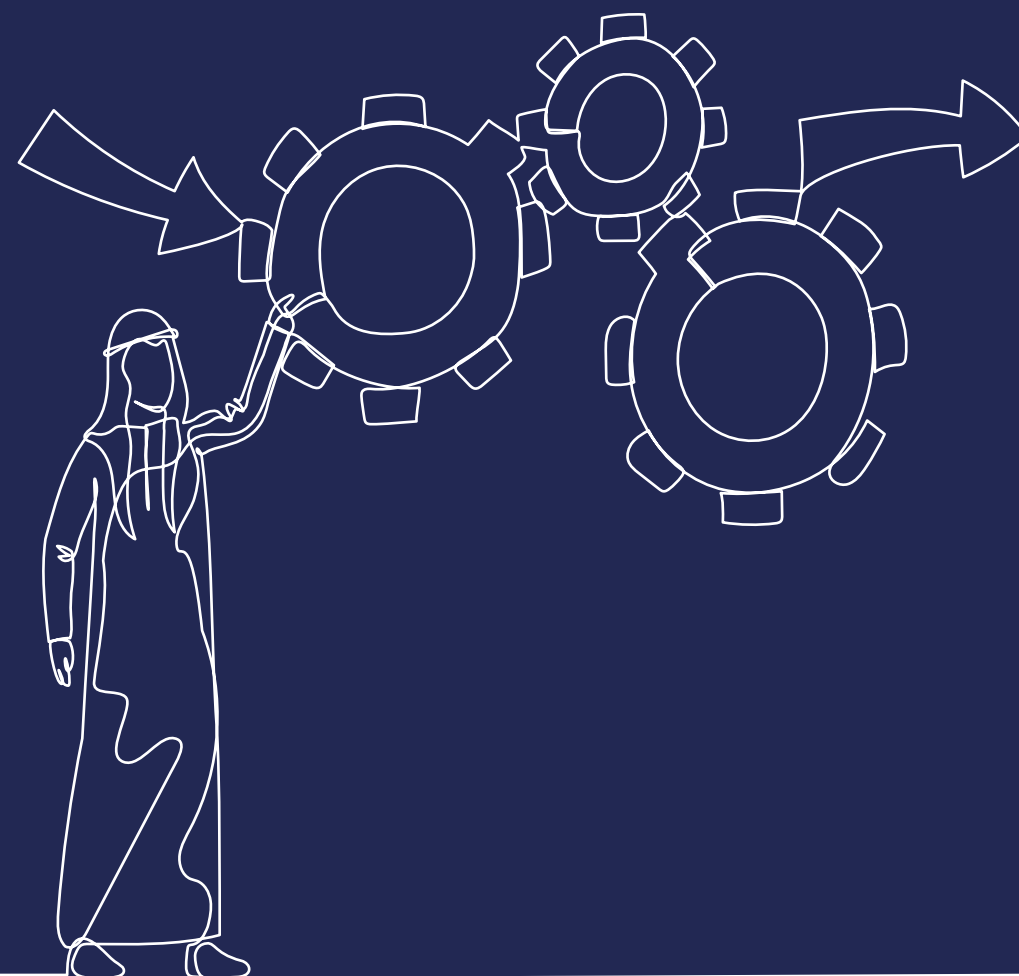
- We Care system for all patients' inquiries.
- IVR system for refill medication inquiries.
- Expanded ADC service.
- Implemented the followings:
  - anaphylactic kit
  - extravasation kit.
  - liquid dispenser machine.
  - unite dose barcode.





الشؤون الصحية - وزارة الحرس الوطني  
Ministry of National Guard Health Affairs  
MNGHA

# Corporates



# Corporate Investments and Revenue Development (Business Center)

## Introduction:

Corporate Investments and Revenue Development contains three main sections:

- 1- Business Center: responsible for the treatment of insured/paying patients.
- 2- Business Development: responsible for Rental Services.
- 3- Etqan Al Sahah responsible for the Saudi Korean Health Informatics Company.

## Achievements among MNGHA

### Implement:

- Released the revenue cycle management (RCM) solution tender.
- Integration with NAPHIES part II, to invoice all insured patients.

### Awards, recognition and contributions:

#### International:

- Contributed in Dakar Rally by providing health and emergency coverage for trauma cases.

#### National:

- Obtained licensure from the Council of Health Insurance (CHI) for all MNGHA facilities.

### 2030 Vision Objectives:

- Contributed with The National Unified Procurement Company (NUPCO) and became in charge of receiving lab samples from other hospitals (Governmental & Private.)



# Corporate Communications

## Introduction:

The Corporate Communications Departments provides latest communication technologies, systems, infrastructure and services in order to enhance the quality of communications services available for all MNGHA users and patients. Communication technologies assist healthcare providers to improve their productivity and enhance patient service quality and efficiency. Communication department consist of four sections: Administration, Maintenance, System Operation and Call Center. Communication services include IP Phone, Wireless Phone, Paging, Mobile, IP Fax, Call Center, IVR, Call Recording, Phone Calls Billing and Directory.

## Deliver:

- Implemented Post-call survey – National Family safety program helplines.

## Promote:

- UPS project for Saqr Al Jazeera Hospital and Comm. PBX room.
- Integrated KASCH PA with WHH PA.
- Mobile signal coverage for all GSM operators - Women Hospital.
- 

## Implement:

- Implemented the IVR application for recruitment information service.
- Upgraded Cisco contact center system.
- Implemented the IVR for Patient Connect service – All Regions.
- Implemented a contact center for staff experience.
- Updated and integrated patient medical files by implementing WhatsApp service for integration centre.

## Awards, recognition and contributions:

### National:

- Registered an invention with the Saudi Authority for Intellectual Property: Advance Enterprise Notification System.





# Corporate Employee Social Club

## Introduction:

The Corporate Employee Social Club provides a diverse range of services to employees, ESC members, residents, and their dependents. These services aim to enhance the quality of life and create a positive and enjoyable workplace.

Members Services is offering membership to all employees wherein members can avail loan programs, facility reservation and benefit from the offers and discounts in various food establishments, flights, hotels, chalets, holiday packages, car rentals, home care, entertainment, fitness centers, etc. In addition, events and activities are organized exclusively for the members throughout the year to promote social interaction and well-being.

As well as providing a Child Learning Center, that aims to provide the highest quality of early year's education and childcare.

Staff Recreation Services is responsible for organizing recreational activities, tournaments, and special events as well. In addition, provides appropriate leisure and supports a healthy and enjoyable lifestyle among employees. These programs and services include fitness programs, sports lessons and competitions, swimming and aquatics, desert trips, weekend getaways, special events, youth programs, and book libraries.

## Achievements among MNGHA Provide:

- Expansion, renovations and enhancement of Recreation, Child Learning Center and Guest House facilities in all regions.



# Corporate Legal Affairs

## Introduction:

Corporate legal affairs committed to the theoretical research and hands-on practice of the legal domain, and have provided professional legal services for the institution, executives and directors in matters related to the institutional establishment, operations, and asset restructuring, due diligence, negotiation, and drafting legal documents. The corporate management is complex and includes the management of people (roles and responsibilities, structure and incentive), workflow (processes, approaches, and systems), information, knowledge, legal service providers, investigations, legal review, legal recommendations, and other critical resources. Since 2020, reporting relationship of positions under Investigation Services (CR, WR, PMBAH, IABFH and Al Hassa), Judicial Review Management CR and Surveillance Unit Management (CR and WR), to be reallocated under Corporate Legal Affairs, CR. The areas of assignment mentioned earlier are expanding rapidly and are only managed internally by Corporate Legal Affairs.

## Deliver:

- SUM results are concluded for 2023 as following:
  - The unified MNGHA Surveillance System includes major projects like Women's Health Hospital CR and NeuroScience WR.
  - As internal projects, finalizing and adding all WR Dialysis Care Centers (Madinah, Jeddah, and Makkah) and part of the PHCC-C KHASH MALAAN to the unified MNGHA Surveillance System.
  - The unified MNGHA surveillance system will have PMBAH (380) cameras added to it.
  - Completion AUDIT LOG per user for all actions\access activities related to Surveillance system.
  - Completion the Unification of CCTV Surveillance System management in Riyadh, Hassa, Dammam, Jeddah. (Closing tenders as PTRs)
  - The completion of integrating multiple camera brands into one CCTV system for MNGHA (4200 cameras).

## International awards, recognition, contributions:

- The judicial review has contributed to further review, assessment, and investigation of around 52 cases from different regions.
- The Legal Assessment Board reviews all legal cases, oversees legal proceedings, and provides defence documents.
- Delegation of investigation services in regions: Investigation Judicial review has completed delegated tasks such as reviewing, assessing cases, and permitting investigations without delay or disruption.



# Corporate Public Relations and Media Affairs

## Introduction:

The Corporate Public Relations and Media Affairs Department aims to create, maintain, and protect MNGHA's reputation, enhance its prestige, create good will, and present a favorable image. It also serves as the bridge, which linked the Ministry of National Guard –Health Affairs internally and externally with public and community by managing and ensuring the correct flow of information by using all mass media sources. The role of Corporate Public Relations and Media Affairs is growing significantly with the growing importance of MNGHA and the number of its visitors as well as the number of duties and responsibilities handled by the department on several administrative and technical levels as well as basic tasks related to the preparation of organizational arrangements.

### Achievements among MNGHA

#### Emphasize:

- Flo Vaccination Awareness Campaigns, Hajj Vaccination Campaigns and All International Awareness Weeks Campaigns.

#### Deliver:

- Conducted Structural Heart Disease Symposium.

#### Promote:

- Registration of a Patented in “Clinical Calls Notifications”.

#### Implement:

- Linked BestCare with NPHISE Platform.



# Corporate Manpower Services Department

## Introduction:

The Manpower Information Center (MIC) is a section of the Corporate Manpower Services Department and it is in charge of maintaining the NGHAs and all its affiliated facilities database inclusive of all organizational units (OU), positions and employees. The functions and responsibilities of the MIC are centralized at a corporate level for controlling and coordinating all manpower transactions covering all NGHAs regions (Central Region, Western Region, Al Ahsa, Dammam & Madinah), to ensure an accurate and accountable database.

