



المملكة العربية السعودية



مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre

Better care. **Transforming lives.**

KFSH&RC Annual Report 2022



رؤية VISION
2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



The Custodian of the Two Holy Mosques
King Salman bin Abdulaziz Al Saud



His Royal Highness
**Prince Mohammed bin Salman
bin Abdulaziz Al Saud**
The Crown Prince and the President of the
Council of Ministers

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Our Facilities pg. 70



Our People pg. 64

2022 in Review: Providing better care, transforming lives

A pioneer within the Kingdom’s health sector, KFSH&RC has been a trusted center of care for decades. Its transformation to officially become a non-profit foundation by Royal Order in 2021 is part of a broader transformation journey to reinforce its position as a leading center for healthcare delivery and innovation. The Organization is a key driver of the comprehensive transformation and modernization of the Kingdom’s healthcare sector, in line with the goals of Saudi Vision 2030.

More than cold efficiency and statistics, this transformation is a promise to provide the best possible care to our patients and support to our employees, every day. Across our operations and geographic footprint, our purpose-driven transformation accelerated throughout 2022, achieving momentous milestones and landmark accomplishments across all dimensions.



Key Figures at a Glance¹



Total amount billed
SAR 14.8 Mn+
+16.3% ↑

¹ In comparison to 2021 data

Innovation and Growth¹

Throughout this year, KFSH&RC continued to set the standard for the healthcare sector across the Kingdom. We responded to every challenge to drive continuous improvement and innovation. As a result, we are delivering better care to more patients with greater efficiency and at lower cost than ever before. This provides a source of collective pride to our people and delivers on our promises to all our stakeholders.

First in the world
to use bone grafts for pectus excavatum repair for an adolescent

First case of intra-operative brain radiation therapy in the Middle East

First pediatric intestinal transplant in the Kingdom

HLA Fellowship Accreditation
by the American College of Histocompatibility and Immunogenetics (first outside North America and fifth in the world)

Heart transplant on a **6-month old** baby, the **youngest and smallest patient** to undergo the procedure in the Middle East successfully

Agreement with the Saudi Space Commission to conduct cell science experiments at the International Space Station (ISS)

Practice Transition Accreditation Program
by the American Nurses Credentialing Center (first organization recognized outside the USA)

First AI professional course accredited in the region (Applied Healthcare Artificial Intelligence Program)

One of Saudi Arabia's early adopters of shared blockchain technology, with its 'digital credentialing' solution to securely issue, manage, track, and verify hospital credentials

¹Non-exhaustive list; further information under Continuing Our Journey to Excellence chapter

Select Awards and Recognitions²



Winner, Oracle-Cerner Innovation and Achievement award for achieving **HIMSS O-EMRAM Level 7**, being the Most Wired Hospital, and winning Cerner's Patient Experience Innovation award



KFSH&RC-Madinah mega project awarded as **one of the top 2022 projects in the world** (Large and Mega Projects category) by Project Management Institute-USA



Value-Based Health Care (VBHC) Prize in 2022 for KFSH&RC's contribution to the **implementation of VBHC**, awarded by VBHC Center Europe



Gold Stevie® Winner for Achievement in **Managing a Remote Workforce**, Stevie Awards for Great Employers



Gold Stevie® Winner for **Most Innovative Work-from-Home Plan**, Stevie Awards for Great Employers



ZIMAM Digital Health Awards 2022 (in collaboration with HIMSS) for the **Best Digital Health Transformation Project**

The commitment to delivering better care and transforming lives has already started to yield tangible results. But this is just the beginning of an exciting new journey; there is a great deal of work left to do. At every level of the organization—from our senior leadership to our world-class physicians to every single employee who makes KFSH&RC the unique institution that it is today—there is a shared sense of ambition and determination to maintain momentum and deliver our vision to be among the best healthcare organizations in the world by 2030.

² Non-exhaustive



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King Faisal Specialist Hospital and Research Centre (KFSH&RC) is considered one of the most distinguished organizations in the medical, research, and education fields in both the Kingdom of Saudi Arabia and the region. Since its establishment in 1975, KFSH&RC has been dedicated to continuously raise the standards of healthcare in the country.



Aerial view from the main entrance, KFSH&RC-Riyadh campus

Vision, Mission, Values, and Strategic Objectives



Our Vision

To be the specialized healthcare provider of choice for every patient



Our Mission

To serve society with the highest level of healthcare and best patient experience in an integrated education and research setting



Our Values

Safety

We build our capabilities and implement necessary processes to eliminate preventable harm in KFSH&RC and become a High-Reliability Organization (HRO) that delivers safe care.

Excellence

We distinguish and differentiate our organization through providing outstanding clinical care and a highly satisfying patient experience. We offer healthcare providers top notch education opportunities, while pioneering in medical research.

Patient Centric

We put the needs of our patients and their families first. This revolves around involving the patients and their families in decision making, by communicating openly and honestly, and treating them with compassion, dignity, and kindness. We show them sympathy and understanding, all leading to world-class customer experience.

Accountability

We have clearly defined responsibility and accountability at all levels within the Organization. This will ensure awareness and ownership of all operational responsibilities, duties, and ultimately the delivery of the highest level of healthcare.

Transparency

We uphold transparency within KFSH&RC by openly sharing information and data, internally and externally, to better serve our patients and stakeholders and to enable accountability for high-quality care and outcomes.

Collaboration

We partner and collaborate with leading local, regional, and international organizations to achieve world-class service in clinical, research, and education domains. We support the community via social responsibility activities to positively impact the local community, environment, and society.



Strategic Objectives



Deliver world-class customer experience, quality, and safety of care to our patients



Provide access to all who need our services



Focus on our core specialties



Be a knowledge leader, through education, research and innovation to support our goals and bring value to the Kingdom of Saudi Arabia



Build, commission, and operate the new Jeddah and Madinah branches, as well as other new capital assets, consistent with our strategic objectives and resources



Transform into a financially sustainable and efficient not-for-profit foundation



Establish effective collaboration and communication within the Organization as well as with external public and private entities

Facts and Figures

Home to a diverse group of individuals across multiple fields

16k+
Employees

60+
Nationalities

60%
Saudi nationals

Vital provider of high quality complex care for the Kingdom over the past 50 years

~60
Specialties and Sub-specialties

Specialized centers

- Heart Center
- Neurosciences Center
- Organ Transplant Center of Excellence
- Oncology Center
- Center for Genomic Medicine

Key anchor for medical innovation and research for Saudi Arabia and the region

Research Centre with focus on biomedical research in major disease areas and provision of specialized services

Owner of infrastructure and services that support the unique healthcare needs of the Kingdom and its people

- King Fahad National Center for Children's Cancer (KFNCCC)
- King Abdullah Center for Oncology and Liver Diseases (KACO&LD)
- Health Outreach Services Regional Centers
- Telemedicine services and virtual health

Active role in the training and education of the nation's professionals and their realization of potential and power through knowledge gain

- 160+ residency and fellowship programs
- Life Support Training Center
- Simulation Center
- Continuing Medical Education provider
- Affiliation with Alfaisal University

Advocate of community and social care, providing support to various causes as well as cultural and scientific activities that raise awareness of the health culture

- King Faisal Specialist Foundation (Wareef Charity)
- King Salman Center for Disability Research

Business incubator for potential start-ups to commercialize products and services, investing in opportunities and business alliances that contribute to the achievement of financial sustainability. Subsidiaries:

- Saudi Diagnostic Limited Company
- Al-Takassusi General Limited Company
- Allergotek Limited Company
- Mahd Alroyah



Facts and Figures (continued)

Riyadh branch

- 10 clinical facilities
- 46 support facilities
- 17 housing facilities
- Education and training facilities
- Research Centre
- Animal Laboratory and Holding Facility

~1,000,000 sqm
1,519 beds

Jeddah branch

- 54 support facilities
- 2 housing facilities
- Education and training facilities

~121,000 sqm
527 beds

Madinah branch

- 19 support facilities
- 1 housing compound
- Education and training facilities

~133,000 sqm
400 beds



Board of Directors

- Royal Decree No. 295257 dated 28/05/1440H reconstituted the Board of Directors in its fifth session
- Royal Decree No. 39660, dated 26/06/1441H appointed H.E. Mr. Fahd bin Abdulmohsen Al-Rasheed as the Chairman of the Board of Directors
- Royal Order Nos. 35772 dated 27/06/1440H and 20668 dated 28/03/1441H appointed board members for three years only
- Royal Order No. 30176 dated 13/05/1443H extended the current Board of Directors' session until the Hospital's new board is appointed as stipulated in the statute



H.E. Dr. Majid bin Ibrahim Al Fayyadh
Secretary-General and Chief Executive Officer, KFSH&RC

Board committees' membership

- Transformation Acceleration
- Marketing and Communications
- InterContinental Hotel and Conference Hall

Education

- King Saud University Bachelor of Medicine and Surgery
- University of Southern California Master of Medical Management



H.E. Dr. Saleh Al Qahtani
Chief Executive Officer and Chairman, Board of Directors, Royal Clinics

Board committees' membership

- Nomination and Remuneration

Education

- King Abdulaziz University Bachelor of Medicine and Surgery



Dr. Mohammed Al Abdulaali
Assistant Minister of Health

Board committees' membership

- N/A

Education

- King Faisal University Doctor of Medicine
- University of Alabama Master of Science in Healthcare Administration



Mr. Yasser Al Quhidan
Assistant Minister for Financial Affairs, Ministry of Finance

Board committees' membership

- Finance and Investment

Education

- Umm Al-Qura University Bachelor of Economics and Accounting
- London Business School Executive Master of Business Administration

H.E. Mr. Fahd bin Abdulmohsen Al-Rasheed
Chairman of the Board of Directors



Board committees' membership

- **Nomination and Remuneration**

Education

- **Washington University Bachelor of Business Administration**
- **Stanford Business School Master of Business Administration**





Dr. Hussam Al Faleh
Chief Executive
Officer, Program for
Health Assurance and
Purchasing

Board committees' membership

- Audit and Risk

Education

- King Saud University Bachelor of Medicine and Surgery
- Frankfurt School of Finance & Management Master of Business Administration



Prof. Thomas Coffman
Dean of Duke-NUS
Medical School, James
R Clapp Professor
of Medicine, Duke
University Medical
Centre, Singapore

Board committees' membership

- Audit and Risk
- Nomination and Remuneration

Education

- University of Pennsylvania Bachelor of Arts in Natural Science
- Ohio State University Doctor of Medicine



Prof. Abdullah Daar
Professor of Public
Health Sciences and
Professor of
Surgery, University of
Toronto

Board committees' membership

- Quality and Safety

Education

- University of London Doctor of Medicine
- Oxford University



Mr. David Roberts
Executive Chairman,
Tektology Holdings Ltd

Board committees' membership

- Finance and Investment

Education

- General Bath University Bachelor of Business Administration and Management, Master of Business Administration



Dr. Paul Rothman
Dean of the Medical
Faculty and Professor of
Medicine, Johns Hopkins
University School of
Medicine

Board committees' membership

- Nomination and Remuneration
- Quality and Safety

Education

- Massachusetts Institute of Technology Bachelor of Science in Biology
- Yale University Doctor of Medicine



Dr. Ross Wilson
Chief Executive Officer,
RMW Consulting

Board committees' membership

- Quality and Safety

Education

- University of the State of New York Doctor of Medicine
- University of Sydney Bachelor of Medicine and Surgery



Chairman's Statement

“

At KFSH&RC, we strive for unparalleled healthcare excellence on a national, regional, and global level. We prioritize the well-being of our patients in everything we do. And with the dedication of exceptionally talented professionals, and the support of the Kingdom's leadership, we are empowered to help shape the future of medicine.

”

H.E. Mr. Fahd bin Abdulmohsen Al-Rasheed

Chairman, Board of Directors



KFSH&RC is privileged to serve as a catalyst to Saudi Arabia's **healthcare transformation**

One of the world's **top healthcare institutions** in the eventual time

Amidst its unprecedented evolution into an independent non-profit foundation, King Faisal Specialist Hospital and Research Centre (KFSH&RC) aimed and continuously aims to provide better care and transform lives. The year 2022 exemplified the zeal: KFSH&RC catered to more patients, performed a greater number of procedures, operated with improved efficiency, and delivered better outcomes.

For their limitless support, trust, and confidence in KFSH&RC throughout, I would like to thank our leadership, the Custodian of the Two Holy Mosques, King Salman bin Abdulaziz Al Saud, and His Royal Highness, the Crown Prince, Prince Mohammed bin Salman bin Abdulaziz Al Saud—may Allah protect them.

At KFSH&RC, we strive for unparalleled healthcare excellence on a national, regional, and global level. We prioritize the well-being of our patients in everything we do. And with the dedication of exceptionally talented professionals, and the support of the Kingdom's leadership, we are empowered to help shape the future of medicine. This intent runs parallel to that of the Kingdom's Health Sector Transformation Program as part of Vision 2030. As such, the Hospital is wholly committed to the fulfillment of the Program, and ultimately, of the Vision.

Our transformation is based on the principle of positioning KFSH&RC as one of the world's most effective medical organizations with financial sustainability, fundamental transparency, and social integrity. As we accelerated our progress in 2022, we stepped closer to the ambition. With the Hospital board's engagement and oversight of an internationally renowned management consultancy firm, we immersed in reinforcing our key strategies that included identifying primary areas of transition and assessing the most effective methods to implement change. As a result, we were able to achieve operational outcomes that surpassed most of our records, improve the organizational health score, fully align education goals, secure multiple

awards and recognitions, and commence initiatives that encourage a more inclusive and innovative working environment.

Other primary transitional areas are research and innovation, which KFSH&RC constantly drives to expand with the procurement of patents, increased notable publications, and discoveries that make a difference. In addition, the organization invested in augmenting its digital health, asserting KFSH&RC's lead position in the field. Recognizing its huge impact in underscoring environmental and social responsibility, the Hospital implemented projects to demonstrate care for the environment and the community.

KFSH&RC is privileged to serve as a catalyst to Saudi Arabia's healthcare transformation. From human resources and research facilities, to information technology security and environmental responsibility, our headway is bringing us nearer to becoming an operational independent non-profit foundation in forthcoming years, and one of the world's top healthcare institutions in the eventual time.

I take this opportunity to express my appreciation to all who have contributed to KFSH&RC's successes transcribed in the pages of the 2022 annual report—the executive management, the employees, our patients and their families, the Hospital's collaborators and customers.

Thank you for the continued affirmation of your support to King Faisal Specialist Hospital and Research Centre.

Chief Executive Officer's Statement

“

KFSH&RC's accomplishments in 2022 are not only mere improvements of previous years; rather, they embody our transformation, which challenges us to deliver health care in the most effective ways and subsequently, to bring our Hospital to the level of the global best.

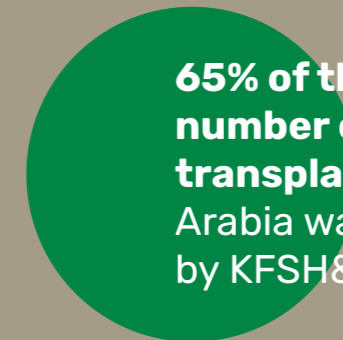
”

H.E. Majid Al Fayyadh, MD, MMM

Chief Executive Officer



KFSH&RC accepted more than 38,000 new patients in 2022



65% of the total number of organ transplants in Saudi Arabia was contributed by KFSH&RC

Practically 50 years ago, King Faisal Specialist Hospital and Research Centre (KFSH&RC) opened its doors for the first time in Riyadh to provide health care to people from all corners of Saudi Arabia. Since then, the Hospital's doors have never closed. In fact, KFSH&RC opened additional ones in Jeddah and Madinah, so it may accommodate as many of those who need its services.

In 2022, KFSH&RC accepted more than 38,000 new patients—the highest number recorded thus far. In the outpatient setting, we saw approximately 1.7 million patients, 4.9% greater than our 2021 visits. An increase in the number of visits was also seen in the emergency room, from 144,661 in 2021 to 151,201 in 2022. Throughout this annual report, figures and outcomes of care provided are presented, a testament of the continued efforts and commitment of the KFSH&RC team.

However, KFSH&RC's accomplishments in 2022 are not only mere improvements of previous years; rather, they embody our transformation, which challenges us to deliver health care in the most effective ways and subsequently, to bring our Hospital to the level of the global best.