The objective of Employee Credentialing & Transfers is to design fit-for-purpose, high-quality credentialing processes that make it easy for MNGHA staff to promote, demotion, and move laterally. Working to provide a process governing the transfer (promotion/demotion/lateral) practice at the MNGHA and all affiliated facilities for full time employees (non-medical and non-academic) Saudi Arabian National Guard (SANG), Direct Hire (SDH) and Program Direct Hire (PDH).

The Compensation and Benefits department has charge of conducting compensation analysis, design, market research, and analysis to establish competitive salary ranges for various job roles in the organization. Creating compensation structures and pay scales that are consistent with the organization's compensation strategy is also included.

Manpower Planning Services is about people (STAFF): How many staff are needed to do what departments expect of them, and how will they be organized, by assisting the departments in supporting the MNGHA mission.



# Corporate Manpower Services Department

## Achievements among MNGHA

### Provide:

- Used the Manpower Gate System to advertise positions, process applications, and finalize the transfer process in a short time, in a smooth, efficient, and transparent way.

### Implement:

- Created a medical dashboard that provides data for higher management.
- Transferred the work from paper-based to an automation system.
- Automated the current MSR transactions and establish clearly outlined policies and procedures for each process (i.e., SCDP, NSDH, etc.), this will increase work efficiency; accurately and effective communications between involved parties & will reduce human errors.
- Enhanced processes with technical knowledge and support, including Manpower Gate and Salary Catalog Automation.

### 2030:

- Enhanced and optimized the Oracle system features in its current version to provide instant detailed and accurate data reports. This will result in faster and more comprehensive decision-making by Higher Management.
- Improved other services provided by Corporate Manpower Services sections by providing technical knowledge and support to improve their current processes, such as Manpower Gate and Salary Catalog Automation.
- The department has leveraged technology to streamline compensation and benefits administration processes. This includes:
  1. Implementing automatized Salary Catalogue for employees to access compensation information.
  2. CB also has automatized the instant pushnotifications of updated job descriptions to ensure departments are notified at once of new updates.



# Clinical Strategy Department

## Introduction:

1. Cultivate creative and forward-thinking solutions aimed at providing exceptional patient care while maintaining the highest clinical and operational standards.
2. Establish MNGHA as a leading organization known for providing outstanding and compassionate healthcare services.
3. Implement a program management office approach to instil ownership and accountability in pro-jects, ensuring optimal care delivery at the right time and place.
4. Ensure the organization's staff, patients, and families are engaged and supported, and encourage active participation in a transformative culture of excellence in healthcare delivery.
5. Promote and celebrate our achievements to enhance our global standing in research, innovation, and education.

## Services Under Clinical Strategy Department:

- Clinical Efficiency
- Strategic Operations
- Healthcare Data Science & Analytics
- Virtual Care
- Integrated Excellence Services Delivery
- Clinical Data Governance
- Artificial Intelligence



## Clinical Strategy Department

### Achievements among MNGHA

#### National awards, recognition, contributions:

- First place in the prestigious Ada'a Health Award 2023 for the Digitally Enabled Care Category for their ground-breaking e-consultation program.
- Third place in Ada'a Health Award 2023 for the Innovation and Creativity Category for iCare Inpatient Program

#### Provide:

- E- Consultation program It has revolutionized the healthcare landscape by facilitating digital consultations and second opinions in the electronic medical record. Patients no longer have to visit multiple specialists because of the e-consultation program's seamless communication between healthcare providers. This saves time and resources, enables timely access to specialized expertise, and leads to better patient outcomes and satisfaction.
- iCare Program The program utilizes real-time surveillance via electronic scoring and a risk stratification system to detect patients at risk of fragmented care on their own. Ensuring timely interventions and seamless coordination and integration throughout the inpatient hospital journey is facilitated. By enhancing consultant-delivery care and significantly decreasing inpatient length of stay, the program's impactful contributions to healthcare excellence were showcased.

#### Implement:

- The iDetect Is a suspected cancer early detection program integrated within BESTCare. The objective of this innovative program is to identify patients with suspected cancer through radiological or laboratory findings and electronically flag them within BESTCare.
- The iDetect pathway is both efficient and effective in managing cancer. Early assessment, referral, and diagnostics can be ensured by the timeline associated with the pathway, allowing for a timely decision. Confirmation of a cancer diagnosis will lead to appropriate access to treatment. Access to cancer care targets will be achieved within 6 weeks.



# Financial Affairs

## Introduction:

Finance Department is responsible for providing accounting and financial services to all departments within the region. The department consists of the following sections:

- **Accounts Payable** - processing of payments to vendors for purchase orders/contracts related to various services and supplies provided for program facilities and activities.
- **Accounts Receivable** - recording and reconciliation of all collections irrespective of any sources and monitoring of outstanding accounts.
- **Treasury** - preparation of cheques, fund and telex transfer payments for submission to Internal Audit for review and audit clearance and transmittal of documents for processed payments through Permanent Advance Accounts to Corporate Billing Services.
- **Financial Services** - processing of payments for utilities, petty cash, recruitment fees, insurance, scholarships, manual payments of employee salaries and other related reimbursable and non-reimbursable expenses.
- **General Ledger** - maintaining a complete audit trail of transactions and financial records ensuring that all financial transactions are accurately recorded in the fiscal books.
- **Budget** - preparation of annual operating budget related to the region, monitoring, and control of budget utilization and expenditures.
- **GOSI** - preparation of Employee/Employer share of GOSI for remittance to GOSI office and reconciliation of remittance to deductions for employees' share of GOSI.

## Achievements among MNGHA Implement:

- Automation of Patient Tickets Requests and Subsidy Payments through MNGHA Website.
- Required automation of SPRs default charge account combination (i-Procurement).
- Required auto link between the date of MRR and Finance Record through Oracle System.
- Automation of Sending Notification to the Vendors of their Un invoiced Receipt.
- Required using B2B System for the replenishment of Petty Cash for hospital custodian through adding their account in the system.





# Healthcare Technology Management

## Introduction:

Healthcare Technology Management (HTM) Division offers technological expertise in planning and evaluating medical technologies for later acquisition, and managing them with cost-effective life-cycle management at MNGHA. The Division plays a crucial role in the provision, and sustainment of quality patient care, medical research and education, starting from planning of required medical technologies, needs assessment and procurement, to installation and commissioning, to service and support, quality performance, risk management, up to replacement and decommissioning. HTM is responsible for the availability, accessibility, affordability, appropriateness, and safe use of MNGHA's medical assets. Optimal utilization of healthcare technologies leads to improved health/clinical outcomes through efficient operational and appropriate management.



# Healthcare Technology Management

## Achievements among MNGHA

### Deliver:

- Efficient in-house management of MNGHA medical assets; 65,270 pieces of healthcare equipment/technologies with an acquisition value of SAR 2,382,566,114 for safe, reliable, and cost-effective usage, ensuring operational condition and continuous availability for patient use, research, education, and other domains of MNGHA's health system.
- HTM service engineers, amidst inadequate staffing in all regions, effectively manage 44,076 medical equipment in service (out of 69,678). The number of full-service contracts is only 890 and 13,133 are still under service warranty, but HTM engineers are the first to respond to service issues. The medical equipment under the on-demand contract, which covers 1,378, is managed in-house because it is only used for spare parts.
- Managed to achieve replacement strategy for all planned obsolesced of healthcare/medical technologies to be replaced by 2023 and obtained the new healthcare/medical technologies, which is planned for expansion in 2023 with approximately cost 200,000,000 SAR, through National Unified Procurement Company "NUPCO".
- Assisted MNGHA Jeddah (KASCH) with the commissioning and acceptance of new equipment worth approximately 253,000,000 SAR.

### Promote:

- The operating ratio for the Three (3) hospitals that included in MNGHA 5 Hospital Projects are:
  1. Women's Hospital, Riyadh- Riyadh has a soft opening with 70% operation ratio.
  2. Neurosciences and Trauma Care Center, Jeddah- has a soft opening with 57% operation ratio for ER and Outpatient clinics the full opening will be on December 2023.
- Installation and configuration of the new MRI in the Medical Imaging Department to increase the capacity of providing patient services.
- CT-SIM installation in the Oncology Department to mimic the patient's position prior to treatment in LINAC.
- Completed an exhaustive inventory of all Omnicell equipment situated in KAMC in order to furnish room numbers to the HTDU Department to improve connectivity with the server and database.
- Completed manufacture-level service training for PET-CT scan machines abroad, MRI machines abroad, X-RAY mobile machines abroad, and RAD source RS 3400s abroad.
- Completed minor repair service training for flexible endoscopes, service training for Prisma Flex (CRRT) abroad and the Occupational Safety and Health Administration Training Course (OSHA).
- Completed the Philips Course (CMS2032, CMS2460, and CMS2024) at Philips Medical Systems Facility in The Netherlands.
- Completed Occupational Safety and Handling Hazardous Materials training in the warehouse.

### Implement:

- Completed the upgrade of the X3 Philips module software to display the hemoglobin value.
- Upgraded the software of all the patient monitors in PCICU2 to be able to acquire four pressure lines.
- Installation of a new Anesthesia Data Management System Hardware and Software (DIAN) to replace the obsolete system (INNOVIAN).
- GO LIVE of new CTG system (ISP) in WHH, Corporate GO LIVE of new POC system (GEMWeb) and GO LIVE of new Patient Monitoring, Ventilator, and CRRT integration in Cardiac Center-CR for BESTCare Cardiac module.
- Corporate GO-LIVE of new integration for post-blood transfusion documentation across all regions.
- Arranged and completed end-user and HTMS staff training for the Diane system.
- Arranged and completed end-user staff training for the ECG machine.



# Infection Prevention & Control Program

## Introduction:

The Infection Prevention and Control Program at the Ministry of National Guard Health Affairs has been Establishment of for 40 years. It functions as a Corporate Program and is responsible for overseeing hospital infection control and epidemiology, community and public health, and environmental health. This year, we Establishment of two new programs: Occupational Health, Safety, and antimicrobial stewardship. Each medical city/hospital has an IP&C department comprising the main three sections. Additionally, a central surveillance unit collects and manages data for the program at a corporate level.

Our strategic goals are Health promotion and a safe environment, Building and improving the workforce and laboratories, Digital transformation and data science, Community engagement and developing innovative applied research.

Our goal is to prevent and control infections and work-related injuries, while promoting patient safety to support the National Guard mission and improve care for MNGHA employees and their families.