In line with the Hospital's overall strategy based on His Royal Highness the Crown Prince's vision, we developed many of the elements comprising KFSH&RC's transition plan, such as clinical, communications, human resources, finance, education and research, and governance, among others. We continue to refine our strategy while we ensure that our patients, employees, and the communities we serve are aware of KFSH&RC's transformation and understand its implications. They must be reassured that the quality of healthcare will not be compromised; instead, it will improve and an even more valuable service will be provided.

In keeping with this reassurance, our teams at KFSH&RC worked determinedly to ensure that every aspect of care

is handled with utmost quality and professionalism even as we navigate through the course of our transformation journey. Education and training remained foremost, with the expansion of residency and fellowship training, service offerings for professional development, and the commencement of the plan for the KFSH&RC Training Academy. As part of our comprehensive training program and the credentialing for new procedures, the Simulation Center was enhanced and equipped to better prepare our residents, nurses, and allied health personnel.

Research continued to be at the core of the sciences and hospital services. Among our Research Centre's achievements in 2022 is the increase in the number of research proposals and clinical trials, which support our provision of advanced therapeutic care to our patients. Moreover, our scientists are increasingly recognized worldwide, with 14 distinguished by Stanford University as among the top 2% most cited for their work.

The increase in our patient numbers expectedly brought an increase in the number of procedures and clinical services performed. It likewise provided KFSH&RC opportunities to demonstrate its capabilities, especially in the core specialized services of genomics and precision medicine, cardiovascular, neurosciences, oncology, and organ transplantation. The Hospital provided access to the regulation-bound CAR T-cell therapy, treating 32 patients who would have otherwise sought the treatment abroad. Additional contribution to the Kingdom's health sector

was the performance of 65% of the total number of organ transplantation activities in Saudi Arabia.

Levels of care in terms of digital health have also progressed, with KFSH&RC recognized once again by the College of Healthcare Information Management Executives' (CHIME) for the 'Digital Health Most Wired' program. KFSH&RC is one of only two healthcare facilities outside the United States to achieve Level 9 status for being at the forefront of innovating with healthcare information technology to improve patient safety.

KFSH&RC's annual report for the year 2022 gives an account of the Hospital's determined progress and the potentials of a world-leading institution in the future. With deliberate and persistent efforts, KFSH&RC will gradually realize its aspirations and secure its place at the top.

I would like to convey my appreciation to the Kingdom of Saudi Arabia's leadership, the Custodian of the Two Holy Mosques, King Salman bin Abdulaziz Al Saud, and His Royal Highness, the Crown Prince, Prince Mohammed bin Salman bin Abdulaziz Al Saud, for their constant support and trust in KFSH&RC. I would also like to extend my thanks to His Excellency the Chairman of the Board of Directors and to the other Board members for their guidance.

Lastly, I express immeasurable gratitude to our patients, for their confidence and faith in KFSH&RC, and to the over 16,000 employees across Riyadh, Jeddah, and Madinah, for their incredible efforts and loyalty to the institution.

KFSH&RC is one of only two health care facilities outside the US to achieve **Level 9 status** for being digitally most wired (CHIME award)



Expanding the Strategic Horizon

In line with the government’s overarching healthcare vision, KFSH&RC is strongly committed to ensure the steady growth of the healthcare sector. With its transformation affirmed in December 2021, the Hospital aims to become one of the world’s leading organizations, expanding its services, research, and education to provide outstanding patient care with the best quality and experience, while being financially sustainable.

Road to Transformation

KFSH&RC’s transformation journey began in 2016, following a comprehensive roadmap that covered key aspects such as strategy, governance, finance, and human capital. The year 2022 trails the pivotal year of the Royal Order issuance, within which the Hospital rapidly gained strategic and operational momentum through assessing, developing, and finalizing the logistics of change across all areas.

Our transformation program comprises of priority pillars that need to be delivered in an integrated manner in order to set the stage for KFSH&RC’s advancement:

- Refreshing KFSH&RC’s strategy
- Transforming the financial sustainability of KFSH&RC
- Strengthening the management capabilities and talent while instilling and enabling organization culture and leadership
- Designing the transformation plan and metrics and anchoring the transformation governance

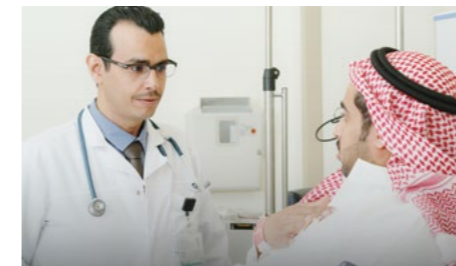
The work towards the delivery of the above pillars is progressively underway. In every chapter of our transformation in 2022, we have endeavored to move closer to realizing our aspiration. **Being a globally leading hospital must mean excellence across multiple elements.** KFSH&RC’s engagement with a reputable strategy house furthered the implementation of our transformation program and identified the elements that require our focus.

Focus elements



Alongside our strategic objectives, these focus elements have become our guiding principles in building progress in 2022.

Concentrated on our future clinical services strategy and assessed our providers, defining their role and developing a collaboration and action plan



Finalized the KFSH&RC medical tourism strategy, including opportunities, definition of service offerings, required capabilities, economics and key success factors



Aligned research and education strategies, allowing the business case and funding model to be developed

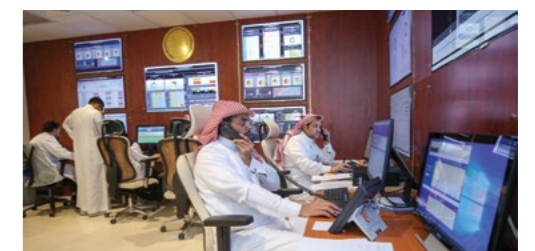


Applied internationally recognized assessment tools to analyze our current organizational values, including key strengths and benchmarks with global best practices; refined our existing set of initiatives and crafted a detailed culture change plan



Completed KFSH&RC’s subsidiary strategy along with a detailed operating model and implementation roadmap

Enhanced cybersecurity by adding a further layer of protection on end-point devices; created a business continuity management and recovery framework that enables KFSH&RC to maintain viable capability to continue business processes with minimum impact in the event of an internal or external disaster scenario



Following achievement of our key progress points in 2022, our primary focus for the upcoming year is to fully execute and implement our plans to become a fully functional non-profit independent foundation. We will achieve this through realigning the strategies on governance, strategy, finance, human capital, and operational transformation through three main themes.



New Statute Enablers

Initiatives and projects to implement the enablers stated in the Royal Decree and new statute; Work to redefine and shape our future governance that will enable the strategy and unleash our potential; Finance transformation as a key element to ensure foundation sustainability, with more focus on human capital transformation and capability building in line with the future operating model that will enable the vision for KFSH&RC.



Safety

Projects that directly deal with reducing hazards and refinement of safety processes and procedures; this is a key focus for the organization, ensuring that all backlog projects are addressed, as part of our journey towards being a high reliability organization for our employees and patients.



Capabilities and Foundation

Projects under this theme focus primarily on four types of projects: urgent renovations or construction works, governance, medical equipment replacement, and technology infrastructure.



02

Continuing Our Journey to Operational Excellence

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Efficiency, Value, and Sustainability	74

~33,500

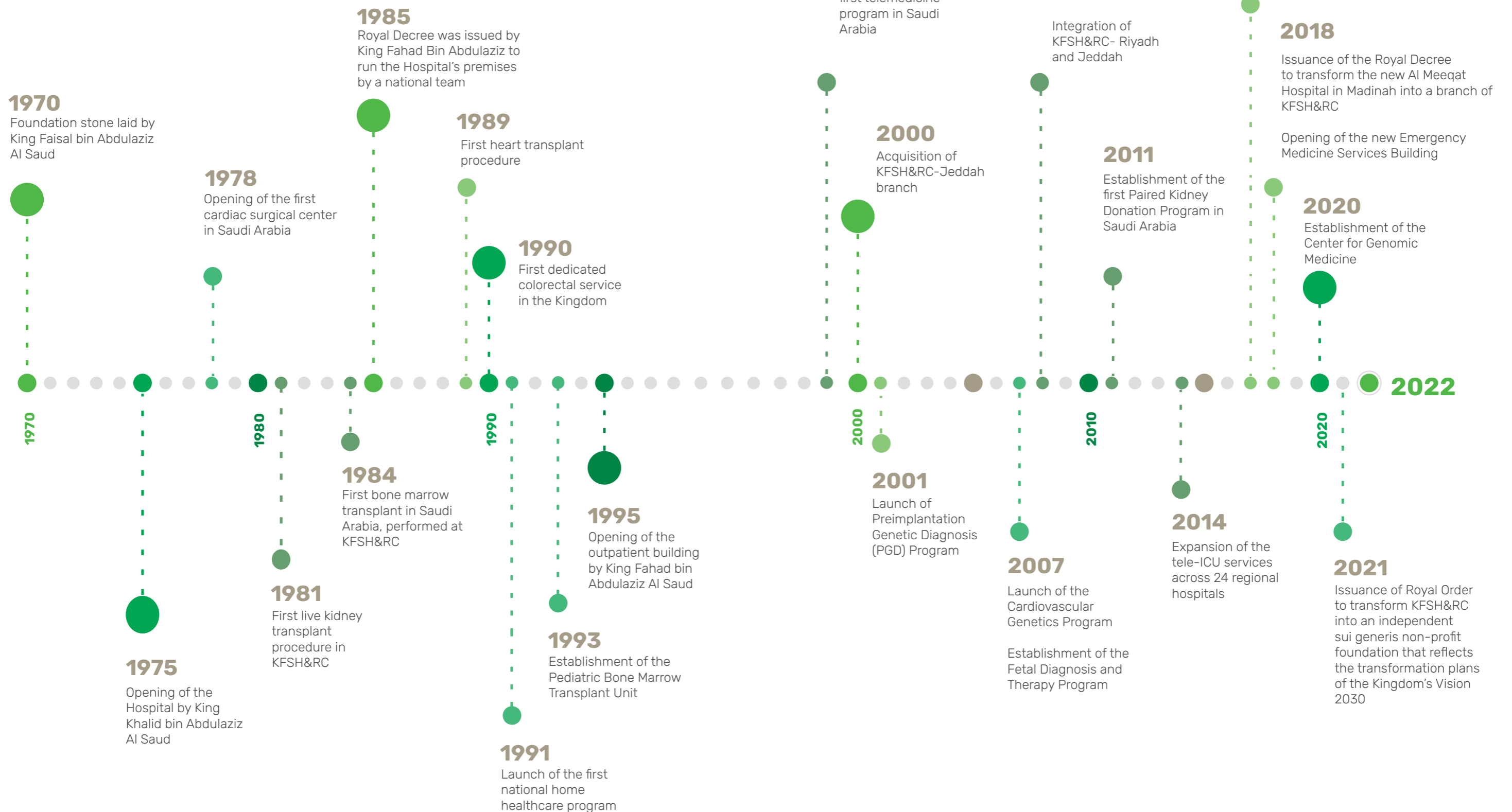
Patients seen in clinics per week

38,468

New patients accepted in 2022



For almost five decades, KFSH&RC has been committed to providing healthcare to patients within and beyond Saudi Arabia in accordance with the highest standards. Its contributions to medicine and the healthcare sector are among some of the milestones in the Kingdom, positioning KFSH&RC as a leading tertiary/quaternary healthcare institution in the region.



Access to Care

While KFSH&RC remained steadfast in terms of providing optimal medical and clinical services to the citizens and residents of Saudi Arabia, its transformation into a non-profit foundation necessitates venturing into different ways of delivering care. In 2022, the Hospital fully engaged into the implementation of its transformation program, in collaboration with a global consultancy firm. Building on the initiatives the team has worked on in the previous year, KFSH&RC strove to perform better and produce greater outcomes for the benefit of all who needs its services.

<p>New patient referrals</p> <p>66,645</p> <p>+11.4% (2021: 59,822) ↑</p> <hr/> <p>Total number of hospital beds</p> <p>2,446</p> <p>+1.3% (2021: 2,415) ↑</p>	<p>New patients accepted</p> <p>38,468</p> <p>+1.5% (2021: 37,885) ↑</p> <hr/> <p>New international patients</p> <p>323</p> <p>+21% (2021: 267) ↑</p>	<p>Total inpatient days</p> <p>421,148</p> <p>+9.7% (2021: 383,910) ↑</p> <hr/> <p>Bed occupancy rate</p> <p>82.7%</p> <p>+0.3% (2021: 82.4%) ↑</p>
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<p>17,615</p> <p>New patients accepted in specialized centers</p> <p>+7.1% (2021: 16,447) ↑</p>	<p>Center for Genomic Medicine</p> <p>1,189</p> <p>Heart Center</p> <p>3,431</p>	<p>Oncology Center</p> <p>4,627</p> <p>Neurosciences Center</p> <p>4,411</p>	<p>Organ Transplant Center of Excellence</p> <p>3,957</p>
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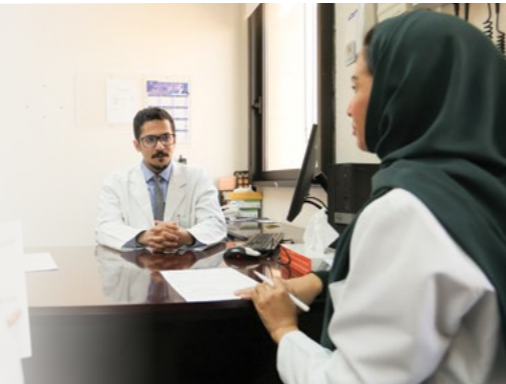
20 hours

Time to make referral decisions

-29.8% (2021: 29 hours) ↓

80%

of all new patients received their appointment within 2 weeks



As a specialist hospital, KFSH&RC primarily treats patients with complex and often advanced conditions, which may not be treated in other hospitals. In these cases, referrals

from physicians and institutions across Saudi Arabia are reviewed in accordance with KFSH&RC's patient acceptance bylaws.

Outpatient access

On an average week, KFSH&RC treated approximately 33,500 patients in clinics of various specialties.

<p>Total outpatient visits</p> <p>+4.9% (2021: 1,661,633) ↑</p> <p>1,743,316</p>	<p>Total day procedures</p> <p>+11% (2021: 118,547) ↑</p> <p>131,581</p>
<p>Endoscopy procedures</p> <p>+10.5% (2021: 11,088) ↑</p> <p>12,255</p>	<p>Outpatient visits in core specialized services</p> <p>+16.2% (2021: 394,223) ↑</p> <p>457,999</p> <p>Core specialized services represent the core business, including those in organ transplantation, neurosciences, oncology, cardiology, and genetics</p>
<p>Hemodialysis sessions</p> <p>+17.9% (2021: 60,562) ↑</p> <p>71,410</p>	<p>Total number of patients seen through virtual clinics</p> <p>+830.4% (2021: 9,677) ↑</p> <p>90,033</p> <p>Nearly 10-fold increase due to the further development of the virtual healthcare program</p>
<p>Cardiac Holding Unit procedures</p> <p>+0.3% (2021: 4,681) ↑</p> <p>4,694</p>	<p>Total number of home health care visits</p> <p>+41% (2021: 23,779) ↑</p> <p>33,523</p>
<p>Total number of medical home services</p> <p>+17.7% (2021: 13,280) ↑</p> <p>15,625</p>	

Emergency access

In 2022, emergency room (ER) presentations increased by 4.5% to 151,201, with average wait times for physician assessment of serious (but not immediately life-threatening) conditions down by 5.4% to 53 minutes.

However, in the latter part of 2022, there were several instances of ER overcrowding concerns and longer waiting times for beds if a patient needed admission. The average boarding time (time between the physician's decision to admit the patient and the time the patient actually occupies an inpatient bed) increased from 8.1 hours in 2021 to 10.6

hours in 2022. This was essentially due to a shortage of available beds, with 2022 bed utilization figures going well above the optimal level of 85% and subsequently over 90% towards year-end. This occurred despite gains in bed-turnover rates and reductions in length of stay. The loss of approximately 100 beds due to the safety renovation program that began in 2022 and will continue beyond 2023 is a contributing factor, as well as seasonal issues.

We also started to experience a slight increase in incidences of ER patients leaving before being seen—up from 2.0% in 2021 to 2.3% in 2022.

Access to Care (continued)

Inpatient access

Overall, more patients were admitted and treated during the year, up by 10% from 2021. Access to specialized surgeries, which frequently involve multiple teams and may take considerably more than 12 hours to complete, was up by 10%.

Multiple efforts that aided managing patients' length of stay, reducing operating room cancellations and changeover times, and increasing utilization of step-down care facilities have contributed to increased inpatient access. As a result,

an overall improvement of 10% in patient bed-days utilized was seen—from 383,910 bed-days in 2021 to 421,148 in 2022.

However, the increasing tide of patients—caused by a combination of expected population growth and aging, as well as constraints in other parts of the healthcare system—is resulting in an urgent and inevitable need for expansion of the Hospital's specialty bed capacity.

Average length of stay (ALOS)
-1.4% (2021: 9.1) ↓ **8.97 days**

Reduction of over 20% over three years (11.3 days in 2019), accommodating around 7,800 additional admitted patients by 2022

Total number of admitted patients
+10% (2021: 42,959) ↑ **47,255**

Same-day admissions
+19.9% (2021: 4,775) ↑ **5,726**

Total number of surgeries
+10.3% (2021: 26,956) ↑ **29,742**

Clinical Services

Laboratory procedures
+12.5% (2021: 32,371,626) ↑ **36,417,850**

Robotic surgeries
+30.5% (2021: 591) ↑ **771**

Radiology procedures
+11.7% (2021: 509,105) ↑ **568,728**

Solid organ transplants
+14.4% (2021: 888) ↑ **1,016**

Inpatient/outpatient prescriptions
+18.1% (2021: 4,123,059) ↑ **4,870,691**

Epilepsy surgeries
+3.9% (2021: 279) ↑ **290**

Mail order prescriptions
+9.4% (2021: 80,772) ↑ **88,353**

Although KFSH&RC offers services in approximately 60 specialties and sub-specialties, it remains distinctive in providing care and treatment in complex medical cases or diseases in the fields of oncology, cardiology, neurosciences, organ transplantation, and genomics. KFSH&RC also leads in introducing and performing innovative techniques, procedures, and therapies, which all aim to not only contribute to medicine but also—and more importantly—enhance the care delivered to its patients.

Core Specialties and Notable Programs

Genomics and Precision Medicine

The Center for Genomic Medicine (CGM) was established in 2020 to provide a core service needed in the country, as well as to support research activities. CGM brings together physicians, researchers, and clinical and computational scientists with the objective of improving patient care through disease prevention, better diagnosis, and targeted treatments. This practice of precision medicine that tailors

to the needs of each patient at a molecular level facilitates better long-term—and often preventative—whole of life outcomes.

While already at the forefront of rare disease diagnosis and treatment, KFSH&RC aspires world leadership in genomic medicine in the years ahead, through pre-emptive pharmacogenetic screening and individualization of therapies to reduce adverse events and deliver better value-based care and patient health outcomes.

Physicians, scientists, technicians, and administrative personnel **168**

Patient visits in Medical Genomics clinics **11,944**
+22.5% (2021: 9,753) ↑

Genomic and Precision Medicine activities
+180% (2021: 8,404) ↑ **23,531**

Oncology cases genetically analyzed
+340% (2021: 3,232) ↑ **14,234**

Clinical genomics exome
+183% (2021: 767) ↑ **2,173**

Prenatal cases analyzed
+158% (2021: 1,235) ↑ **3,184**

Genotyping files processed
+183% (2021: 506) ↑ **1,433**

Targeted mutations analyzed
+37% (2021: 691) ↑ **948**

Patients with challenging genetic conditions analyzed
-21% (2021: 1,973) ↓ **1,559**

Access to Care (continued)

Cardiovascular

The Heart Center provides specialized and high-quality care for cardiovascular patients using modern technology to perform procedures such as cardiac catheterization, echocardiograms, electrocardiograms, and Cardiac Implanted Electronic Devices (CIED) implantation.

In 2022, 88,845 outpatient visits to the Heart Center was recorded, 4% greater than in 2021. KFSH&RC's Heart Center remains the only service in the Middle East that provides TransMedics Organ Care System (OCS™) Heart in a Box technology, and EXVIVO and ECMO technology to lung transplant patients.

Cardiac surgeries
+2.7% (2021: 1,984) ↑

2,038

Open-heart surgeries
+2.4% (2021: 1,320) ↑

1,352

Catheterization intervention
+23.9% (2021: 4,941) ↑

6,120

Trans-aortic valve implantation
+38.7% (2021: 62) ↑

86

In focus

In September 2022, the youngest (at six months) and smallest (6 kilograms) child to undergo heart transplantation in the Middle East was transferred from the UAE to KFSH&RC. The patient had severe heart failure and was placed on ECMO prior to arrival at our hospital.

Our Heart Center team handled the patient's case, performing a Berlin Heart insertion in September and a successful heart transplantation in November.

KFSH&RC's Heart Transplant Program is the largest in the region, and is placed among international cardiac transplantation programs.



Post-transplant in-hospital mortality

Heart Transplant - Adults	4.7%
Heart Transplant - Pediatrics	0%

Survival Rates, Heart Transplant Program	KFSH&RC	International benchmark ¹
One year post heart transplant - Adults	84%	84%
One year post heart transplant - Pediatrics	87%	90%
Five years post heart transplant - Adults	69%	74%
Five years post heart transplant - Pediatrics	79%	81%

¹ International Society for Heart and Lung Transplantation (ISHLT)

Neurosciences

A tertiary/quaternary center for neurological care with international standards of excellence, KFSH&RC's Neurosciences Center is a regional lead in many of the most advanced neurological care in medical and surgical diagnostic, interventional, and therapeutic procedures. Pediatric and adult patients are evaluated by nationally- and internationally-renowned multidisciplinary staff in the form

of integrated practice units (IPUs) and specialized programs organized around patient-centric care.

The center leads in Saudi Arabia in terms of movement disorder procedures, epilepsy surgeries, mechanical thrombectomies, and neurophysiological procedures.

Patient visits in Neurosciences clinics
+10.7% (2021: 45,397) ↑

50,272

Endovascular stroke reperfusion therapies
+101.4% (2021: 69) ↑

139

Long-term monitoring procedures
+61.7% (2021: 214) ↑

346

Movement disorder surgeries
+29.7% (2021: 74) ↑

96

Intraoperative neurophysiology monitoring procedures
+32.5% (2021: 157) ↑

208

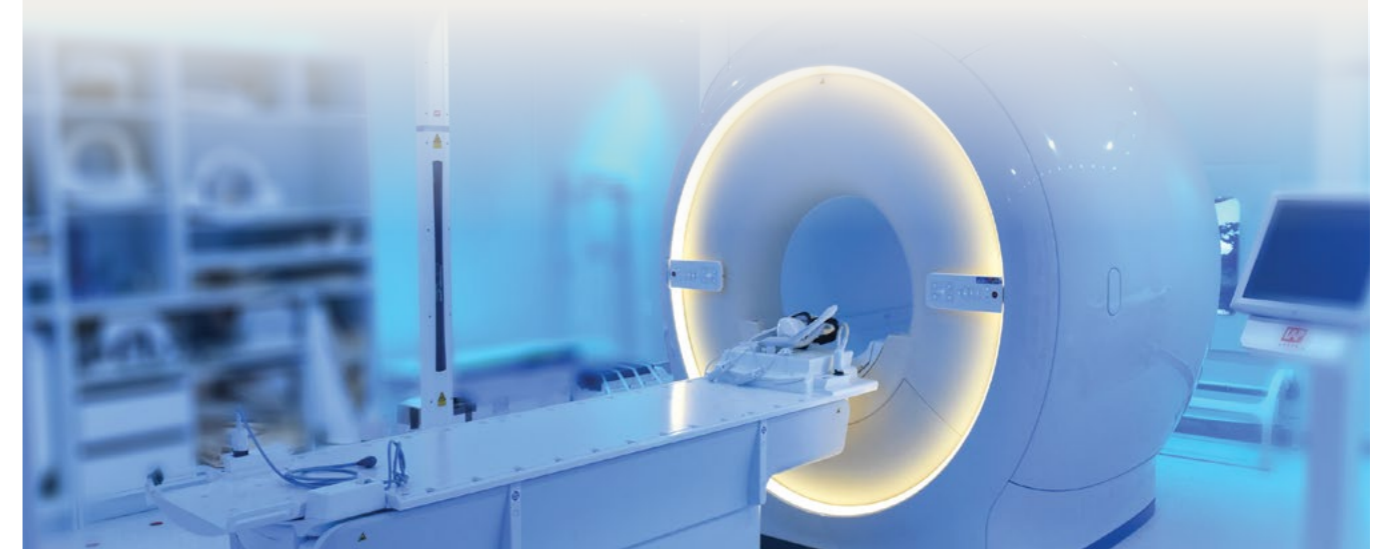
Epilepsy surgeries
+3.9% (2021: 279) ↑

290

In focus

KFSH&RC is now among 18 centers worldwide who offer Intra-operative Radiation Therapy (IORT) during brain surgery, an advanced procedure that reduces the dose and treatment for brain cancer from six weeks to three days. This treatment serves as a one-stop shop for patients, who may have their surgery and therapy at the same time.

A team of neurosurgeons, radiation oncologists, and biomedical physicists used the technique for a brain cancer case, the first of its kind in the Middle East.



Access to Care (continued)

Oncology

KFSH&RC's Oncology Center is the first cancer center in the region and has had more than 40 years' experience as the premier healthcare provider in the field. The center provides a number of integrated services for patients with several types of cancers, and offers preventive programs of cancers such as rectal and colon cancer screenings.

Patient visits in Oncology clinics +17.1% (2021: 196,726) ↑	230,406	New services Neuro-Oncology Neuro-Endocrine Tumor Integrated Pediatric Oncology Practice Program Outpatient Lymphoma BMT Program (Jeddah) Therapeutic Plasmapheresis and RBCs Exchange (Madinah)
Chemotherapy sessions +2.8% (2021: 112,948) ↑	116,158	
Radiation therapy sessions -2% (2021: 42,996) ↓	42,116	
Bone marrow transplants +12.1% (2021: 479) ↑	537	

Advancements

Introduction of surface brachytherapy applicator using 3D printing First use of targeted lifesaving therapy of a case of neurofibromatosis with inoperable complex "plexiform neurofibroma" First case of gene therapy for hemophilia in the region	New technique for Total Body Irradiation using the Extended SSD technique The Pediatric Hematology/Oncology Department is the only site in the Kingdom to offer Intra-Arterial Chemotherapy (IAC) and Metadobenzylguanidine (MIBG)
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Survival Rates, Oncology Center-Riyadh



Chimeric Antigen Receptor (CAR) T-Cell Therapy

The development and implementation of CAR T-cell therapy, with all regulatory approvals in place, enables our cellular therapy program to provide patients access to this specialized therapeutic modality in the country. In 2022, 24 adult patients received therapy and eight pediatric patients received the treatment successfully. To date, the overall survival rate recorded is 80%.

This program presents significant savings as patients will not need to be sent abroad, as well as opportunity for KFSH&RC when therapy is performed at the Hospital for patients from the GCC and the region.

Changing lives, one CAR T-cell therapy at a time

In 2017, Abdulaziz was diagnosed with acute leukemia. He received standard treatment of chemotherapy followed by bone marrow transplant. Unfortunately, he had recurrence of his disease few years later, affecting his legs and ability to walk.

In January 2022, Abdulaziz received CAR T-cell therapy at KFSH&RC. He responded well to the treatment, and recovered completely with no evidence of the disease. Abdulaziz has gone back to his baseline and is preparing for his wedding soon.



Aisha was diagnosed with acute lymphoblastic leukemia (ALL) at five years old. Five years later, she had a relapse of the disease, affecting her brain. Aisha underwent chemotherapy; unfortunately, she was found resistant to the treatment.

In December 2022, the young patient received CAR T-cell therapy at KFSH&RC. This innovative treatment for cancer transformed Aisha's life entirely: She is leukemia free, enjoying her everyday life as any child should.



Mortality rate, 100 days post stem cell transplantation

	KFSH&RC - Riyadh	International benchmark ¹
Adults - allogenic	4.57%	10%
Adults - autologous	0 %	5%
Pediatrics - allogenic	5.38%	10%
Pediatrics - autologous	0%	5%

¹ Centre for International Blood and Marrow Transplant Research (CIBMTR)

Access to Care (continued)

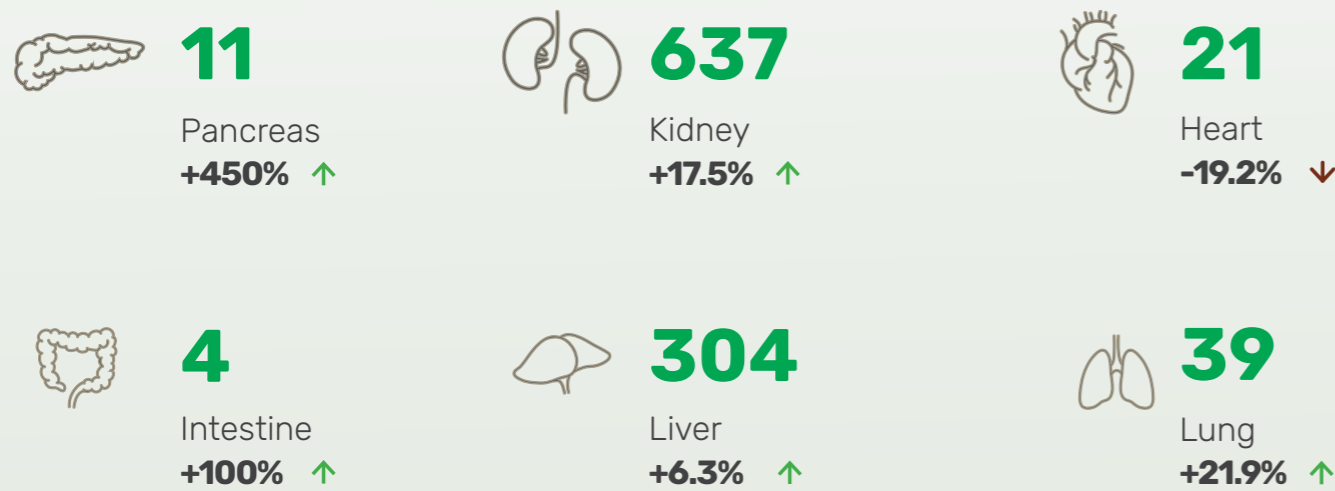
Organ Transplantation

KFSH&RC continues to be the primary contributor to the organ transplantation activities in the Kingdom, accounting for 65% of the total number of transplants performed. In

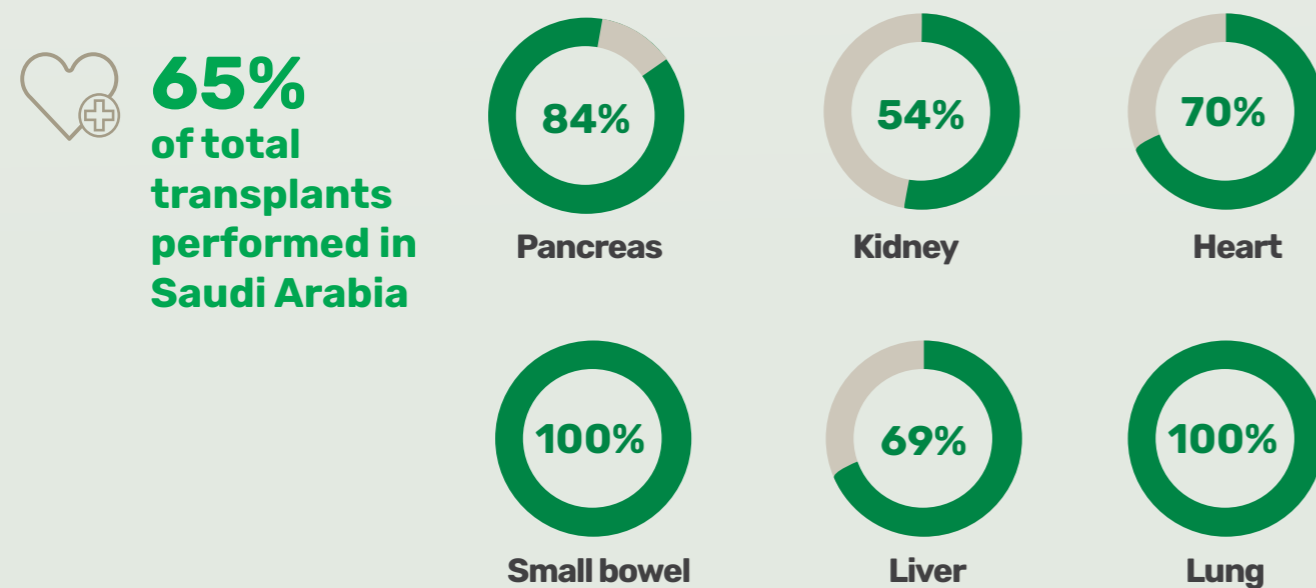
2022, KFSH&RC performed more than a thousand solid organ transplants, with 813 done in Riyadh and the rest in Jeddah. In addition to this feat, we remain the only institution in Saudi Arabia that transplants six solid organs.