# Infection Prevention & Control Program

## Achievements among MNGHA

### Provide:

- Updated the regional (western region) MDRO/CRE isolation management algorithm.
- A total of 10,328 MNGHA eligible employees received occupational health clinical services in the daily occupational health clinic.
- A total of 125 MNGHA eligible patients managed in a weekly infection control public health clinic.
- National Vaccination Registry Services has been provided for the concerned departments in all MNGHA facilities. Through this service, medical vaccinations can be input for individuals for the purpose for unifying an electronic national vaccination registry among all MNGHA facilities.

### Deliver:

- Women Preventive Health clinic.
- Achieved exceptionally low HAI rates:
  1. Zero VAP in adult ICU and NICU in Dammam.
  2. Zero VAP in PICU in Jeddah.
  3. Zero CAUTI in several units in Riyadh.
  4. 75% reduction in CLABSI Madinah compared to 2022.
  5. Zero CLABSI in TICU Riyadh.
  6. Zero CLABSI, VAP, and CAUTI in PICU Al Hasa.

### Promote:

- CLABSI in Hematology-Oncology improvement project.
- CABG improvement project in Cardiac Science.
- Implemented Colon Surgical Site Infection (SSI) improvement project.

### Implement:

- Launched the Isolation system in MNGHA Intranet.
- Updated electronic immunization documentation in the Bestcare.
- Establishment of Point of Care (POCT) testing documentation for HIV and HCV on BESTcare.
- Implemented public health documentation form at Electronic Medical System (BEST Care).
- Immediate reporting of notifiable diseases in HESN-PLUS.
- Go-Live of MNGHA Sanford antimicrobial guide Assist in all regions.
- Implemented Dialysis bundle in BESTCare.
- Preventive Health virtual clinic.

### Awards, recognition and contributions:

#### International:

- Abstract accepted in the 33rd European Congress of Clinical Microbiology & Infectious Diseases (ECCMID), held in Copenhagen, Denmark in Apr 2023.
- Conducted the 5th Saudi International Vaccine Forum Conference in May 2023.
- Conducted 4-days workshop about "Surveillance of Healthcare Associated Infection and Antimicrobial Stewardship Program" in Bahrain in January and July 2023.
- Collaborated with the WHO Antimicrobial Stewardship team in Geneva.
- Assisted the WHO team in developing "Regional Infection Prevention and Control Training Package for 2023".
- Launched special addition "Journal of Infection Control and Public Health"

- Collaboration agreement and action plan with Gulf CDC (Gulf Centre for Disease Prevention and Control).
- Expert roundtables:
- Animal vaccination.
- Unifying GCC immunization schedule.
- One health approach from theory to implementation.
- AMR research agenda.

#### National:

- Data collection and sharing with MOH e.g., reporting of notifiable diseases, registering vaccines in NVR. (Madinah).
- 1ST place winner paper titled "The Impact of Intensive Educational Programs on the rate of Inappropriate Treatment of Asymptomatic Bacteriuria in Acute Care Hospitals in Saudi Arabia" 17th Annual Conference of Saudi Society of Medical Microbiology and Infectious Diseases 28 Feb - 02 Mar, 2023 (Eastern region).
- 1ST place winner paper titled "is procalcitonin a better marker in predicating bacterial infection in sickle cell patients with Vaso-Occlusive crisis KSA ID week 4-6 November 2023 (Eastern region).
- Winter Preparedness and Readiness - Scientific Symposium (Central).
- Conducted 8 workshops in all regions "Vaccine Academy for Nurses".



# Information Technology Department

## Introduction:

In MNGHA, the primary provider of IT services is the Information Technology Department (IT). IT manages IT facilities, IT networks, IT applications, and automates processes in medical services and administrative-business operations across Kingdom. The mission is to work together with the business to utilize information technology to provide health care services that are both efficient, quality, and safe. IT has come up with a strategy that is patient-centric and focuses on strategic core business applications that directly affect patient healthcare expectations. To achieve this vision, IT has updated its strategy, adopted an IT governance transformation management framework, and implemented the balanced scorecard tool for strategic execution and management.



# Information Technology Department

## Achievements among MNGHA

### Provide:

- Enhanced Take home supply system: integration with BestCare system to reduce the processing time for patient Take home requests.

### Deliver:

- Implemented the below KPIs for:
  - Social Service Counselling to measure the financial intervention by MNGHA social service and assist them allocate the necessary resources.
  - Inpatient Discharge Journey to evaluates the inpatient discharge process by measuring the turnaround time between each step of the discharge process in addition to the total turnaround time of the discharge.
  - Infection Control Department Analytics Service: main corporate level KPIs related to PCR and Rapid Antigen Positive and Negative Results.
  - E-Update of Medical File monitoring analytics service to measure E-Update project activities and to support business decision making.
  - Tele-health Utilization analytics service to measure Tele-health project activities and to support business decision making.
  - Antimicrobial Days of Therapy (DOT): implementing the DOT international KPIs that measures the utilization of antimicrobial medications in all MNGHA facilities.
- Build Big Data environment to provide the required HW/SW of advanced analytics environment and data science project
- Implemented the biometric devices for Enterprise Attendance System (EAS) in Dammam.
- Cybersecurity Assessment in All Regions:
  - Cybersecurity Authority (NCA) Controls – Essential Cybersecurity Controls (ECC).
  - Cybersecurity Compliance Program.
  - Monthly Vulnerabilities Assessment.
- Assessment of National Cybersecurity Authority (NCA) Controls at Central Region:
  - Critical Systems Cybersecurity Controls (CSCC).
  - Organizations' Social Media Accounts Cybersecurity Controls (OSMACC).
  - Telework Cybersecurity Controls (TCC).
- Assisted MNGHA Jeddah (Neuro & Trauma Center) with the commissioning and acceptance of new equipment worth approximately 225,000,000 SAR.

### Promote:

- Implemented Satisfaction Survey for (BestCare system, Patients Mobile Application, Cybersecurity Awareness, PACS system, Content and MNGHA Website) Services Kingdom-wide for the year 2023
- Implemented App Dynamics APM project to increase the customer satisfaction by proactively monitoring the mission-critical applications environment in order to identify and mitigate issues before they become major problems.
- Provide DNS security where MNGHA users can safely browse the internet and minimize the access to suspicious URLs/sites from MNGHA network.

### Implement:

- Implemented Chronic Disease Management dashboard to monitor and support patient with a chronic health condition.
- Implemented dashboard to monitor the assets contracts and warranties connected to the ORACLE ERP system in AL Ahsa.
- Launched an Interactive Voice Response (IVR) for patient care to remind the patient of the upcoming medical appointment and medication refill in Dammam.
- Implemented Arabic Text Mining and Auto-classification for Patient Survey
- Improved Allied Health Project and build dashboards (Rehabilitation and Respiratory) Dashboards in Madinah.
- Enhanced MNGHA website by:
  - Added more theme and enhance its performance.
  - Optimized the ranking to be in top of search engines ranked D in GTMatrix tool.
  - Maintained Reader speaker and fix styles of MNGHA site.
- Upgraded Biometric Devices Integrated with Enterprise Attendance System (EAS) – upgrading the software and the framework of biometric devices, this upgrade is useful to register user logs in timely manner and accurate during employees working hours.
- Integrated the Vital Sign in ER with HIS System such that the vital signs data are automatically entered in the system in Dammam.
- Implementation of Cybersecurity Awareness Platform.
- Implement All IT Services to the New Woman's Health Hospital (WHH).
- Integrate with Virtual clinic- Facilitate the process of collecting the information of the patient from the Best Care and book the appointment of Virtual clink during Hajj 2023 in Jeddah.

- Implementation of Short URL & QR Generator system - is a new initiative that aims to support the requests of generating QR to be used or shorten the URL in addition its count the number of visits to the link to measure the usability.
- Implementation of MNGHA Hajj Health Information System (Hajj-HIS) which is a seasonal digital platform designed to use during the Hajj season to provide healthcare providers with real-time data on the health status of patients in Jeddah.
- Implementation of Virtual ER to allow patients with eligibility (1,2,3,4 and 8) to seek medical care from an emergency care provider virtually through smartphone without attending physically in Jeddah.
- Implementation of a direct booking for all Hospital Clinics to allow physician to refer and book an appointment for patient in other clinic directly without waiting for other physician to accept the referral in Riyadh and AL Ahsa.
- Implementation of iDetect project to bolster healthcare quality and patient safety in the Oncology department.
- Enhancement of Operation Room (OR) Journey Tracking via SMS to allow SMS notifications to be sent to registered relatives of OR patients, enabling them to monitor the patient's journey throughout the operating room procedure.
- Implementation of Admission of Insurance Patients - following the integration with the Council of Cooperative Health Insurance (CCHI), introduced a new screen in the billing module. This screen aids the admission office in retrieving a scheduled patient list with insurance details.
- Implementation of Expired patient – aims to remove all pending orders (medication, surgery, appointments, lab, and radiology orders) once the patient discharged as expired (Dead). And for patients who expired outside the hospital through National Information Center (NIC) to detected and confirm the expiration.
- Implementation of the Infant protection system to cover the Intensive Care Nursery (ICN) area at the hospital in Madinah.



# Information Technology Department

## Achievements among MNGHA

### Awards, recognition and contributions:

#### National:

- Achieved Ada`a Health Award 2022 for the Digital Enabled Care Category , in Applied MNGHA Virtual Emergency Program at KAMC.
- Integration with Wasfati Platform and mapping the outpatient prescription such as drug code, dosage units, frequency and other criteria directly from Wasfati platform.

#### International:

- HIMSS Renewal Electronic Medical Record Adoption Model (EMRAM) stage 7 with new requirements in Riyadh.
- MNGHA recognition at HIMSS Conference “Health that Connects and Technology that Cares” held on 7-9 June 2023.

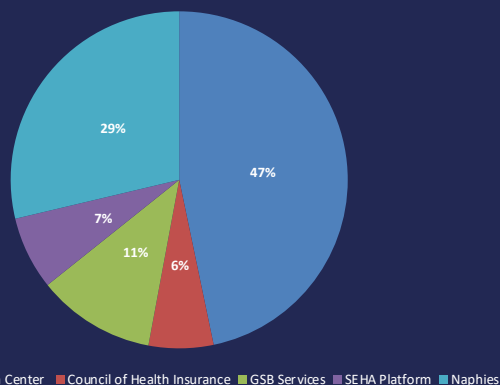
### 2030 Vision:

- Integration with Nafath to enhance the services of Patient Portal application login function.
- Implemented EXPRO IT-Requirements for Expenditure & Projects Efficiency Authority for the year 2023.
- Developed the IT strategic plan for Digital Transformation for 2024-2026 aligned with MNGHA strategy. (NOTE: mostly it will be completed by end of this year Dec. 23).
- Integration with Saudi Pharmacoepidemiology and Drug Safety Database to build the national database of pharmacoepidemiology and drug safety for all hospitals across the kingdom.
- Integration with SDAIA AI (Program of Excellence in Artificial Intelligence) project for Cardiac and Stroke.
- Integration with Council of Health Insurance portal and Ministry of Finance portal (Tahseel) to enhance the MNGHA Business Billing system, ERP and Best Care.
- Deployed International Classification of Diseases (ICD-10.5) to record patient diagnoses, operation name, and diseases in BESTCare in Riyadh and AL Ahsa.
- Integration with National Platform for Healthcare Information Exchange Services (NPHIES) Platform for the health insurance exchange system.

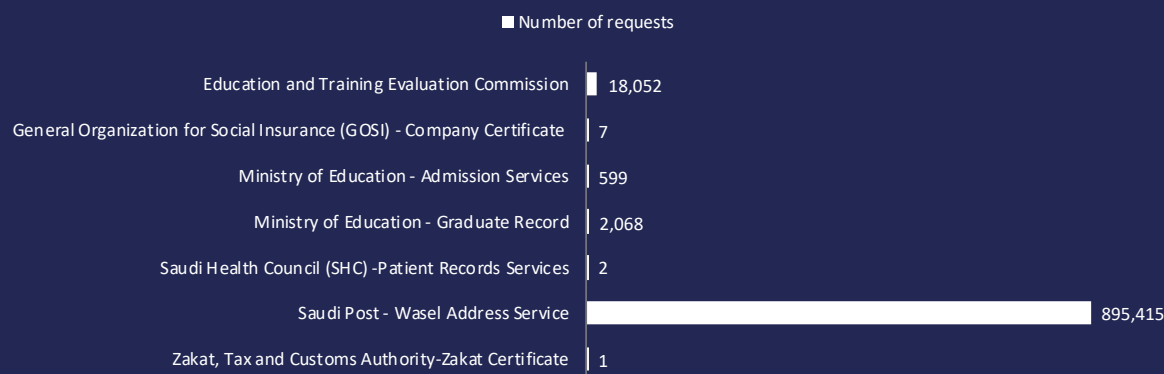


# Annual Report for Governmental Services Integrated with MNGHA for 2023:

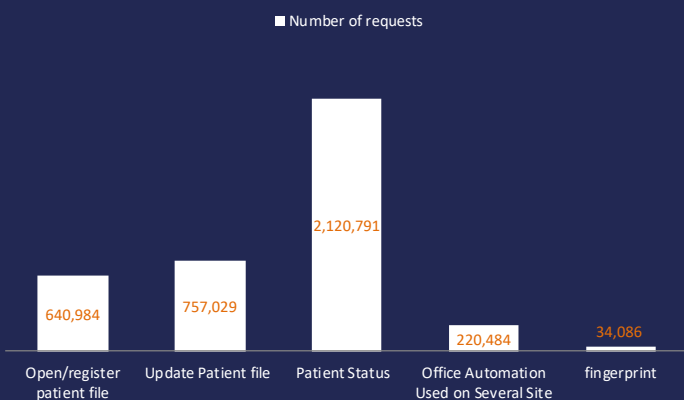
## Overall Highly utilizes services



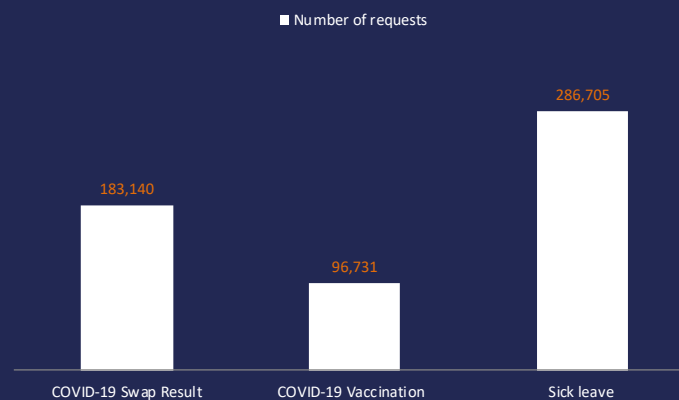
## Highly Utilized services for Government Service Bus (GSB) Statistics for 2023:



## Most Highly Utilized National Information Center Services Statistics for 2023



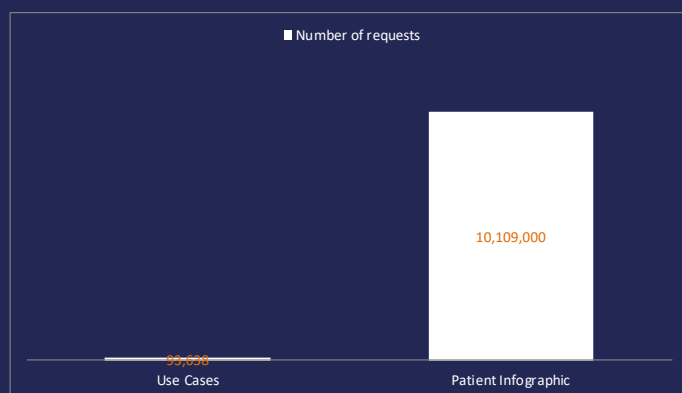
## Most Highly Utilized Ministry of Health integration and Council of Cooperative Health Insurance Services Statistics for 2023



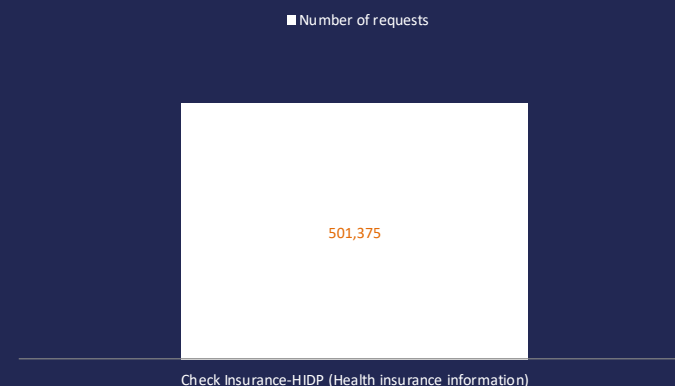


# Annual Report for Governmental Services Integrated with MNGHA for 2023:

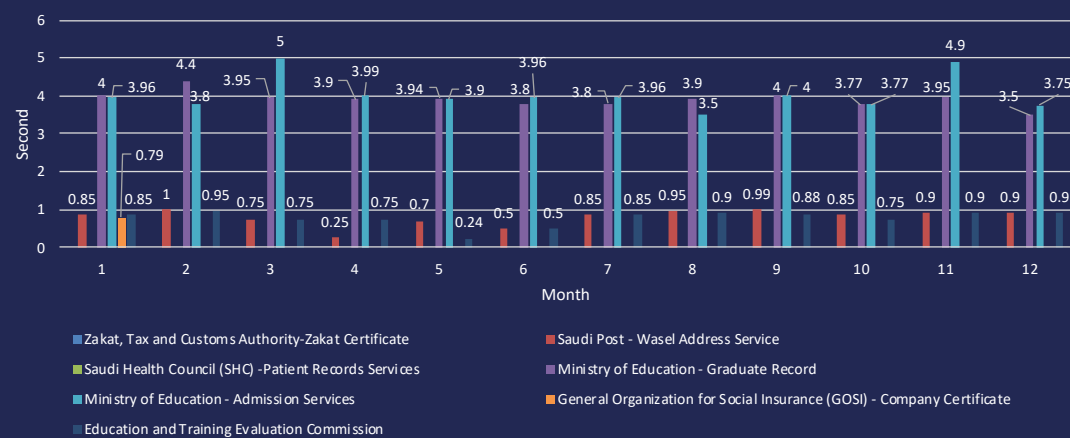
Most Highly Utilized Nphies Services Statistics for 2023



Most Highly Utilized Council of Cooperative Health Insurance Services Statistics for 2023



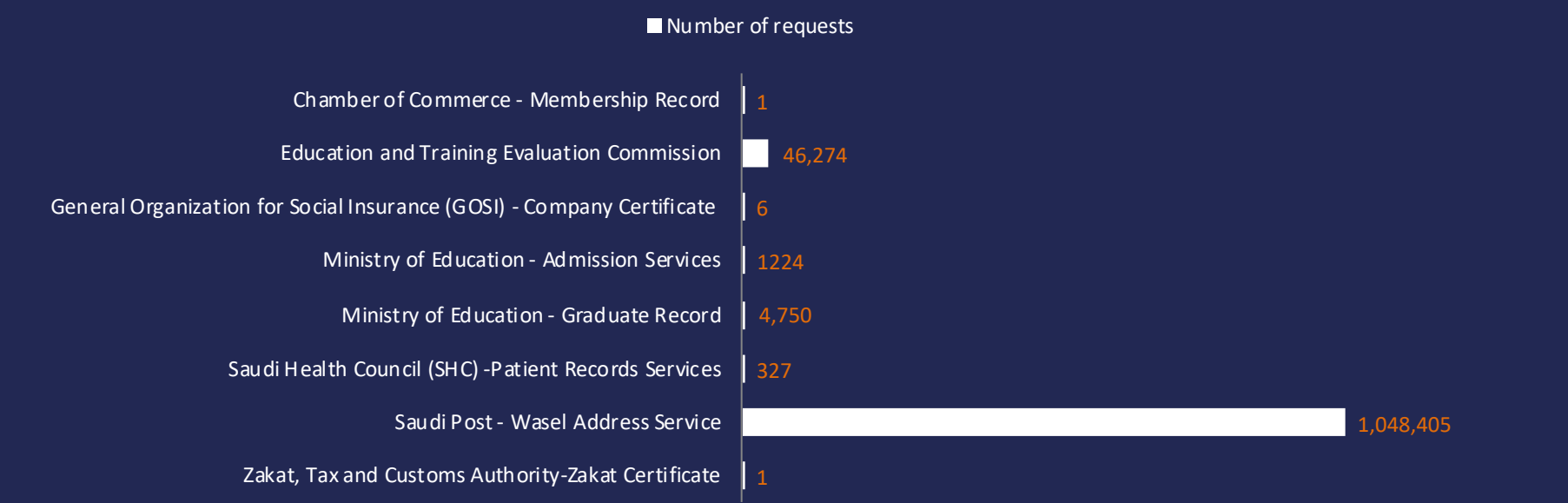
Average Response Time Statistics for 2023:



# Government Services Bus (GSB) Services Utilization Report, since launching of the service:



## Government Services Bus (GSB) Services Utilization Report, since launching of the service: Highly Utilized Services Statistics:

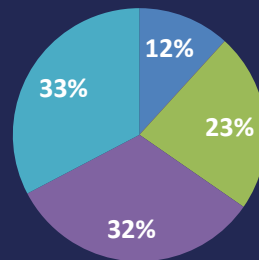


# Government Services Bus (GSB) Services Utilization Report, since launching of the service:

## Over all services User's satisfaction Survey:

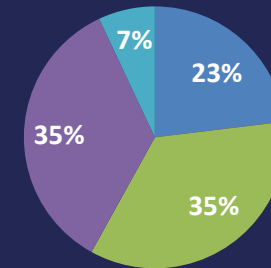
Please rate your satisfaction with the overall functionality of the services on a scale of 1 to 5.

1 2 3 4 5



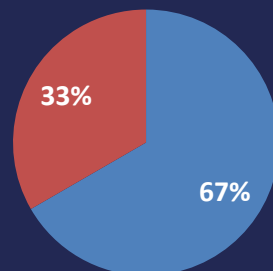
How would you describe the ease of using the features and functionalities of the services?

Difficult Somewhat Difficult Neutral Somewhat Easy Easy



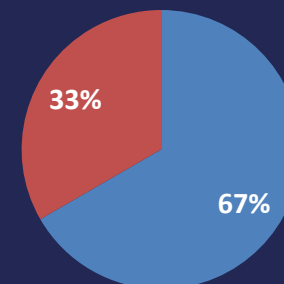
Have you encountered any technical challenges or issues during your utilization of the services?

Yes No



Have the services been delivered in a timely manner?

Yes No

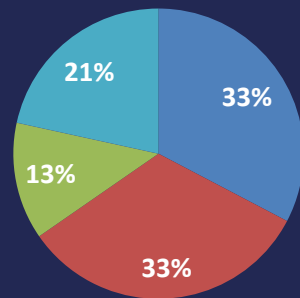


# Government Services Bus (GSB) Services Utilization Report, since launching of the service:

## Over all services User's satisfaction Survey:

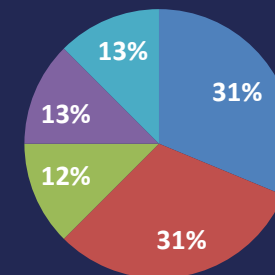
How would you rate the accessibility of the electronic services?

Very Good Good Fair Poor Very Poor



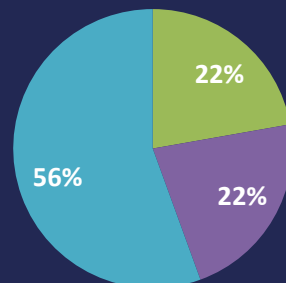
How would you rate the reliability and responsiveness of the electronic services over the past year?

Very Good Good Fair Poor Very Poor



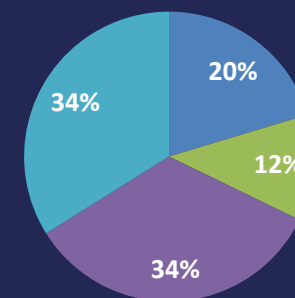
How would you rate the impact of electronic services on enhancing your access to information, with 1 being minimal and 5 being significant?

1 2 3 4 5



Rate the level of convenience you experience using the electronic services on a scale of 1 to 5

1 2 3 4 5



## Services Level Agreement (SLA)

### Achievements among MNGHA

#### Introduction:

A service-level agreement (SLA) sets the expectations of both the service provider and the customer. It provides details about the product or service to be delivered, the single point of contact for user problems, and metrics for measuring process effectiveness.

#### Deliver:

- The importance of services and impact is classified to determine the priority of the communication through the following information:

| Number | Service importance levels | Definition  | Properties   |
|--------|---------------------------|---|--|
| 1      | Very critical             | The service of great importance in sending the results of the client's business, the lack of which can quickly affect many users.                                       | The continuity of availability of critical services must be maintained; To ensure the implementation of the business, therefore, the unavailability of services must be considered catastrophic to the progress of the business (unless the parties agree otherwise) |
| 2      | Critical                  | The service of great importance in sending the results of the client's business, the lack of which could lead to a negative or harmful impact on the client's business. | Continuity of availability of critical services must be maintained to ensure service delivery  |
| 3      | Important                 | Support services necessary to operate the service, the lack of which results in a significant impact on the customer's business flow.                                   | This service is required and necessary for the basic functioning of the business, and unavailability levels are accepted as long as they are within the scope of the agreed availability targets, and are not considered catastrophic.                               |
| 4      | Normal                    | Support services necessary to operate the service, the unavailability of this service may not have a significant impact on the customer's business flow.                | The unavailability of these services does not affect the course of the main business, and more may be accepted in other types of services.   |

- The impact of the reported issue as follows:

| Number | Impact     | Definition  |
|--------|------------|---|
| 1      | Wide Range | In case it affects the entire service.  |
| 2      | Big        | If multiple sites containing essential resources are affected, including that location and the users. |
| 3      | Local      | If it affects one site or affects multiple users.   |
| 4      | Individual | If it affects a single user.  |



## Services Level Agreement (SLA)

Achievements among MNGHA

Deliver:

The priority definition table for communications is as follows:

| Impact / Importance level | Wide Range | Big | Local | Individual |
|---------------------------|------------|-----|-------|------------|
| Very critical             | P1         | P1  | P2    | P2         |
| Critical                  | P1         | P2  | P2    | P3         |
| Important                 | P2         | P2  | P3    | P3         |
| Normal                    | P2         | P3  | P3    | P4         |

- Target period for responding and resolving the complaint:

| Priority Degree | Targeted response time | Targeted percentage of the response time out of the total number of communications | Targeted period for restoring the service | Target percentage of the service recovery period out of the total number of communications |
|-----------------|------------------------|--|---|--|
| Priority 1 (P1) | 30 minute              | 90%  | 12 Hours                                  | 95%  |
| Priority 2 (P2) | 40 minute              | 90%  | 2 Days                                    | 95%  |
| Priority 3 (P3) | minute 60              | 90%  | 3 Days                                    | 95%  |
| Priority 4 (P4) | minute 120             | 90%  | 5 Days                                    | 95%  |



# Internal Audit

## Introduction:

The role of Internal Audit (IA) is to provide an independent and objective assurance and consulting activity that is guided by philosophy of adding value to improve the operation of the Program. IA assists Higher Management in accomplishing its mission and achieving its objectives by bringing systematic and disciplined approach to evaluate and improve the effectiveness of the Program's governance, risk management and internal control.

The nature of services performed by Internal Audit as mandated by Higher Management are as follow:

- **Assurance Services** are objective examination of evidence for providing independent assessment of governance, risk management and control processes for the Program. Currently, Internal Audit is conducting Financial, Compliance, and Operational & Inventory Control.
- **Consulting Services** the nature and scope of which are agreed with Higher Management or requested by them which are intended to add value and improve the Program's governance, risk management, and control processes without the Internal Auditor assuming management responsibilities, e.g., reviews, recommendation, facilitation, etc.

## Achievements among MNGHA

### Promote:

- Conducted 121 assurance services (financial audit, compliance audit, operational audit and inventory control) throughout various audit areas across the Programs.
- Provided 319 consultancy / advisory services to Higher Management and other concerned departments.
- 3,667 sites were inspected across the regions during Fiscal Year 2023.
- 7,857 operational processes were verified during Fiscal Year 2023, which includes patient eligibility, acceptance of new patients, patient single room, readiness of ambulance report, etc.
- 22,592 inventory line items were verified; randomly counted (cycle), scrap report checked, etc. by Inventory Control.
- 1,863 packages were reviewed and verified in relation to Local / International Hire / Re-Hire PQD packages and other HR related process.



# Logistics and Contracts Management

## Introduction:

Logistics & Contracts Management is a part of the Corporate Divisions in the Ministry of National Guard Health Affairs. The division is composed of various departments from all regions that play a vital role in providing MNGHA and all its facilities with the required equipment, devices, supplies, medications, and services of high quality and competitive value in the most efficient and timely manner in accordance with government procurement rules and regulations and international standards. To meet patient demands, LCM evaluates, matches, and maintains thousands of product profiles.





# Logistics and Contracts Management

## Achievements among MNGHA

### Achieve:

- Distribution including proper tracking of assets to all departments.
- Generate Oracle Number/ stock item as requested by the Military Field Medicine that will enhance the request and the availability of medical items for the Military.
- Generate new Oracle Number/ stock item in the Master Catalogue – 1,192 items.

### Provide:

- Delivery of Home Health Care supplies to patients.
- Developed KPIs to monitor and control the workflow on continuous basis such as forecasting accuracy, stock item levels, processing time, and other critical indicators.

### Promote:

- Return and proper storage of all equipment that had been utilized for two years in the COVID-19 Center.
- Developed Pharmaceutical Expenditure Report to aid the organization in analysing medication expenditures and patient data.
- Implemented the use of Intelligent Electronics Locking device to seal the shipments and monitor the delivery truck's door status and keep security of shipment until it reaches the receiving regions.

### Implement:

- Utilized barcode devices in conducting an inventory of laptops for more efficiency and organization.
- Automation of Request for Item Attributes Change & forms and tracking systems for smooth processing.
- Completed the Intellinum Project, which is prerequisite for RASD project.
- New sub inventory for recall and to hold/freeze the items recall immediately have been added in the Oracle System.
- Take Home Supply Integration with BestCare (HIS) adding the Patient orders to the Mobile App and SMS to the patient when the order is ready for collection.