Solid organ transplants
+14.4% (2021: 888) ↑

1,016



KFSH&RC's contribution to KSA's organ transplantation activities



Globally, KFSH&RC has taken leadership in several transplantation specialties, as well as in terms of the number of transplants performed in a single center.

Robotic liver donor hepatectomy¹

Pediatric kidney transplant²

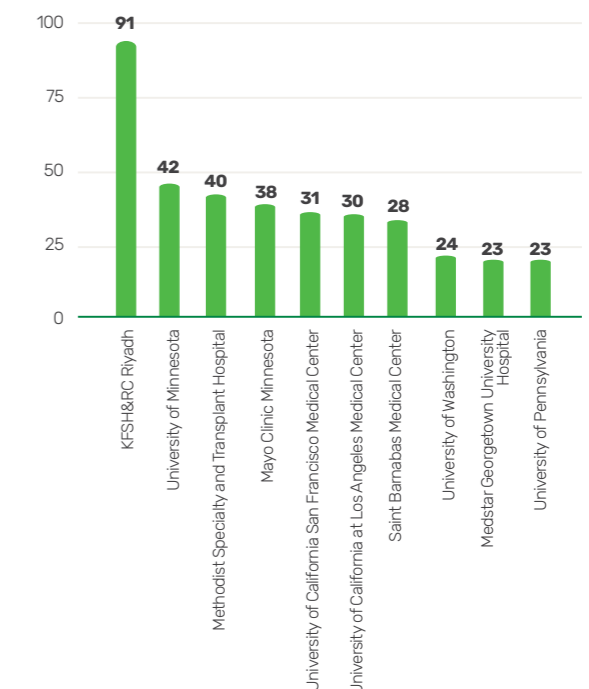
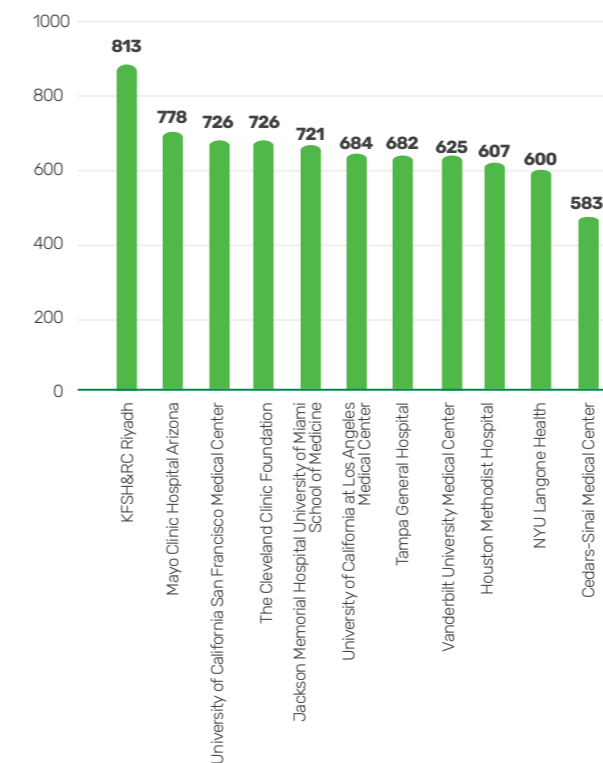
Living donor donation²

Paired kidney exchange transplant²

Pediatric liver transplant²

Total solid organ transplant activity in 2022, KFSH&RC-Riyadh v. top US centers

Paired kidney exchange activity in 2022, KFSH&RC-Riyadh v. top US centers



¹ Cases done at KFSH&RC were cited to have resulted to shorter hospital stay and less patient-controlled analgesia (Ref: Liver transplant 26 (11), November 2020; American Journal of Transplant 22 (1), November 2021)

² Outranked top centers in the USA known for transplantation in terms of volume (Ref: The Organ Procurement and Transplantation Network, <https://optn.transplant.hrsa.gov/>)

Access to Care (continued)

Transplantation Outcomes

Post-transplant in-hospital mortalities	2022
Liver Transplant – Adults	4 (2%)
Liver Transplant – Pediatric patients	2 (1.9%)
Kidney Transplant – Adults	1 (0.3%)
Kidney Transplant – Pediatric patients	0
Lung Transplant	2 (5.1%)
Pancreas Transplant	0
Intestinal Transplant / Multivisceral Transplant ¹	1 (20%) ¹
TOTAL	10 (1.3%)

Parameters	3-year Graft Survival Outcome	
	OTCoE	US ¹
LIVER		
Adult Liver Transplant Deceased and Living Donor	86.1%	85.91%
Adult Liver Transplant Living Donor	86.9%	87.03%
Pediatric Liver Transplant Deceased and Living Donor	91.2%	89.42%
Pediatric Liver Transplant Living Donor	91.3%	94.13%
INTESTINE		
Intestine Transplant	100%	56.04%
KIDNEY		
Adult Kidney Transplant Deceased and Living Donor	96.1%	90.32%
Adult Kidney Transplant Living Donor	97.2%	94.60%
Pediatric Kidney Transplant Deceased and Living Donor	96.8%	94.60%
Pediatric Kidney Transplant Living Donor	96.2%	97.39%
LUNG		
Adult Lung Transplant	77.6%	73.4%
Pediatric Lung Transplant	100%	NA

¹Based on the Scientific Registry of Transplant Recipients (SRTR) report (www.srtr.org)

The teams at the KFSH&RC's Organ Transplant Center of Excellence (OTCoE) have again taken on new medical challenges and successfully performed several firsts in 2022.

Pediatric intestinal transplant

A two-year-old male underwent successful isolated intestinal transplantation in November 2022. The underlying disease was microvillus inclusion disease, a condition characterized by chronic, watery, life-threatening diarrhea typically beginning in the first hours to days of life, preventing absorption of nutrients from food during digestion, therefore resulting in malnutrition and dehydration. Affected infants of this disease often have difficulty gaining weight and growing at the expected rate (failure to thrive), developmental delay, liver and kidney problems, and thinning of the bones. They usually do not have a life expectancy of more than three years.

Following allocation from a 10-year-old donor from Makkah, the entire small bowel, including parts of the large intestine, was transplanted to the patient with a cold ischemia time of 8.5 hours in a 4-hour surgery. The patient was discharged 90 days post-transplant and currently taking up food by mouth. During this time, he was able to increase his bodyweight from 6.5 to 8.3 kg, clearly documenting his success to thrive.

This isolated intestinal transplant for an infant was the first at KFSH&RC. Worldwide, around 150 of these procedures are being carried out, half of them in the pediatric age group.

Nine-way paired kidney exchange (PKE) performed in a single center

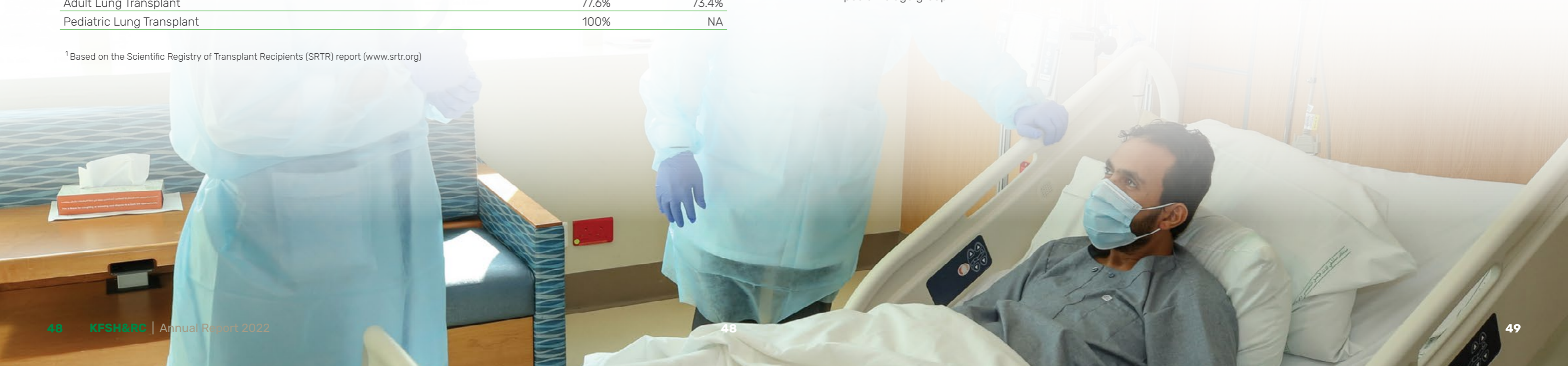
A nine-way chain triggered by a non-direct altruistic donor, representing one of the largest KPD chains (if not the largest) ever performed at a single center. Kidney transplants of the involved nine patients were performed over three days in November 2022; all patients are currently alive and enjoying excellent renal allograft function.

Minimally invasive esophagectomy

The patient is a 43-year-old male known to have GERD on medication. History of Crohn's disease 13 years ago.

There are many surgical approaches for esophagectomy. For this patient, the approach done was the fast tract minimal invasive esophagectomy, performed for the first time in KFSH&RC and rarely in Saudi Arabia. The surgical time took five hours.

This technique of minimally invasive esophagectomy with fast tract post-op care decreases postoperative morbidity and mortality and improved of the length of hospital stay.



Access to Care (continued)

Fetal Diagnosis and Therapy Program

Established in 2007, this program was the first and only comprehensive program in the region performing procedures for the diagnosis of genetic diseases, chromosomal abnormalities, and in-uteri intervention for a variety of fetal conditions.

3,285

Total number of patients served through the program
+4.2% ↑

1,506

Diagnostic intrauterine procedures
+5.8% ↑

263

Therapeutic procedures
+4.1% ↑

Pre-implantation Genetic Testing for Monogenic/Single Gene Defects (PGT-M)

Through KFSH&RC's PGT-M, a variety of genetic diseases are detected, providing families with the capability of preventing the occurrence of disease prior to pregnancy. A total number of 1,686 genetic disorders have been discovered since the inception of the program.

539

PGT-M therapeutic cycles in 2022

4,695

Couples accepted in the program

51%

Success rate (international benchmark of 43%¹)

Clinical Research Department

The department was established to promote and facilitate prospective clinical trial activities at KFSH&RC, providing access for our patients to be enrolled and treated on innovative international prospective clinical trials. It also aims to support research activities, in addition to revenue generation, through performing advanced therapeutics such as gene therapy and CAR T-cell trials.

154

Clinical research proposals
+185% ↑

781

Recruited patients
+96% ↑

26

In-house clinical trials (PI-initiated)
+160% ↑

¹ Reference: ESHRE PGT Consortium data; doi.org/10.1093/hropen/hoab024

Medical Tourism

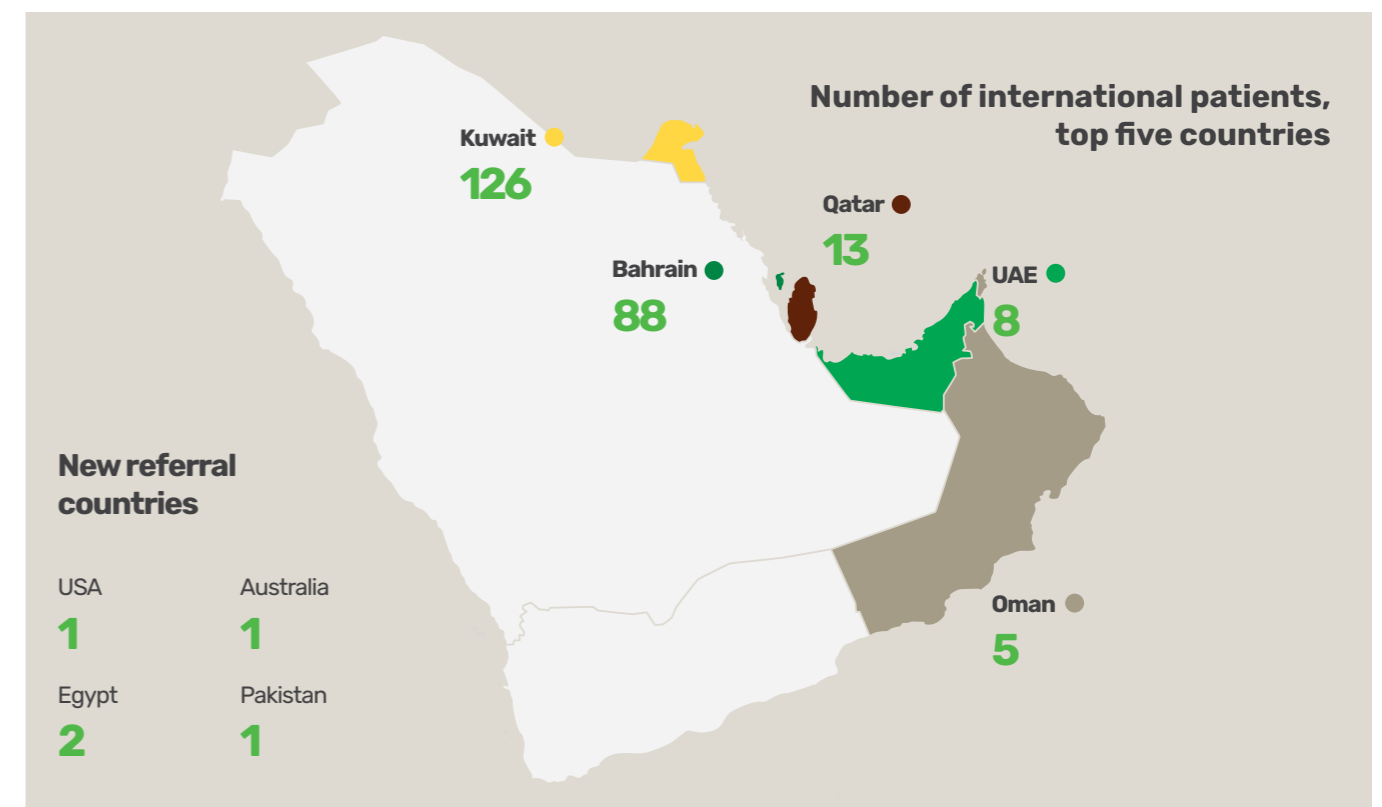
Attracting more patients from outside the Kingdom of Saudi Arabia is a national Vision 2030 objective and a key plank in positioning Riyadh as an international economic and high-tech hub. The agenda is significant and extends well beyond opening another source of health-related income; it involves job and investment growth across multiple sectors and includes the spill-over effects for research, education, tourism, and the national economy.

During 2022, KFSH&RC made important early strides in building its international patient flow and in expanding the services available, including developing associated support for patients and their families during and after treatment. The InterContinental Hotel-Riyadh, now owned

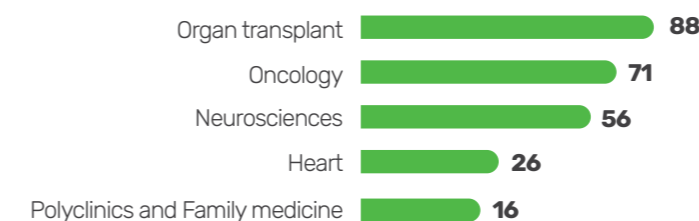
by KFSH&RC, will play an important role in this broader offering in the period ahead.

Pending availability of additional bed capacity and facilities, KFSH&RC is conscious of the need to prioritize the treatment of the Kingdom of Saudi Arabia's citizens and residents. However, strong growth of international patient numbers occurred in 2022, up by 21% to 323—essentially one new international patient per day. Over the period to 2030, KFSH&RC has plans to increase this figure towards 10,000 patients annually, the equivalent of 30 international patients per day.