### 2030 Vision Objectives:

- Wasfaty.
- Local Content Development has led to several tenders revised in compliance.
- Cost-effective initiative resulted in significant value of Free of Charge (FOC) medications.

### National:

- Several published posters at international conferences such as: ISPOR 2023 in US (Boston), ISPOR 2023 Denmark (Copenhagen), KAIMRC Research Day, SISY 2023 (Serbia).
- Team members participated as speakers in several national and international conferences and congresses such as International Pharmacoeconomic Forum, Gulf Health Insurance Conference (Dubai), GCC Pharmacy Congress, the 5th Greater Gulf of Type 2 Inflammation Summit, Health Economic Forum (Cairo), 3rd SSCP Annual international conference (7-9 September 2023).



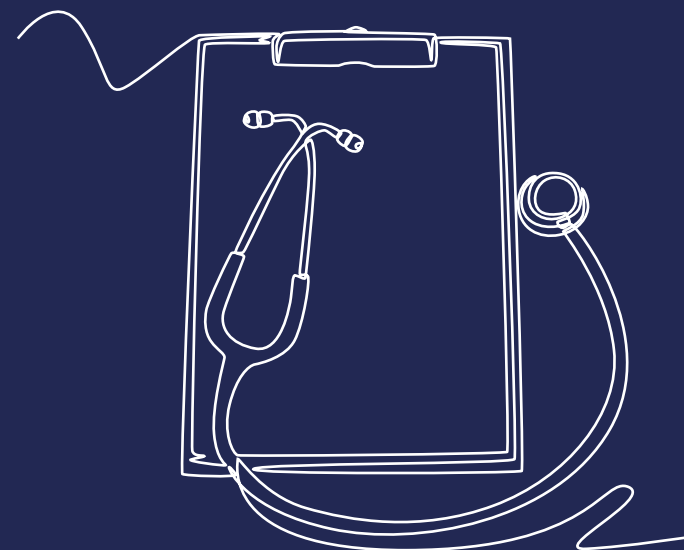
# Medical Protocol

## Introduction:

In 2005, the Health Affairs Council has approved the concept of establishing Medical Protocol Department (MPD) in order to provide comprehensive medical care, and to ensure that all Protocol Offices in Riyadh, Jeddah, Dammam, Al Ahsa and Madinah provides high quality care in an effective, efficient, systematic and well-organized manner. The department function is to organize the clinical performance of inpatient, outpatient and follow-up protocol clients, as well as to provide and promote continuity of care for clients at home, to and from the hospital, nursing home, or extended care facility.

The department provides 24-hour coverage to address patients' concerns and queries. Nursing Services is the administrative reporting department for nursing personnel working in outpatient/inpatient departments, but they also report to this department on a daily basis.

Aside from King Abdulaziz Medical City (KAMC), Medical Protocol Department also cater clients from King Abdullah Specialized Children Hospital (KASCH) and Women's Health Specialist Hospital (WHH).



# Medical Protocol

## Achievements among MNGHA

### Emphasize:

- 100% compliance rate in NDNQI staff satisfaction survey.
- Active involvement in flu vaccine campaign.
- 3 PCT's passed Nursing Exams.

### Provide:

- Protocol Short Stay Visits – Total 117.
- Patient Experience Award 2023 – Best Ward in KAMC Central – Protocol Ward 16C.
- Re-certification on updated competencies completed 100%.

### Deliver:

- Three (3) clinics operating on weekly basis under Family Medicine for both female and male MPD patients this year 2023, previously only two clinics. Due to increase of patients, additional clinic was added.

### Promote:

- Two training programs (staff body language and NAFEEES) for the MPD officer to improve the highest quality services.
- New wheelchair to escort the needed MPD clients.

### Implement:

- Direct line to MPD clients for appointments requests, and refill medication requests.
- New features on the best care for MPD nursing staff.
- Apply new device for pharmacy to implement the medication dispensing services.
- QR Code Instruction for Specimen collection for Outpatient.

### KPIs for 2023:

- HAPI incident rate = 0.
- In-patient fall rate per = 3 fall incident, 1st quarter.
- Outpatient fall rate = 0.
- Medication administration error rate = 0.
- Drug library = 100%.
- CLMA = 99%.
- CLSC = 99%
- Pain Prevalence = 100%.

### Objectives Vision 2030:

- Patients use the application to facilitate their service (Refill – Reports).
- Booking, cancelling and arranging appointments by calling and direct number.
- Using the Virtual Clinics clinic when the patient is not required to attend.



# National Antivenom and Vaccine Production Center

## Introduction:

The National Antivenom and Vaccine Production Center (NAVPC) is considered the first and only center within the Gulf Region, which produces specialized and effective antivenom with the utilization of local poisonous snake and scorpion venoms.

NAVPC, being a producer of very potent antivenom against the venoms of local poisonous snakes and scorpions, has an ultra-modern plant for plasma processing and ampoule filling, which was built in accordance with the European Standards of Good Manufacturing Practice (GMP).

The Center has the capacity to supply all snake and scorpion antivenom requirements of the Kingdom and the Gulf States. It also has the potential of supplying neighboring countries with specialized antivenom if the demand arises.



# National Antivenom and Vaccine Production Center

## Achievements among MNGHA

### Provide:

- The number of sixteen (16) horses were introduced into production lines to increase the collected plasma.

### Deliver:

- The Center's Veterinarian Services Section has been successful in establishing its horse-breeding program, in which additional seven (7) horses were reproduced in our horse stable, thereby, minimizing the Center's procurement cost.
- A comprehensive study was performed for the production of new products using the existing filling line.
- A study was performed for the expansion of NAVPC Facility to include a new factory with new production lines in order to manufacture other forms of injectable products such as vials and prefilled syringes.

### Promote:

- Completed staff training for the introduction of new electrophoresis method.
- Procured new APIs and excipients for the new products development.
- A project was initiated to fabricate tools for the existing filling line to be able to manufacture new products (i.e., Change parts of 2 ml, 3 ml and 5 ml ampoules).
- A project was performed to isolate or enclose the ceilings of NAVPC Factory and Administration Building in order to control any hazards that might occur and to comply with international Good Manufacturing Practices (GMP).

|  | Scorpion | Snake  |
|--|----------|--------|
| <b>Total No. of Antivenom produced in ampoules</b> | 287,308  | 64,991 |
| <b>Total No. of Antivenom sold in ampoules</b>     | 300,820  | 74,720 |
| <b>Export Quantity</b>                             | 3,470    | 8,730  |
| <b>Total No. of Catching Trips</b>                 | 43       | 5      |
| <b>Total No. of Collections</b>                    | 3,077    | 123    |
| <b>Number of horses acquired</b>                   | 13       |        |



# National Family Safety Program

## Introduction:

The National Family Safety Program has been Establishment of based on Royal Order No. 11471 /B issued on 16 Shawal 1426 H. November 18, 2005 as a national program aimed at protecting the family from violence and administratively linked to the Ministry of National Guard Health Affairs.

## Program Objectives:

- Saudi Arabia's humanitarian role can be enhanced by participating in the preparation of regulations and policies to prevent domestic violence.
- To enhance partnerships and solidarity with all government sectors, NGOs, and charitable organizations in order to overcome obstacles and duplication in objectives and performance.
- To assist in research and studies while offering knowledge and databases related to domestic violence.
- To equip staff members in all sectors with the skills to effectively handle domestic violence cases.
- The goal is to educate individuals and organizations about the long-term negative consequences of domestic violence.
- To enhance the quality of services given to domestic violence victims and create prevention and rehabilitation programs.
- To contribute to the preparation of future national strategies and plans that address domestic violence issues.



# National Family Safety Program

## Achievements among MNGHA

### Emphasize:

- Women's Help Line Project "199022":
- The National Family Safety Program, has broadcast soft opening of the Women's help line, dated 24 May 2023 under His Royal Highness Prince Abdullah bin Bandar bin Abdul-Aziz, MNG The mission of the women's helpline is to improve the quality of women's lives and enhance their role and status in society.
- Nevertheless, the National Family Safety Program has worked to develop the skills and competencies of the counselors in charge and refine their expertise through intensive workshops and specialized lectures and trainings, in cooperation with multiple agencies and entities either local or international institutions. The Ministry of Justice, the Ministry of Human Resources, Social Development, and the Human Rights Commission are all examples. As a result, the women's Help line had been activated early in the second quarter of 2023.

### Deliver:

- The NFSP has deliver and published number of scientific studies as listed:
  1. Scientific Studies and data collection:

The program cooperated with a number of local and international institutions in conducting scientific studies and collecting data on domestic violence and child abuse, the most important of which are the following:

    - A research project in cooperation with the Department of Geriatrics at King Abdul-Aziz Medical City entitled "Determining Patterns and Types of Violence Against Elderly in Kingdom of Saudi Arabia"
    - Research project in collaboration with the World Health Organization (WHO) entitled "Impact of COVID-19 Pandemic on Child Protection Services in Gulf Council Cooperation (GCC) Countries"
    - A research project in cooperation with King Saud University for Health Sciences entitled "Characteristics and Outcomes of Non-accidental Visceral Injuries among Children: 5 Years' Experience of National Data in Saudi Arabia".

- A research project in collaboration with The World Health Organization "WHO" entitled "Trends in Media Reporting of Violence against Children in the Who Eastern Mediterranean Region in the Context of Covid-19".
- Research project in collaboration with the Department of Population Health at the King Abdullah International Research Center entitled "Trends and Changes in Childhood Problems in Saudi Arabia; A national Child Helpline Ten Years' Experiences".
- Research project in collaboration with the Department of Population Health at the King Abdullah International Research Center entitled "Prevalence and risk factors of abuse against people with disabilities in Saudi Arabia".

The published scientific studies in refereed scientific journals, which are as follows:

- The summary of a scientific paper in cooperation with Princess Nourah bint Abdulrahman University entitled: Nurses and doctors visualize appropriate interventions towards spousal partner violence in Saudi Arabia in a journal "healthcare"
- Publication of a scientific paper entitled: The relationship between video games and aggressive behavior in Saudi youth: an empirical study, in a journal "behavioral science"
- Published a scientific paper in cooperation with the King Abdullah International Research Center entitled: Study of the campaign for the safety of children in vehicles "Chair First" in a journal "healthcare".

### Promote:

- Aman Youth Project:

The Amman Youth Project is one of the vital and effective projects where the National Family Safety Program since the establishment of this project has focused on the role of youth and their ability to create and bring about positive change in values that influence health and well-being of society.

The program coordinated with a number of public and private universities regarding the conclusion of memorandums of understanding on the activation of the Aman Youth Project for university students, the most important of which are the followings:

- King Saud Bin Abdul-Aziz University of Health Sciences.
- Imam Muhammad Ibn Saud Islamic University.
- Princess Norah Bent Abdul Rahman University.
- Sulaiman Al-Rajhi University & Jazan University.

- Women's Support and Development Project "Amal story":

The program achieved the geographical expansion of the Women's Support and Development Program during 2023. The program was able to conclude agreements with a large number of charities from different cities of the Kingdom, which contributed to the implementation of this rehabilitation program in Riyadh, Hail, Jeddah, Al-Jawf and Rabigh. Over the past year, the program has targeted Asir, Jizan, Qassim, Tabuk, Arar, Mecca, Medina, and Dammam.

- The most important training efforts of 2023:
  1. Holding the second scientific club of Saudi Forensic society.
  2. Seminar entitled (Training for women helpline) in cooperation with the Ministry of Justice.
  3. Workshop "Preparing Girls/Women for Marriage life".
  4. Training forum "Call center guidelines for Women helplines".
  5. Training course "post-traumatic stress disorder" & "For charities participating in the Hope Story Project".

- The Higher Diploma Program in Family Safety:

The Higher Diploma Program formed in Family Safety Program, which has accredited in cooperation with King Saud bin Abdul-Aziz University for Health Sciences. Beside to that, NFSP first honor produced and implement this type of diplomas in whole KSA regions. It aims to protect the family and its members from violence in all dimensions, and to perform the well-being projects and programs in a quality-of-life concept.

### International:

- NFSP participation at the introductory session for delegations participating in the Gulf States dialogue on Child Welfare Policies, held in Abu Dhabi to review the Kingdom's efforts to protect children and organize efforts to enhance their rights of care.



# National Family Safety Program

## Achievements among MNGHA

### National:

- NFSP contributions at “A safe family symposium, titled “Cohesion, Protection and Empowerment,” was held under her Royal Highness Princess Sarah bint Musaed bin Abdulaziz.
- NFSP participated in the symposium that was held in Al-Riyadh newspaper entitled ‘Exploring Childhood on Social Media Platforms’.
- A – Shield honor – and thanks of appreciation for the success of partnership with Maeen Association for the rehabilitation of juveniles and those at risk of delinquency regarding of “Amal Story Project” activation.

### Local contributions and agreements with entities, universities and societies to boost the services in NFSP:

1. Safe Childhood Association.
2. Yosr Association for Family Development.
3. University of Jeddah.
4. Dharmaa society Association.
5. Mouwasat Association for Social Services.
6. Family Development Association in the Northern Border Region.
7. Weaam Association.
8. Almowaddah society for Family Development.
9. Al Nahadah Society Association.
10. Twad Assocaition for Family Development in Al-Jouf.
11. Dorrah Society Association.
12. Women’s Charitable Association in Al-Jubial Industrial City (Wahaj)
13. Maeen Association for the rehabilitation. (Maeen)
14. AGFUND
15. AL-Driyadh Association.





# Quality and Patient Safety

## Introduction:

Quality Improvement & Patient Safety department: working at the corporate level to disseminate knowledge in health care quality and build capacity to improve safe and high-quality care provided to patients by supporting all hospital's departments in continuously improving and measuring the state of quality, proactively seeking latent causes of harm, and mitigate risk by implementing evidence-based practices and ensuring regulatory compliance.

**Patient experience program:** A comprehensive system program that aims to enhance the patient experience and promote patient-centered care and a healing environment. The Patient Experience Program was developed to aid in the re-positioning of Ministry of National Guard Health Affairs (MNGHA) services in accordance with the Saudi Vision 2030. The patient experience encompasses the range of interactions that patients have with the healthcare system, including their care from health plans, and from doctors, nurses, and staff in hospitals, physician practices, and other healthcare facilities. As an integral component of healthcare quality, patient experience includes several aspects of healthcare delivery that patients value highly when they seek and receive care, such as getting timely appointments, easy access to information, and good communication with healthcare providers.

**Staff experience department:** a program structured and dedicated to supporting the best environment for all MNGHA staff.

**Benchmark unit:** measurement unit that is used to evaluate and compare the performance of different services, devices, or processes to identify areas for improvement and set goals for future development.



# Quality and Patient Safety

## Achievements among MNGHA

### Provide:

- Created clinical pathways for the top common diseases in collaboration between ED and subspecialties.
- Introduced post-ED discharge care coordination project.
- Achieved improvement in timing of door to ECG within 10 minutes in ED.
- Achieved improvement in performing surgeries within 8 weeks.
- Improved IABFH No-Show Rate in Out Patient Department.
- Introduced the ED Choose Wisely project to cut cost & and waste in the ED 48 Hours to primary care.
- Reduced the rate of inappropriate red cell transfusion in obstetric patients with anemia due to iron/B12 deficiency.
- Activation of SEMT (Serious Event Management Team).
- Establishment of Stroke Pathway for Emergency and Inpatient.
- Establishment of Pulmonary Embolism Response Team.
- Achieved zero Preventable harm to patients.
- Massive decrease in the number of acquired pressure ulcer in the hospital.
- Decreased rate of Return to ED as critical
- Reduced the Unnecessary Repeated X-ray in Medical Imaging

### Deliver:

- Establishment of of urgent care clinic in ED and medication delivery clinic.
- Early mobility program for ICU patients.
- Establishment of a Medication Counseling Program for Dialysis Patients.
- Establishment of Venous Thromboembolism (VTE) Prevention protocol/ Guideline.
- Early Recovery after Surgery for Colorectal surgeries.
- Proactively identify problem prone processes.
- Launched a new RL-DATIX Safety Reporting System (SRS).
- Establishment of CPG for Perm Cath Exchange Management.

### Promote:

- New Born Screening Program, Diabetic Foot Management Program and Medication Safety Program.
- On-boarding program for new employee.
- Establishment of Staff Experience Department and Outpatient Department.
- Establishment of (DART) difficult airway program
- E tracking of M&M recommendations through the DCIQ system.
- Establishment of Chronic Kidney Disease Improvement Project.
- Developed a comprehensive obesity program and a Diabetic mellitus program in PHC.
- Hospital training for the new DCIQ system.
- Launched SIESTA Time initiative in Paediatrics units.
- Implemented Surgical Site Infection (SSI) Prevention through Patient Engagement.
- Enhanced Discharge notes for outpatients in best care system.
- GREAT Program in ADCU, Nursing & WHH.

### Implement:

- Built capacity through end-user training on the new SRS and M&M systems, and training new SRS liaisons across MNGHA.
- Activated Profiled automated dispensing cabinet (ADC) in ER.
- Launched new safety reporting system.
- Released Narcotics in the OR through the ADC anesthesia workstation.
- Implemented Zayarati video-calling application in ICU to enhance patient experience (My Visit app).
- Launched Medication Safety Alerts for any medication safety concerns.
- Implemented IV Auto-Programming of Infusion Pump in ICU.
- Reduced human error while reporting critical laboratory values using automation (TAKEED Program OPD & Inpatient).
- Implemented Electronic MRP engagement in consultation for Inpatients
- CLMA -Closed Loop Medication Administration
- Creation of the Consultation Trigger Dashboard.
- National Surgical Quality Improvement Program (NSQIP) and National Database of Nursing Quality Indicators (NDNQI).

### Awards, recognition and contributions:

#### National:

- Annual Patient Safety Day & Annual Patient Safety Award.
- Patient Experience Recognition Day for MNGHA caregivers- Patient compliment.

### 2030 Vision Objectives:

- Zero harm – creation of Stroke Pathway for Emergency and Inpatients, creation of Safe Tracheostomy Care Guidelines, establishment of a Pulmonary Embolism Response Team, decreasing rate of Return to ED within 72h as critical/death
- Digitalization and Innovation - New SRS system, integration of M&M reviews and patient complaints with the SRS, dashboard for KPIs, Handover process in BestCare
- Patient Experience and Satisfaction – Patient Flow Audit in ER, Patient Experience Surveys.



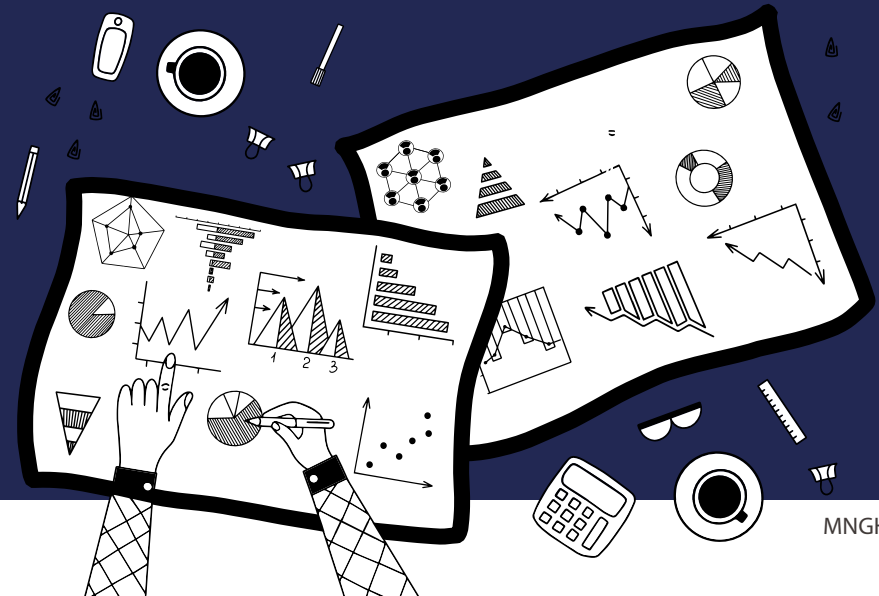
# Project Management Office

## Introduction:

Project Management Department is responsible to provide a professional service to supervise, control, manage the execution and delivery of Projects such as construction, development of infrastructure. As well as services including renovation works by utilizing the services of specialized project managers, engineers, quantity surveyors to ensure that all works are completed in accordance with project contract documents, drawings, specifications, standards, costs and time schedule.