Set out below are some of the key statistics relating to our international patient and medical tourism growth in 2022:



Top five specialties



Total treatment charges
SAR 103,005,857

Total collection
SAR 88,677,976



Access to Care (continued)

Medical and Clinical Services Development and Innovation

3D Printing Services

KFSH&RC takes regional leadership in 3D printing, a global trend that has permeated most industries. Launched officially in June 2022, the Hospital's 3D printing services department combines all relevant 3D services under one umbrella and caters to practitioners, patients, and consumers outside the hospital. The current scope of services cover metallic, orthotics/prosthetics, Polyetheretherketone (PEEK) printing, and surgical planning/modelling.

The 3D printing services at KFSH&RC aims to contribute to education and treatment through facilitating better understanding of the human anatomy and decreasing procedure time. The service also promotes research and innovation, especially with bio-printing, and invokes limitless possibilities. In the long-term, this leading technology is projected to instigate joint ventures to build a subsidiary that services Saudi Arabia and beyond.

Expansion of Ophthalmology Services

Tremendous growth during the year, particularly at KFSH&RC-Madinah, as the organization focused on facilitating more specialized surgical procedures; at least two-fold increase in multiple indicators was seen, as follows:

+140%
Patients seen

+377%
in surgeries
conducted

+115%
in procedures
performed



Unique services

First in the world to use **bone grafts for pectus excavatum repair** for an adolescent patient

First in the Kingdom

Perform **Peroral Endoscopic Myotomy (POEM)** for a pediatric patient to treat swallowing disorders caused by muscle problems

Use **FLUOPTICS®** to detect the parathyroid gland to optimize clinical outcomes

Perform **pelvic exenteration** cases

Use **Cryoprobe** for endo-bronchial and trans-bronchial bronchoscopic procedures



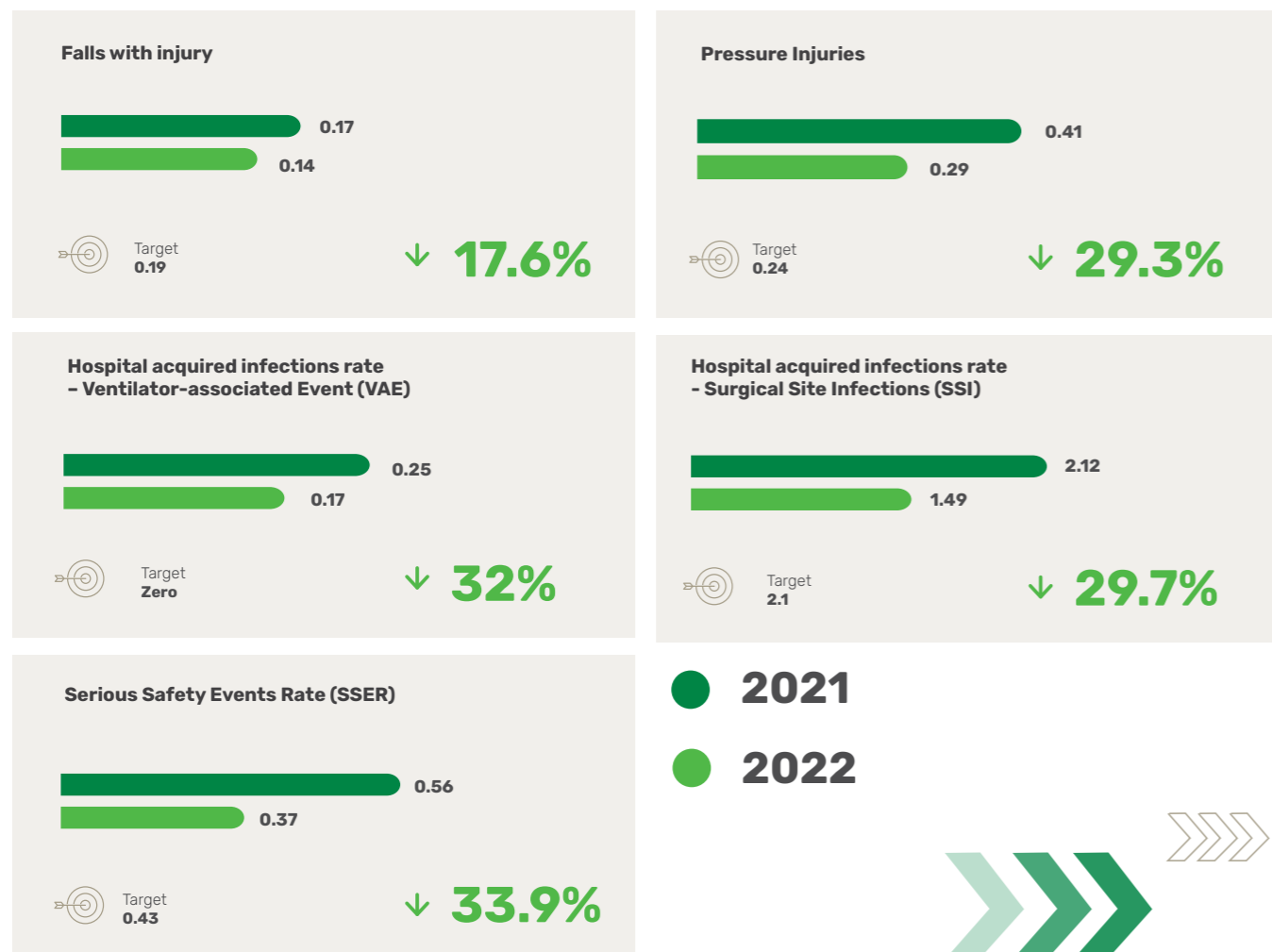
Patient Safety, Quality of Care, and Patient Experience

KFSH&RC's quality of care and patient experience are at the heart of our recognition as the Middle East region's top hospital and the reason why patients from across Saudi Arabia, and increasingly from across our region, seek treatment here.

Despite the increase in demand and volume of the Hospital's services in 2022, the healthcare providers continued to work towards improving the quality of care and ensuring every patient's safety. These efforts led to a reduction in harm and greater operational efficiency, enabling KFSH&RC to accommodate and treat more patients.

Zero Harm

KFSH&RC's zero harm journey steadily progresses, with improvement in serious safety events rate, pressure injuries, falls with injury, and surgical site infection rates.



▲ Better than benchmark ● Meets benchmark ▼ Worse than benchmark

	2020	2021	2022
CLABSI rates	●	▲	▲
CAUTI rates	●	▲	▲

Central Line Associated Bloodstream Infection (CLABSI) and Catheter Related Urinary Tract Infection (CAUTI) rates are measured in relation to the number of days an infection is evident per a thousand central line or catheter days. KFSH&RC typically operates at low levels within the target benchmark¹.

Through multiple initiatives launched to improve safety and quality across all hospital sites, the number of safety reports increased favorably by 3.1% from 20,576 in 2021 to 21,222 in 2022.

Hospital-associated Venous Thromboembolism (VTE)

Literature shows three international studies conducted regarding VTE among hospitalized medical patients.² Considering trends and risk factors, VTE events were observed and documented, leading to the rates reflected below. In comparison, KFSH&RC records lower VTE incidence rates.

Country of study	VTE occurrence value, % of admissions	KFSH&RC, % of admissions
United States	1.20	
United Kingdom	0.17	0.021
Australia	1.15	

Early Sepsis Detection Project

Aim: Reduce the risk of sepsis and septic shock by improving the accuracy of early sepsis detection and speed of treatment in the inpatient setting

Method: Achieved by utilizing a risk prediction scoring tool that allows early diagnosis and prompt antibiotic and supportive therapy to be administered

Benefits/outcomes:

- Alerts calculated automatically
- Standardization of management approach
- Improved communication
- Reduced length of stay and ICU admissions

Areas implemented, outcomes

In the piloted units, acute sepsis mortality rate decreased by 20% and the average sepsis-related ICU length of stay decreased by approximately 20%.

By the end of 2022, the project was fully deployed, targeting to improve outcomes and save costs.



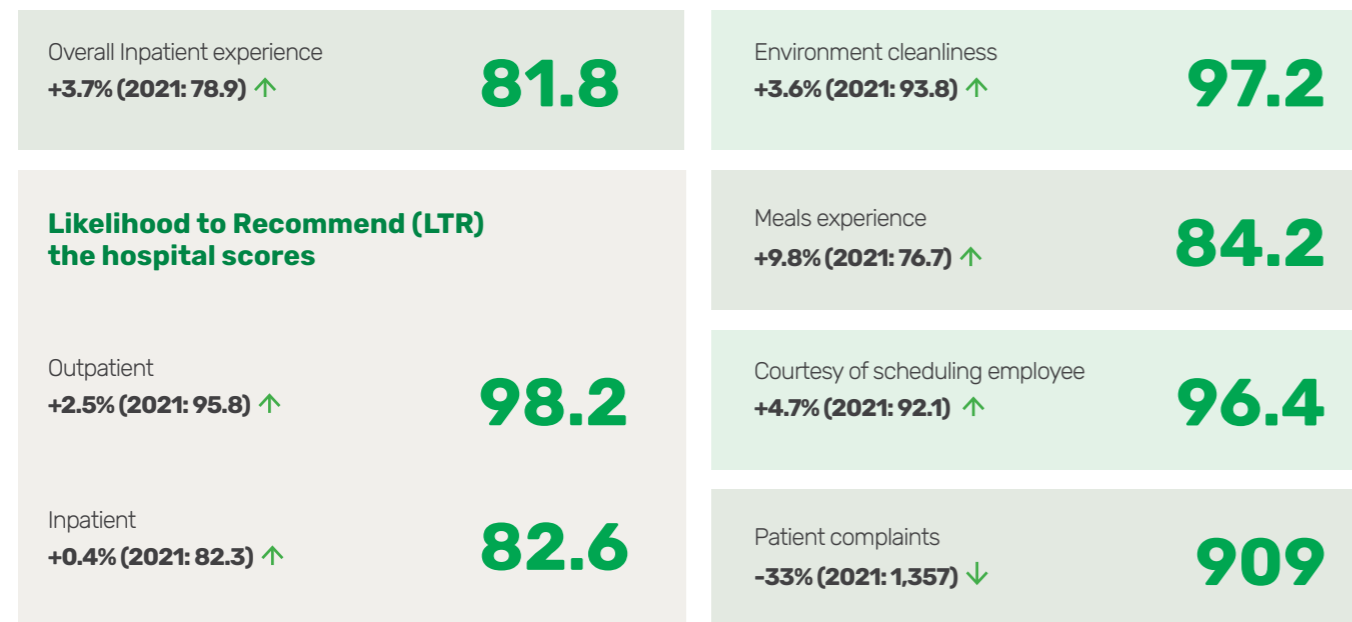
¹ CLABSI benchmark: <1.1; CAUTI benchmark: <2, per Centers for Disease Control and Prevention's National Healthcare Safety Network (CDC-NHSN).

² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9679881/#:~:text=This%20study%20found%20that%20HA%2DVTE%20events%20occurred%20in%201.2,associated%20with%20increased%20adverse%20outcomes.https://onlinelibrary.wiley.com/doi/full/10.1111/bjh.18612>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5034410/#:~:text=Amongst%2C%203%2C33%2C677%20patients%2C%20the%20incidence,HA-VTE%20died%20in%20hospital>

Patient Safety, Quality of Care, and Patient Experience (continued)

The KFSH&RC Experience is focused on delivering healthcare in a way that centers on the perspective of the patients and their loved ones, while promoting a healthy, encouraging environment for caregivers and addressing the health needs of the Organization’s surrounding community.



An important element contributing to improvements in 2022 has been our consistent surveying of patient experience. Following every interaction with our services, we seek structured feedback, summarize and publish the aggregate results internally, recognizing top performing departments and personnel. We also review all complaints and issues raised for opportunities to improve.



Improving patient experience, as with any journey to excellence, is without an end; the bar is always being raised both by us and by our patients.

Wheelchair Accessibility Program

- QR map links to direct patients and families to wheelchair stations
- Tagging wheelchairs using RFID technology
- New inventory management and tracking system to identify and locate unused wheelchairs

Marhaba Lounge

- Offers **personalized information and guidance** to patients on first hospital visit
- **Patient education about rights and responsibilities** in a welcoming environment
- **Services offered physically and virtually**, aiming to ensure optimal first-time visit experience

Experience Ambassadors

- **+130** personnel selected to **lead, educate, coach**
- Patient experience **best practice** implementation
- **Physical appearance/ environment, behavior, and process/system** improvements as focus areas

Priority Lane Initiative

- **Express service** during hospital visits for the elderly, people with disabilities, and those needing extra support

Quiet Time Initiative

- **Decreased hospital noise level** during specific hours
- Opportunity to rest and recover **without reduction** in care provided
- **Impact on patients and family members** as well as on **staff**

Research and Education

Research is at the heart of medical science. KFSH&RC's Research Centre is on a constant mission to integrate research into medical practice for the improvement of care, translate findings into practical solutions to address rapid environmental changes, and create impactful differences on the lives of our patients and the community as a whole.

300+

Full-time staff working across a range of clinical, scientific, technical and computational disciplines

340

Approved research proposals
+17.2% (2021: 290) ↑

4

Patents awarded
+100%

SAR

1.5 Mn+

In research grants from third parties to support research
+4.5%

985

Publications*
+8% (2021: 912) ↑

* Biomedical research papers in peer-reviewed journals on a wide range of topics, including but not limited to the following:

- Medical and cancer research
- Genetics and genetic diseases
- Immunology and immune disorders
- Stem cells
- Nutrition and environmental health
- Radiation medicine and radiopharmaceuticals

New patents

- United States patent number US11389217B2, titled "**Vertebral fixation device,**" granted in July 2022
- United States patent number US11464538B2, titled "**Surgical apparatus, in particular a navigation probe for localizing and treating lesions in a brain,**" granted in October 2022
- United States patent number US11512286B2, titled "**Method for generating human multipotent mammary stem cells from normal primary breast luminal cells,**" granted in November 2022
- United States patent number US11492599B2, titled "**Method for generating induced pluripotent stem cells from fibroblast cells,**" granted in November 2022

Scientists at the Research Centre discovered a tumor forming role of the fumarate hydratase gene in causing familial non-medullary thyroid cancer, and developed a novel technique for locally producing the important and very short half-life radioisotopes Gallium-68 and Copper-64, which are used in positron emission tomography to locate neuro-endocrine tumors.

Addressing the need to improve the ethical and scientific uses of animals in medical research, the Research Centre worked towards the accreditation of its animal care facility. In 2022, the Association for Assessment and Accreditation of Laboratory Animal Care International granted full accreditation to our facility, **the first institution to receive such recognition in Saudi Arabia.**

Insofar as strengthening its contributions to the society, KFSH&RC signed a memorandum of understanding with Roche, one of world's largest pharmaceutical companies and the leading global provider of cancer treatments, to establish a strategic partnership in healthcare sustainability.

14 KFSH&RC scientists recognized by Stanford University as among the top 2% of scientists globally based on their body of work and the frequency with which their publications are cited by other scholars globally.

- Abdelilah **Aboussekhra**
- Fowzan **Alkuraya**
- Khalid **Abu Khabar**
- Iman **Al-Saleh**
- Jan **Brismar**
- Abdulrahman **Alrajhi**
- Avaniyapuram Kannan **Murugan**
- Ali **Alzahrani**
- Ahmed **Al-Qahtani**
- Subhani **Okarvi**
- Sami **Al-Hajjar**
- Abdulrahman **Al-Nuaim** (Retired)
- Peter **Hall** (Retired)
- Peter **Dalquen** (Retired)



Research and Education (continued)

KFSH&RC has played a role in the training of 1 in 5 of the country's physicians and is still the top choice for over 80% of the country's medical graduates seeking residency programs. Beyond this, and through its affiliation with Alfaisal University, KFSH&RC contributes to the further development of the nation's physician specialists and healthcare providers.

Scholarships

118

Approved scholarship applications during the year (abroad)

291

On-board scholars abroad

28

Scholarship returnees during the year

Education

Medical trainees

4,490

Non-medical trainees

5,636

Nursing and allied health trainees

753

Graduated residents and fellows

360

New training programs

- 7 Pharmacy specialty residency programs
- Saudi diploma for home healthcare for physicians
- PET, Mammography, and Angiography training
- Joint diploma in obstetrics and gynecology ultrasonography

Continuing medical education (CME)*

CME hours accredited by the Saudi Commission for Health Specialties (SCFHS)

1,905

CME accredited events

335

CME participants

36,159

* KFSH&RC emphasizes the importance of CME for all its professionals, and thus strives to provide it both virtually and physically through various modes: grand rounds, conferences and symposia, webinars.