The project management office is committed to finishing these projects on time and within the budget allocated. We commission all new projects at the Ministry of National Guard Health Affairs by coordinating with the relevant departments of MNGHA and external entities. Identify the requirements of the end users and ensure that they are reflected in the projects from the early stages of the design phase to meet their needs. We manage the processing of new projects from project initiation through execution until delivery of Projects, and also receive new project proposals from other departments in KAH and process it accordingly with concerned departments as per policies and procedures.

Furthermore, Project Management Office prepares designs for various projects such as infrastructure projects, housing projects and medical projects in accordance with the Saudi Building Code and the latest international engineering standards. In addition to providing technical support to any of the Health Affairs departments.



## Project Management Office

### Achievements among MNGHA

#### Deliver:

- New Multi- Story Car Parking in Riyadh & Al-Ahsa.
- Long Term Care Center in Riyadh (400 Beds).
- New Echo Lab at Cardiac Building in Riyadh.
- Primary Healthcare New Latest Design for All Regions.
- Rain drainage, water and thermal insulation project for the main hospital's roof at King Abdulaziz Medical City in Riyadh.
- Expanded the dialysis wing at King Abdulaziz Hospital in Al-Ahsa.
- Toxicology building at KAMC-WR.

#### Promote:

- Designed New Warehouses for All Regions.
- Construction of medical warehouse at King Abdulaziz Hospital in Al-Ahsa and Jeddah.
- Accomplished and commissioned Data Center in King Abdulaziz Medical City –Jeddah.
- Accomplished and commissioned Staff Housing Complex Phase 3 in King Abdulaziz Medical City Jeddah & Staff Housing Phase 1 in Al-Ahsa.

#### Implement:

- Supply for our Healthcare Facility by construction of New 4 Substation with high capacity for Riyadh, Jeddah, Qassim & Taif.

#### Awards, recognition and contributions:

##### International:

- Honorable mention, Modern healthcare Design Award (KASCH - Jeddah).
- Lead Certificate for New Hospital:
  1. (KASCH - Jeddah).
  2. (Neuroscience & Trauma – Jeddah).
  3. (Women Health hospital – Riyadh).



# King Abdullah International Research Center (KAIMRC)

## Introduction:

The aim of King Abdullah International Medical Research Centre's (KAIMRC) is to turn lab findings into products that improve the quality of life and train skilled researchers in the healthcare field. KAIMRC is a young and thriving organization that has achieved immeasurable success in a short period. Translational research is our approach at KAIMRC to facilitate the advancement of biomedical and clinical research and knowledge into practical solutions. The loyalty of KAIMRC employees and researchers to the organization's values is a key factor in our success. Ethics, transparency, teamwork, and quality performance are the values that our entire organization demonstrates and are key to our success. Through international collaborations, partnerships, and quality project expansions, we are striving to achieve excellence and higher standards.

KAIMRC operates in three regions of Saudi Arabia: Central (Riyadh), Eastern (Al Ahsa and Dammam) and Western (Jeddah and Medina). The Saudi Biobank, the Cord Blood Bank, and the Research Trauma Project are just some of the core research projects that our research centre is known for. These projects are leading to incredible advances in Saudi Arabia's most common diseases, including diabetes, cardiovascular diseases, cancer, trauma, obesity, and hypertension.

The KAIMRC complex is well-equipped with leading-edge research platforms and laboratories, resulting in a high-quality scientific atmosphere. These innovative laboratories include animal laboratories and testing rooms, DNA and stem cell cord banks, and radiology rooms. King Abdullah International Medical Research Center will continue to be a leading international health science research institution that administers and executes biomedical research programs in order to understand and solve complex medical health issues.



# King Abdullah International Research Center (KAIMRC)

## Achievements among MNGHA

### Deliver:

- Developed Data science applications for health care.
- Secured innovation patents from US & Saudi patent offices.
- Developed genetic diagnostic tools & services (NIPT, NGS, PGD).

### Promote:

- Organized dedicated Clinical Trials capability building workshops.

### Implement:

- Developed applications in Bioinformatics, Artificial Intelligence, & data science along with patients' bio banking & cord blood banking.

### 2030 Vision Objectives:

- Riyadh Global Medical Biotechnology Summit 2023.
- Approval for one national initiative (Developing and accrediting drug testing laboratories and bioequivalence) with a budget of 27 million SAR.
- Conditional approval for one national initiative (Localization of pharmacy technologies and biomedical engineering) with a budget of 100 million SAR.
- Signed an agreement with:
  1. The AstraZeneca for gene therapy.
  2. Moderna for vaccine development.
  3. Pfizer for vaccines.
  4. AED for medical devices development.
- Signed MOUs with the following companies for general research services:
  1. (Roche, KFSH&RC, Osang Healthcare, Hevolution, Kite Pharmaceutical, and Sanofi).

### Others:

- Total No. of approved research projects from Jan 2023 to Oct 2023 is around 886 projects.
- Total No. of approved Clinical trials projects from Jan 2023 to Oct 2023 is 57 projects.
- Total No. of publications (KAIMRC, KSAU-HS, MNGHA) in 2022 was 1879 publications and expected to reach around 2000 in 2023.
- Total No. of the patents registered from Jan 2023 to Oct 2023 is 18 patents.



## Deanship of Postgraduate Education

### Introduction:

The Deanship of Postgraduate Education aims to develop a culture of academic excellence that will promote professional growth and set the standard for local and regional graduate studies. Its mission is to impart specialized expertise in healthcare and clinical skills through top-notch educational programs and events based on the latest science and technology to enhance the efficiency of healthcare practitioners and professionals and increase community knowledge. All central, eastern, and western regions can access postgraduate education services through the three KSAUHS campuses and MNGHA Medical Cities and Hospitals. It offers various services, such as Medical Education Programs, Master Programs, Allied Health Training, Visiting Professors Programs, Continuing Professional Development, Symposia and Conferences, Quality Assurance, Health Sciences Library, and Media Services. The Department of Medical Education is one of the largest health sectors, with many doctors enrolled in training programs and many graduates from the fellowship training programs and residency in various fields of medicine, contributing to the national healthcare system. The health sciences are covered in various specialized workshops and unique courses by Continuing Professional Development.



# Deanship of Postgraduate Education

## Achievements among MNGHA

### International awards, recognition, contributions:

- The American Academy of Family Physician's accreditation for Continuing Professional Development in the Jeddah region is valid until February 25, 2025.
- The American Heart Association has accredited Continuing Professional Development in the Jeddah region, which is valid from February 25, 2022 to February 25, 2025.
- Prince Muhammad bin Abdulaziz Hospital in the Madinah region has received accreditation as an approved center for cardiopulmonary resuscitation courses from the American Heart Association (AHA), under the Ministry of National Guard Health Affairs. The accreditation is valid for three years from 2022 to 2025.
- Continuous professional development in Riyadh has obtained an agreement and certificate from the American Heart Association and from the American Academy of Family Physicians.
- The CTAS Course for Service Providers has been accredited by Continuing Professional Development in Riyadh.

### National awards, recognition, contributions:

- Accreditation of Continuing Professional Development as providers of continuing professional development activities in all regions (Riyadh, Jeddah, Eastern) from the Saudi Commission for Health Specialties.
- Renew the accreditation of King Abdulaziz Medical city in Jeddah center as a registered center for conducting Training the Trainers (TOT-on-the-Go) Certification Workshop in collaborative with Saudi Health Commission for Health Specialties.
- With the help of 200 health practitioners at the Health Gathering event in Madinah, I was able to win second place in the Health Simulation Week for Cardiopulmonary Resuscitation.

- The SCFHS accredited the Intensive Care Program, Diagnostic Radiology Program, and Otolaryngology Program at Prince Mohammed bin Abdulaziz Hospital in the Ministry of National Guard Health Affairs.
- Accreditation of the Intensive Care Program, Diagnostic Radiology Program, and Otolaryngology Program from the SCFHS at Prince Mohammed bin Abdulaziz Hospital in the Ministry of National Guard Health Affairs in Madinah.
- The Saudi Commission for Health Specialties has re-accredited medical education in Riyadh for a period of 4 years starting in February 2023.

### 2030 Vision:

- Expanded Fellowship and Residency Programs: Increasing the capacity and accessibility to training more healthcare professionals, addressing the demand for skilled practitioners in the healthcare system by introducing comprehensive range of specialized postgraduate programs in various healthcare disciplines to meet the evolving needs of the healthcare sector and promote expertise in niche areas.
- Ensure that all residency and fellowship programs meet and maintain accreditation standards set by the Saudi Commission for Health Specialties (SCFHS) to guarantee the highest quality of education and training.
- Enable trainees to enhance their clinical skills, critical thinking abilities, and evidence-based decision-making through hands-on patient care experiences to promote clinical excellence.
- Created partnerships with external healthcare institutions, academic organizations, and professional societies to enhance the educational experience and increase learning opportunities for trainees.
- Increased the availability of educational activities, candidates,

and approved CME (continuing medical education) hours.

- Chemical, Biological, Radiological, Nuclear, and yield Explosive's agents (CBRNE) is being Establishment of by the College of Applied Medical Sciences with approval. The College of Nursing in Jeddah has given its approval to a program in Renal Dialysis Nursing.
- 87 students enrolled in Master's and Higher Diploma programs for 2022-2023 in all regions.
- Graduation of 111 students from Master's programs for the academic year 2022-2023 in all regions.
- 11 students have enrolled in the Higher Diploma Program on Family Safeguarding at the College of Public Health and 9 students in the Higher Diploma Program in Health Executive Leadership at the College of Public Health & Health Informatics.
- Academic and practical training is provided to undergraduate and postgraduate medical students, residents, physicians, nurses, and technicians to enhance their knowledge and expertise. Our learners receive knowledge and experiences from renowned keynote speakers and guests from various national and international countries, which is how we achieve this.
- Produced content for social media platforms to exhibit the university's progress in scientific fields, covering educational events and courses, and sharing it with a vast audience.
- Provided and maintained an interactive environment equipped with interdisciplinary research databases in medical and health information resources supporting research, clinical updates, and medical discovery, focusing on clinical excellence and patient safety.







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