In 2022, we achieved a 20% increase in graduated trainees and continued to expand fellowship and residency training, launching independent programs and partnerships unique to KFSH&RC. In addition, we commenced the establishment of the KFSH&RC Training Academy to ensure a sustainable stream of professionals in medical and non-medical fields.

Part of our goals is to provide a professional development academy to offer courses to institutions around the Kingdom. To this end, we have introduced an apprenticeship program for external applicants to improve their skills through hands-on training. This will be overseen and delivered by highly experienced KFSH&RC professionals in more than 17 fully designed courses in a range of clinical disciplines.



82%

of medical residency applicants select KFSH&RC as their first choice

83%

Medical trainees' pass rate



Simulation Center training hours

1,941

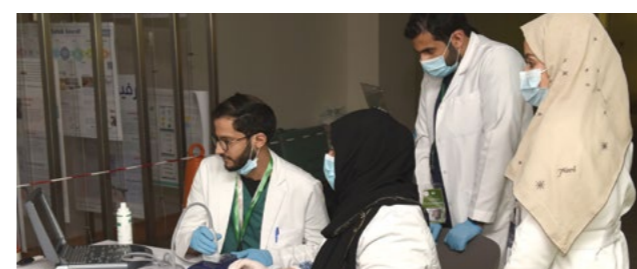
Simulation Center participants

4,152

As part of its strategy to align levels of learning, Education and Training, in collaboration with Human Capital, has unified all processes and platforms across all three sites using technology such as webinars and virtual classes to standardize quality, content, and methods. This has ensured that all internal and external students and trainees now have the same tools and opportunities to develop. In 2022, more participants opted to attend in-person training courses, given the increased availability of slots in such learning mode.

The Life Support Training Center upgraded its techniques to Resuscitation Quality Improvement standards, which was rolled out across KFSH&RC locations in a practical rather than classroom-based environment. The Jeddah site conducted Prehospital Trauma Life Support courses as an authorized Neonatal Association of Emergency Medical Technicians training site. In addition, the Life Support Center in Madinah was accredited by the American Heart Association.

Likewise, the Simulation Center was enhanced and equipped to better prepare our medical trainees, nurses, and allied health personnel.



Completed courses online

154,152

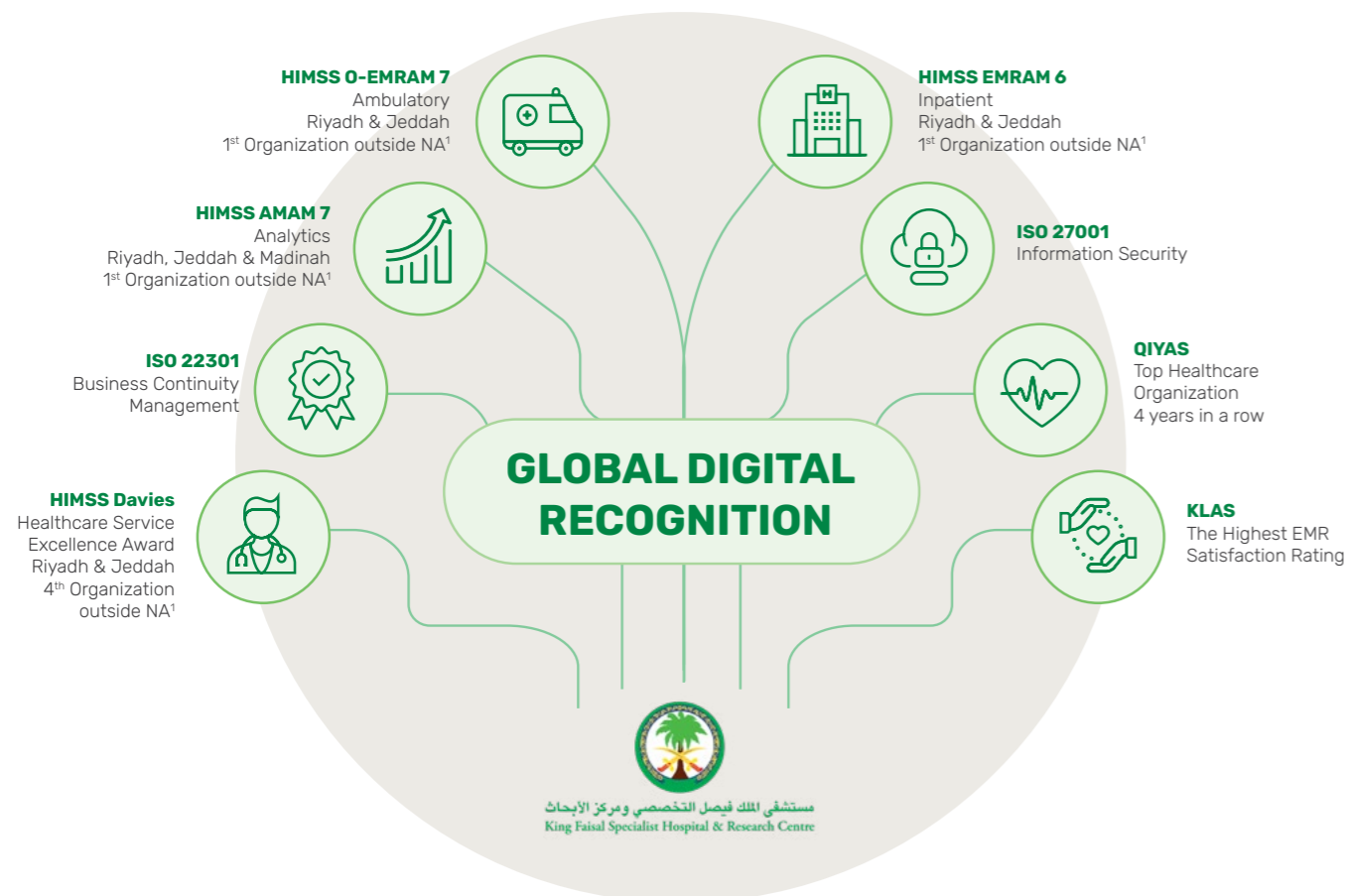
Participants in online courses

51,791

New strategic partnerships and affiliations also reflect our progress in many areas. Last year, we enhanced Education and Training's association with Mumayyaz Leadership Fellowship Program, Healthcare Leadership Academy, SCFHS Health Academy, Competitive Technology and Sheikh Shakhboub Medical City in the UAE.

Digital Health

The future of healthcare is increasingly digital. Technology is not only opening up new options for delivering and managing care, but also entirely new fields of data analytics and artificial intelligence. KFSH&RC is at the forefront of digital health in the Kingdom and is recognized internationally as a leader. We anticipate that digital excellence will be a key differentiator of KFSH&RC as a leading global healthcare provider in the future.



Digital highlights in 2022

AI-driven personalized and optimized radiotherapy system

AI-driven dosimetric criteria selection process for specific tumors to enhance the quality of radiation therapy plans for patients with head and neck and breast cancers

Automated detection and reporting of abnormal chest x-ray

AI-powered solution enables fast and accurate detection and reporting of abnormal chest X-ray scans, reducing the radiologist's time in identifying and retrieving the information from thousands of radiological tests in the system

Critical result mobile notification

Real-time critical result notifications are sent to physicians' mobile devices

Prescription volume forecasting

Forecasting models to inform pharmacies about expected demand up to a week in advance, based on a two-year history of prescription volumes

AI-based liver segmentation

AI solution that performs fast and accurate liver segmentation, reducing the time needed by 85%. The solution also supports assessment of the donor-liver prior to a living related transplant procedure.

Diagnostic AI tool for genetic disorders

Non-invasive assessment tool to assist with early detection of genetic disorders, reducing time for diagnosing rare diseases from 1-5 years to less than a year

MIT AI hospital network participation

KFSH&RC is the first hospital in Saudi Arabia to join the Massachusetts Institute of Technology (MIT) Jameel Clinic and Wellcome Trust to collaborate on the use of AI in healthcare and share outcomes with the international healthcare community

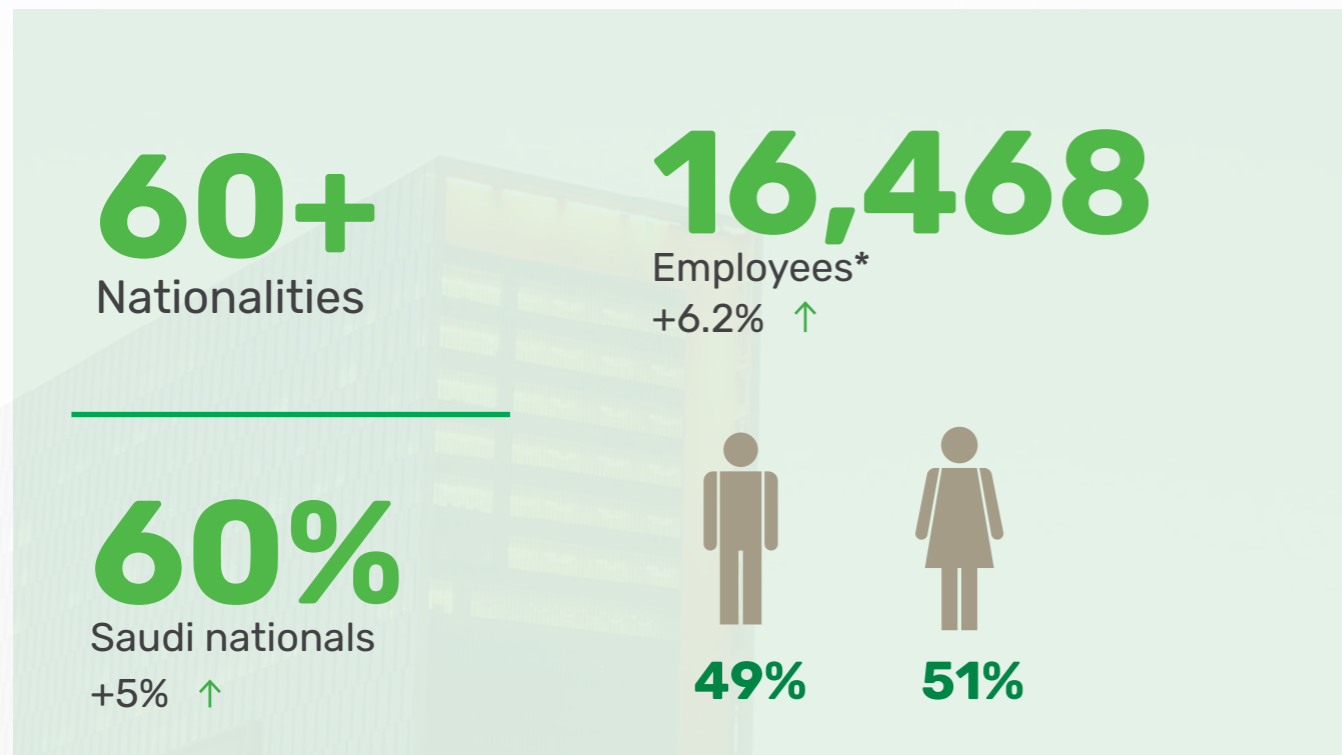


¹ NA: North America

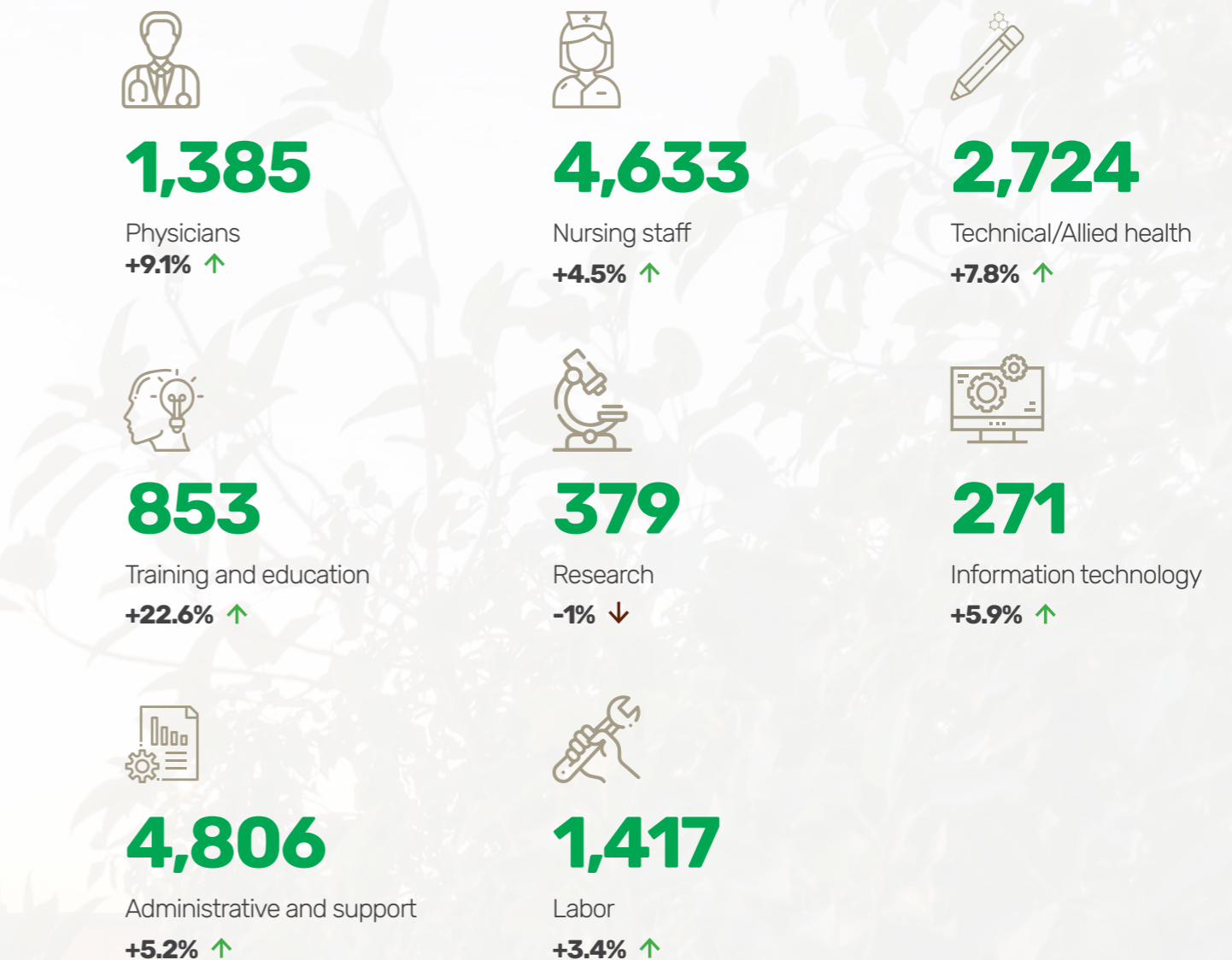
² College of Healthcare Information Management Executives

Our People

KFSH&RC continued to invest and capitalize on its greatest asset—its people. In 2022, the Human Capital group focused on initiatives that promoted professional growth, strengthened staffs' capabilities, and identified the challenges faced while taking the path towards the aspiration of becoming the employer of choice.



* Number of primary employees in 2022 (excluding locum, part-time, temporary, trainees, employees on secondment, and scholarship recipients)



Our People (continued)

The Stevie Awards for Great Employers is an international competition that recognizes the best employers and human resources professionals, teams, achievements, and HR-related products and suppliers who help create and drive great places to work. In 2022, out of 950+ nominations from organizations in 26 nations, KFSH&RC received three Stevie awards, as follows:



Winner for Achievement in Managing a Remote Workforce



Winner for Most Innovative Work-from-Home Plan



Winner for the Most Valuable HR Team, COVID-19 Response Category

In line with Human Capital's continuous efforts to provide unique employee experiences, the following are some of several initiatives that the team worked on and implemented throughout the year:

- **Career and salary enhancement** for several job categories
- **360° performance feedback tool** launched during the first quarter of 2022
- **"Performance for a Better Culture"** awareness campaign to encourage KFSH&RC staff to raise awareness and engagement
- Provision of support to employees through the **employee counselor** function, resulting to **52% decrease on the resolution time for complaints lodged**
- **Continuous enhancement and investment** in employees' self-services systems **for easier facilitation** on employees' transactions

As compared to 2021, KFSH&RC's Saudization percentage increased by 5% in 2022, with the nursing category increased to 39.1%. This increase in Saudization rate was supported by a training program to attract and train a maximum of 150 nursing students from universities before graduation. Human Capital also implemented an education program to train Saudi graduates and prepare them for future vacancies of hospital assistants in both medical and non-medical departments.

The global competition for talent has increased the challenges we face attracting and retaining staff in virtually all disciplines. However, voluntary attrition has remained reasonably steady at 7.5% (up from 7% in 2021). Nursing attrition, previously running at nearly 13% in 2021 has reduced slightly to 12% in 2022.

While KFSH&RC was again ranked among the top employers in the Kingdom and the region, an expert review of the organization's compensation and benefits has indicated that the increased global competition for talent will continue to put upwards pressure on remuneration in the period ahead, as well as other factors affecting attraction and retention for top talents, such as the organization's culture and working environment, and opportunities for growth and development.

Working together to improve the culture

One of KFSH&RC's transformation focus elements centers on the care for our people and culture. The initial work on a subset of topics covering this area started few years ago; in 2022, we commenced defining a holistic plan across talent management, culture, and change management. Progress was seen throughout the year, including assessments across talent management dimensions, regional benchmarking, and identification of 25 initiatives across 11 themes to drive mindset and behavior shifts.

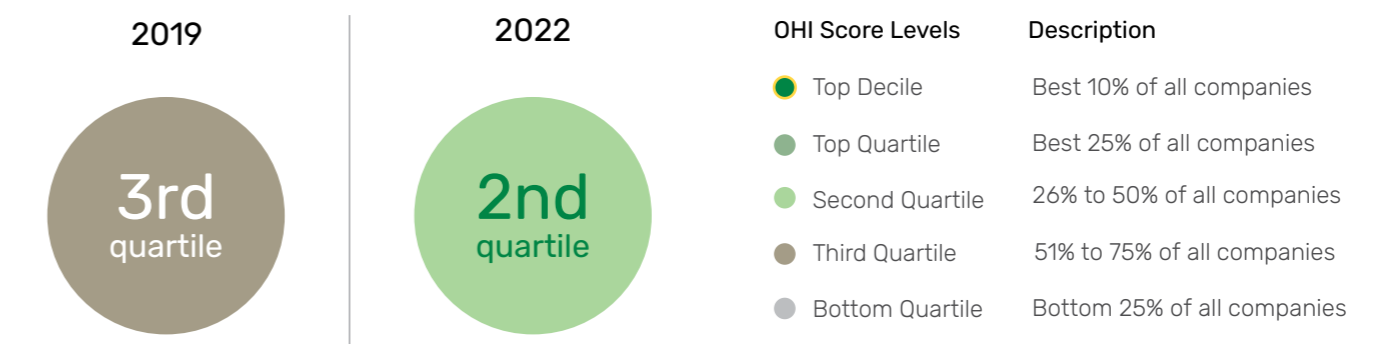
Organizational Health Index (OHI)

Using the OHI tool used to track the organizational elements that drive performance, KFSH&RC recorded improvement on its OHI score in 2022. The organization ranked from the third quartile of global benchmarks to the second quartile. Our goal is to move KFSH&RC into the top quartile within the next two years and ultimately achieve a ranking in the top decile by 2030.

The increase in OHI score has been possible through a renewed focus on employee satisfaction and engagement to enhance the culture. A couple of first-at-KFSH&RC engagement events were scheduled during 2022, which received a positive response. Going forward, a detailed plan is being put together to enhance the culture, which without a doubt, is one of the key enablers for achieving the strategic objectives.

Areas of Strength	Areas of Improvement
Direction	Leadership
Coordination and Control Accountability	Accountability
Innovation and Learning Motivation	Motivation
External Orientation	
Capabilities	
Work Environment	

Since 2019, KFSH&RC's organizational health score has improved



Note: "All companies" mentioned above refer to those covered by the benchmark set, including global and Middle East companies, health care institutions, etc.



Our People (continued)

Leadership Development and Capability Training Project

In partnership with the Saudi Commission for Health Specialties (SCFHS) and the Healthcare Leadership Academy (HLA), KFSH&RC commenced the Leadership Development and Capability Training Project, which will progress into 2023. The project's aim is to prepare and develop KFSH&RC's leaders and personnel in order to help the Organization achieve its strategic goals.

Project scope

- 6 months duration
- 558 leaders and personnel

Throughout the project, participants will undergo different modes of training that cover these capability building training programs

Problem solving	Change management
Data analytics	Health insurance
Agile methodology	Communication
Innovation	Proj mgmt. fundamentals

Learning journeys

The Human Capital team also started the implementation of the building blocks concept of learning journeys. Under each journey type, several journeys and programs are available for the staff, who will build their respective learning journeys accordingly. The concept allows for flexibility in selecting programs that will help improve the staff's professional knowledge and competencies.

Journey types



Onboarding



Fundamentals



Transformation



Leadership



Thematic booster



Journeys and programs

Frontliner fundamentals

Admin fundamentals

Digital services

Research commercialization

Transformation champions

Human capital

Strategy

Operations excellence



Our Facilities

In order to support the expansion of its services and provide a conducive and safe environment to patients and employees, KFSH&RC ensures that its facilities are regularly assessed and projects are prioritized to address ongoing needs. Throughout 2022, a number of significant new and renovation projects were completed, mostly in response to the call for infrastructure upgrades and compliance with regulatory bodies' requirements. In addition, our Capital Projects and Facilities team focused on the execution of contracts for priority projects that form part of the Hospital's operational plan for the upcoming year. Considerable progress was achieved on some major projects scheduled to be completed in 2023 and 2024.

KFSH&RC-Madinah campus

- Handover of main hospital project by end of 1st quarter 2022
- Execution of multiple safety projects
- Remainder of the snag list expected to be completed by end of 2023

KFSH&RC-Jeddah campus

- Expansion of the Emergency Medicine Department to address constant issues of service flow and bottlenecks
- Establishment of day medical unit to increase bed capacity—additional 10 beds, waiting area, staff lounge
- **Jeddah Mega Project**
Onsite work resumed in the last quarter of 2022, with a new target date of completion in 2024. Additional project scope was identified and construction work accelerated, paving for significant progress.

KFSH&RC-Riyadh campus

- Internal works upgrade on the Private Wing Building
- Replacement of all power transformers across the Riyadh campus to ensure reliability of electrical power supply to hospital buildings
- Expansion of underground parking facility to meet increasing demand, allotting space for 350 vehicles
- Fire protection system upgrade in E Housing Complex
- Expansion and renovation of the Computed Tomography (CT) Suite to improve overall flow within the service

Polyclinics and Family Medicine Building

(scheduled to complete in 2023)

28k sq. m. state-of-the-art outpatient healthcare project adjacent to the main Riyadh campus

Main building, 37k-sqm car parking area, green areas and an underground tunnel connecting the main building to the existing KFSH&RC campus underground tunnel

- Outpatient services:
- Women's health
- Mother and child medicine
- New blood bank
- Family medicine
- Commercial space for cafes and other vendors

Training and Development Center

(scheduled to complete in 2024)

Training center for medical, nursing, and administrative staff, estimated to accommodate 400+ trainees

Two floors uniquely designed to help improve productivity and creativity

Includes a reception area, classrooms, administrative offices, a café, and many collaborative spaces

Madinah

Jeddah

Riyadh

Our Collaborations and Partnerships

KFSH&RC values and nurtures synergetic partnerships that improve its capabilities and allow teams to foster the highest standards of services and advancement. Thus, the organization is constantly keen in entering into both national and international agreements to further knowledge gain, exchange experiences in various aspects of healthcare, and improve our services. During 2022, KFSH&RC successfully established several collaborations that aim to support these goals.

International Collaborations¹



Johns Hopkins Medicine International (JHMI)

Improvement of the quality and safety of care across all KFSH&RC branches



Massachusetts General Hospital

Establishment of a clinical trials unit at KFSH&RC for the oncology service



Planetree International

Facilitation for KFSH&RC to obtain Planetree membership to aid in improving patients' experience



Department of Health in Abu Dhabi

Referral of Emirati patients for treatment at KFSH&RC as part of the Hospital's medical tourism program



International Society of Nephrology

Improvement of the medical and educational programs at KFSH&RC



Canadian Association of Schools of Nursing (CASN)

Attainment of the Nurse Educator Certification Program to improve nursing education



American College of Surgeons National Surgical Quality Improvement Programs (ACS NSQIP)

Improvement of the quality and safety of care across all KFSH&RC branches

¹Non-exhaustive list

Collaboration agreements



Spotlight: Memorandum of Understanding (MoU) between KFSH&RC and Oracle-Cerner

Per this MoU, the parties will exchange shared experiences and develop programs that will enable the use of data and artificial intelligence within Saudi Arabia's healthcare system. The scope of this collaboration includes big data analytics and machine learning capabilities in support of data-based clinical research activities and data-driven operational improvement projects.



National Collaborations

- Memorandum of Collaboration with **Imam Mohammad bin Saud Islamic University (IMSUI)** to cooperate in research and post-graduate studies
- Collaboration Agreement with **Madinah Central Blood Bank in King Fahad Hospital (KFH)** to obtain blood and blood components to support clinical services
- Collaboration Agreement with **Alfaisal University** to develop education, training, and research
- Collaboration Agreement with **Eighties Generation for Advertising Company (8IES)** to improve media and marketing services at KFSH&RC
- Memorandum of Understanding with **Project Management Institute-Kingdom of Saudi Arabia Chapter (PMI-KSA)** to cooperate in community, knowledge, technical, and advisory partnerships towards improving project management at KFSH&RC
- Memorandum of Understanding with **Saudi Data and Artificial Intelligence** to develop E-services at KFSH&RC
- Memorandum of Understanding with **Lean Business Services** to promote the utilization of artificial intelligence
- Memorandum of Understanding with **King Khalid University (KKU)** to cooperate in education, training, and clinical practice
- Memorandum of Understanding with **Cyber X** for potential opportunities concerning the awareness process to improve health education at KFSH&RC
- Memorandum of Understanding with **Roche Products Saudi Arabia LLC** to identify areas of collaboration under the pillars of value-based healthcare, advanced diagnostic for cancer patients, and research and clinical trials advancement

Efficiency, Value, and Sustainability

KFSH&RC made huge strides in recent years to embed value-based healthcare thinking in its clinical and non-clinical practices. This has not only produced significant improvements in performance, but also received recognition from organizations as diverse as the European Centre for Value Based Healthcare, from whom we received a major international award in 2022.

Even though our staff numbers are increasing—most recently due to the opening of our new hospital in Madinah—the volume of clinical activity produced by KFSH&RC staff [measured in clinical relative value units (RVUs)] is growing at 13%. This is twice the rate of our headcount, which grew 6% in 2022.

Overall, the organization’s operational efficiency reached higher levels in 2022, enabling KFSH&RC to treat and save more at true value for health.

82.7%
Bed occupancy rate
0.3% ↑


82%
Operating room (OR) utilization rate
-2% ↓

7%
OR cancellation rate
-7.9% ↓

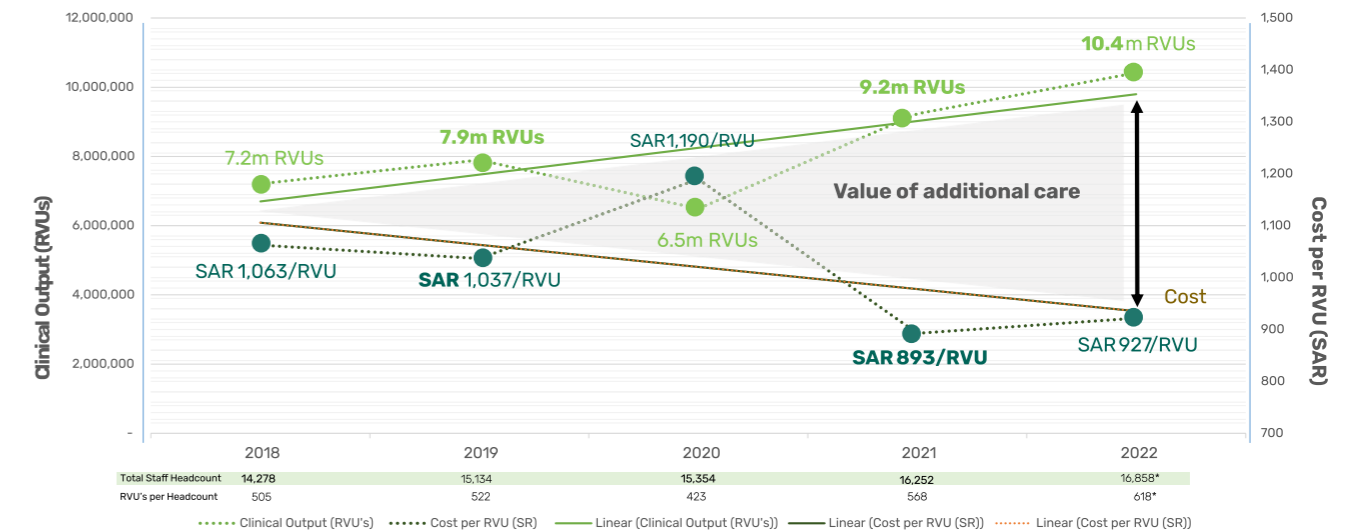
8.97 days
Average length of stay (ALOS)
-1.4% (2021: 9.1) ↓

11.25
Diagnosis Related Group (DRG) adjusted ALOS
-6.9% (2021: 12.08) ↓

Several initiatives contributed to the improvement of this indicator in 2022, including increasing the number of clinical pathways in the medical departments and improved quality of coding and monitoring of data.



As shown in the next diagram, the value of healthcare we deliver, i.e., patients treated, improved quality, reduced complications and lengths of stay, increased number of beds and operating room utilization, lower readmissions, has increased substantially in recent years.



KFSH&RC has been focusing on increasing patient throughput and clinical activity while minimizing costs through enhancing efficiency. With more clinical activity being delivered at a lower unit cost, the value of additional care delivered from 2018 to 2022 is SAR 4.4 Billion..

RVU: The relative amount of physician work, resources, and expertise required to treat patients

*2022 headcount and related calculations include 1,269 staff at Madinah

Looking beyond our clinical areas, we have also delivered significant savings from waste reduction and improved our inventory turnover ratio to 3.5 times per annum, a 25% improvement on the turnover rate of 2.8 times per annum in 2021.

Revenue Cycle Management (RCM)

In addition to our focus on costs and efficiency, we have also been building up the organization’s RCM capabilities, in anticipation of the move from direct government budget funding to becoming an independent non-profit foundation. Although the government directly funded the treatment of most patients in 2022, KFSH&RC has been expanding its non-government sources of income through the treatment of insured, self-pay, corporate, and international patients, as well as through commercial arrangements with other hospitals in the Kingdom to provide specialized laboratory and genetic testing and radiopharmaceuticals.

In 2022, KFSH&RC billed approximately SAR 832 million to non-government clients and patients and had collected SAR 266 million (32%) by year-end, up from approximately SAR 600 million billed and 20% collected in 2021. Although there are numerous practical, social, and stakeholder communication issues to be overcome as we expand billing and payment practices, we anticipate non-government billings approaching, if not exceeding, SAR 1 billion in 2023 and collections reaching 50%. In coming years, we expect further growth in both billings and collections, as the proportion of our non-government revenue continues to grow, in line with other leading benchmark hospital groups and our financial sustainability strategies.

To assist in the careful management of this critically important sustainability initiative, which also has significant brand and patient experience implications, KFSH&RC has engaged an expert revenue cycle business partner firm to work alongside our staff, augmenting our resources and transferring skills, and identifying opportunities for process and system improvements. We have also initiated the onboarding of a specialized credit management firm to assist with improving recovery of long-outstanding amounts owing.

Efficiency, Value, and Sustainability (continued)

Subsidiaries and Investments

The third arm of our financial sustainability triangle, complementing cost/efficiency improvement and revenue cycle management, is income diversification through complementary business and investment activities. This is a critical financial sustainability activity of leading global hospital groups, including academic medical centers. Income diversification enables these organizations to preserve and grow their financial reserves and pursue strategic business development opportunities that keep them at the forefront of global care provision and innovation.

By comparison, KFSH&RC's investment portfolio of approximately SAR 1.5 billion and four fully-owned subsidiaries is a relatively modest beginning. However, this is a key arm of our financial sustainability strategy as an independent non-profit foundation.

Our goal is to establish or invest in businesses with strong growth potential where KFSH&RC is potentially a major and growing customer, especially where the business has the capability to expand as a supplier of services within the domestic Saudi health sector that would otherwise have been imported. A relevant example is genetic testing, which was provided previously by overseas firms at premium prices with longer turn-around times. KFSH&RC and its commercial subsidiary is increasingly replacing the 'sending out' of certain genetic tests throughout the Kingdom.

Summarized below are the activities of our current subsidiaries and key achievements in 2022:

Subsidiary	Business Type	Business Sector	Products and Services
Saudi Diagnostic Limited Company (SDL)	Medical services	Laboratory services	<ul style="list-style-type: none"> Advanced genetic testing Metabolic and toxicology tests Reference laboratories
Al-Takassusi General Limited Company (TGL)	Medical and technology services	Radiology and health technology services	<ul style="list-style-type: none"> Drugs and radioactive isotopes Teleradiology services Health technology solutions and consultation
Allergotek Limited Company	Pharmaceuticals	Distribution and resale of pharmaceuticals	<ul style="list-style-type: none"> Allergy vaccines and reagents Diagnosis and treatment mechanisms for allergic respiratory diseases Importation of pharmaceuticals and medical devices
Mahd Alroyah	Real estate management and operation	Commercial and residential real estate	<ul style="list-style-type: none"> Management of real estate holdings owned by KFSH&RC



National-level contracts with government hospitals

Major breakthrough success with the government's national unified procurement company (NUPCO), with SDL winning a global tender to become the designated vendor to government hospitals for a range of genetic tests that would otherwise have gone to international vendors



Expanded commercial testing

SDL evaluated several opportunities for expanded high-grade commercial laboratory testing, such as for prohibited substances in sports and major international sporting events, and for non-human testing as required by the national regulatory bodies for horses, camels, and falcons. During 2022, an initial national-level agreement was signed to undertake commercial laboratory verification of camel and horse pedigrees



Teleradiology

Expansion of TGL teleradiology service to cover additional private hospitals and meet the demand for transcription radiology reports by specialized consultants. In 2023, the implementation of walk-in facilities for customers who seek second opinions on original diagnoses is planned



Radiopharmaceuticals

Allergotek continued to expand its service offerings to meet the national demand for radiopharmaceuticals, largely used in the diagnosis and treatment of cancer. Consideration is presently being given to further selected expansion to other Gulf and the Middle East nations



Investment portfolio

In addition to direct commercial investments in related business activities, KFSH&RC maintains an equities and securities investment portfolio. This portfolio is essentially a source of long-term reserves and is managed by an industry leading fund manager under the stewardship of the KFSH&RC Board's Finance and Investment Committee.

At the end of 2022, funds under management totalled SAR 1,530,081,216, comprised of:

Diversified investment portfolio:
SAR 1,165,411,711

Emergency reserve funds:
SAR 364,669,505

The portfolio has consistently performed above policy benchmarks, with a cumulative above benchmark return of 8% since 2016. Funds are either used to support hospital operations or reinvested, subject to the Board of Directors' approval.

03 Leaning into Environmental and Social Responsibility, Governance, and Risk Management

Caring for Our Environment	80
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Our Organizational Governance	84
Dealing with Risk and Opportunity	88

Partnership with **Tarshid**

Projected savings equivalent to growing
72,000
seedlings



Caring for Our Environment

Environmental focus areas



Renewable Energy Projects

Commencement of a major **solar panel program**, involving installation of roof-mounted solar panels on hospital buildings, car parking towers and covered walkways, as well as solar-enabled outdoor parking shades

Conversion of diesel broilers into electric ones in the main energy production plants, **centralizing chiller plants** to balance energy distribution more effectively

Installation of **LED lights and motion sensors** to reduce energy consumption

Targeted savings of 25-30% in energy consumption through the 3-year engagement with the Saudi Energy Efficiency Center



Medical Waste Treatment

Medical waste treatment is a key priority and KFSH&RC is currently working on initiatives to **find alternative sources** rather than burning the medical waste, which generates toxic emissions



Recycling Waste

The awareness campaign for recycling has been reinforced, along with the installation of recycling machines for plastic bottles in key areas in the hospital. Several recycling initiatives shall be activated in the coming year.



LEED Building Certification

Adoption of **LEED (Leadership in Energy and Environmental Design) building certifications** to ensure environmentally friendly and efficient buildings; LEED is the most widely used green building rating system in the world



Water Treatment

Development of an on-site sewage treatment plant in order to **treat sewage water and turn it to irrigation**. Grey water is the target as it may easily be treated into portable water.



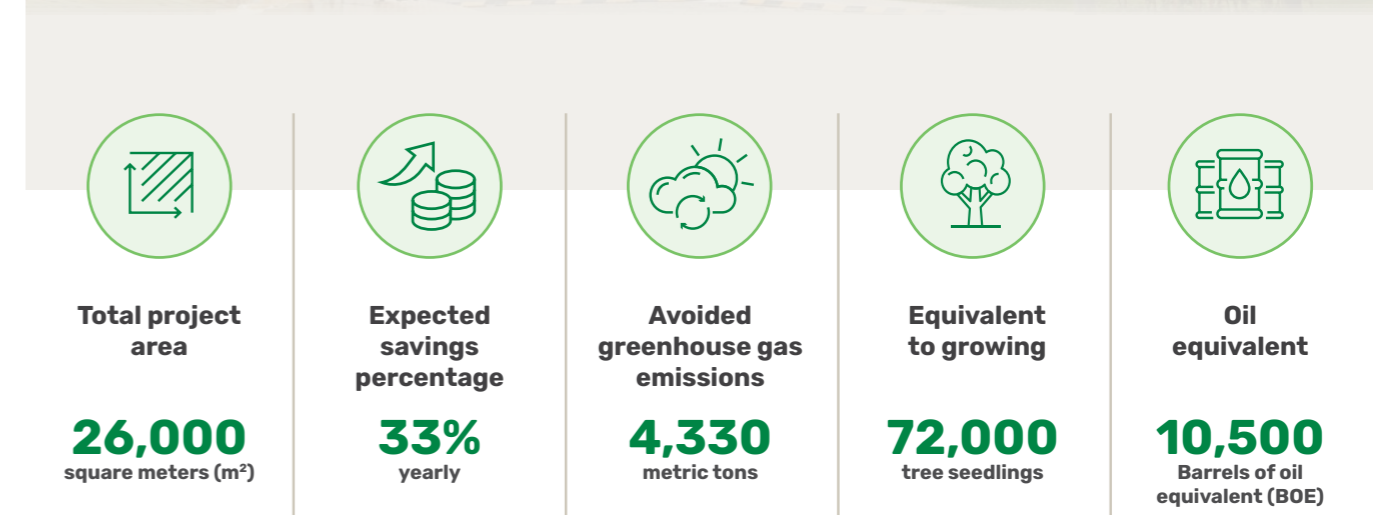
Increase Green Landscape

KFSH&RC's **green spaces are an important part of the patient experience**. They also play a significant role as **'urban lungs' in our cityscapes**, helping to counter-balance the highly constructed urban footprint in which major hospitals are usually located.

Green spaces and environmental design factors are now included in all new site works and building plans to ensure that our future is even greener than at present.

Partnership with the National Energy Services Company, **Tarshid**, to upgrade services such as lighting and air-conditioning in our older buildings to latest environmental standards

TARSHID Projects



Caring for Our Community

KFSH&RC, its patients, staff, service providers, and their families are all part of the community. The Hospital connects with these groups to identify opportunities to work together for the common good.

KFSH&RC's Volunteer Programs

The organization provides unique and exciting volunteering opportunities to diverse age groups, from high school students to retirees and former employees, including programs for the following:

- Speech-Language Pathology
- Recreation Therapy
- Autism Centre
- Physical Therapy
- Health Education



Employee Social Club (ESC)

With branches in all sites, the ESC plays an active role in supporting our staff and their families through organizing entertainment trips, managing recreational facilities, and conducting a wide range of sporting and social activities. Other KFSH&RC employee and family support services include:

- Wellness center and programs
- Mental health and staff well-being hotline
- Alumni community
- Employee assistance program
- Employee and career counselling service



Wareef Charity

KFSH&RC's charitable organization manages funds raised from corporate and private donations (approximately SAR 25 million as annual spend), which are directed towards various causes such as disease prevention, provision of specialized medical care, scientific and applied research, qualification of specialized Saudi medical professionals, assistance to patients in need, and cultural and scientific activities that contribute to raising awareness of health culture.

In 2022, Wareef's projects and initiatives benefitted more than 1.8 million people. Main project during the year included the following:

- Oumny (‘‘Make a Wish’’), particularly for children
- Installation of potable water machines
- ‘‘Give me a voice,’’ providing patients with opportunities to give feedback and make suggestions for improvement
- Charitable housing project (HAYYAK)
- ‘‘New Smile,’’ assisting patients in need with charitable dental services
- Provision of wheelchairs



One of 37 machines dispensing free water, installed in buildings at KFSH&RC-Riyadh, Jeddah, and Madinah



11-year-old Saud, attaining his wish to be a SABIC engineer for a day (Oumny project)

Our Organizational Governance

KFSH&RC is overseen by a Board of Directors, appointed by the Royal Court. The Board of Directors is supported by the following committees, each of which is chaired by a Board member:

BOD Committee	Chairman
Nomination and Remuneration Committee	H.E. Mr. Fahd Alrasheed
Quality and Safety Committee	Dr. Ross Wilson
Finance and Investment Committee	Mr. Yaser Alquhidan
Audit and Risk Committee	Prof. Thomas Coffman
Transformation Acceleration Committee	H.E. Dr. Majid Al Fayyadh
Marketing and Communications Committee	H.E. Dr. Majid Al Fayyadh
InterContinental Hotel and Conference Hall Sub-Committee	H.E. Dr. Majid Al Fayyadh

BOD's meetings and resolutions for the fiscal year 1443/1444 H (2022)

Throughout 2022, the Board continued to focus on KFSH&RC'S progress to meet year-on-year business plan performance improvement targets, which include patient acceptance, quality and experience indicators, length of stay and efficiency indicators, and financial sustainability.

In addition, a major focus for the Board has been the transformation of KFSH&RC into an independent non-profit foundation, which came into effect in April 2022 and the objective of shifting KFSH&RC from the top Middle East region hospital group to a globally leading academic medical center by 2030. This has involved extensive interaction with the Board's external advisors and KFSH&RC's executive management.

The Board held five meetings during the fiscal year 2022 and issued 17 resolutions and 24 recommendations, most notable of which are the following:

1. Approval of adjusting the compensation packages for Saudi nurses as proposed by the executive management and the Nomination and Remuneration Committee, in order for KFSH&RC to attract and retain top talent (regionally and internationally).
2. Approval of the Financial Statement of General Organization of King Faisal Specialist Hospital and Research Centre (cash basis) for the fiscal year 2021.
3. Approval of the annual report for fiscal year 2021.
4. Approval of the 2022 Business Plan, built on the strong results of 2021 and laid the foundation for the transition towards an Independent non-profit foundation.
5. Acknowledgment of the 2023 budget request to the Ministry of Finance.
6. Approval of the fire sprinkler systems renovation plan in each patient ward using a phased approach per block (i.e. A, B, and C), which is one of the major priority safety projects across Riyadh and Jeddah.
7. Approval of an operational budget for Wareef Charity for one year (2022). Wareef is the charitable subsidiary of KFSH&RC that helps enhance the quality of life for needy patients and children, supports their families, and sets up educational programs.



The 19-story King Abdullah Center for Oncology and Liver Diseases (KACO&LD) at the Riyadh campus towers over the city, symbolizing hope and resilience as it caters to oncology patients, some with the most complex cases

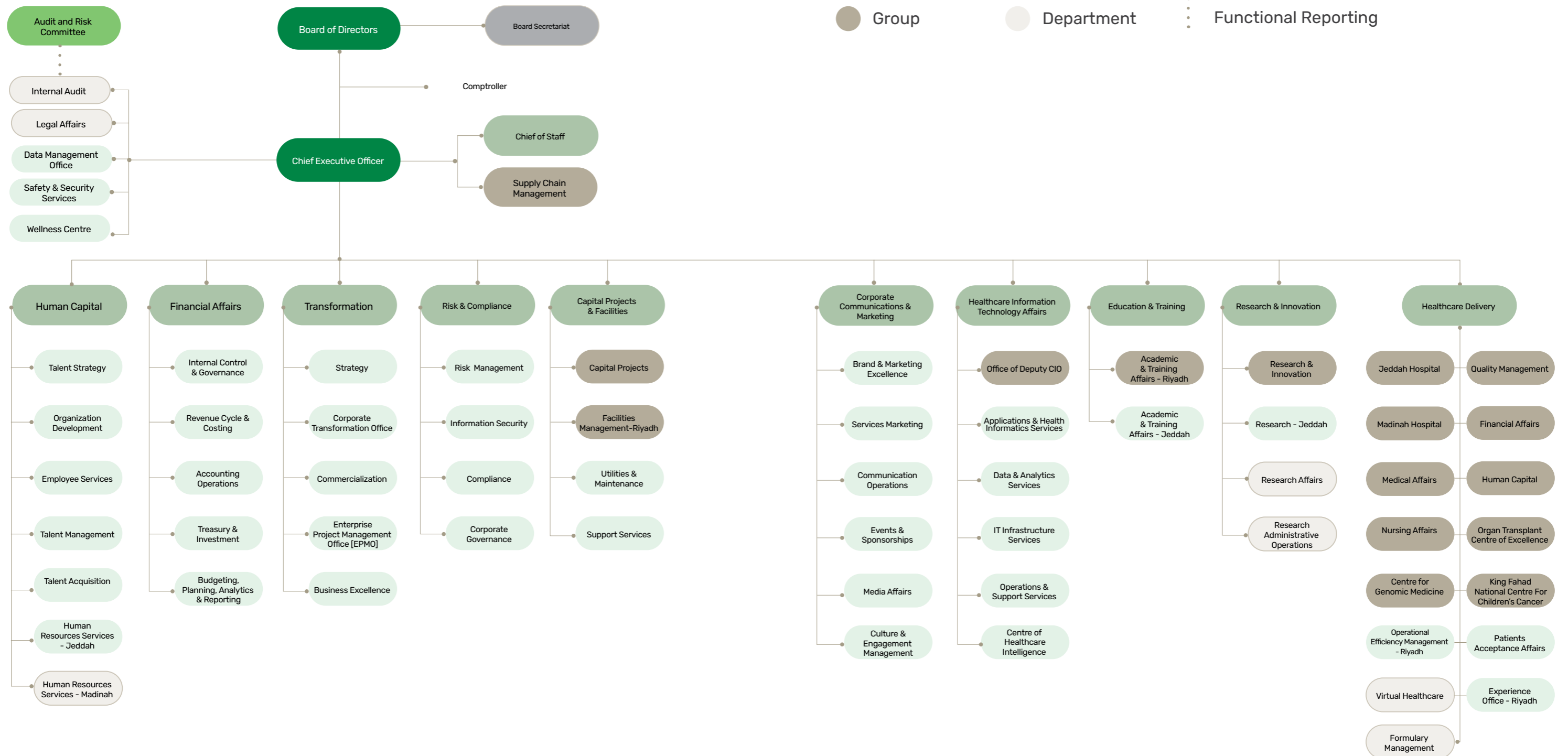
Our Organizational Governance

(continued)

Set out below is the current management structure of KFSH&RC, which supports the Board and delivers the organization's day-to-day managerial and operational governance in line with the Board's identified key performance indicators.

Legend:

- C-level
- Division
- Department
- Group
- Committee
- Functional Reporting



Dealing with Risk and Opportunity

KFSH&RC recognizes that its medical, operational, technological, and financial activities all involve a certain amount of risk. These risks are present on a day-to-day basis throughout the Hospital. While it may not always be possible to eliminate these risks, they may be managed to an acceptable level.

KFSH&RC uses modern methods, tools, and processes to manage enterprise risks. Enterprise Risk Management is an indispensable element of management at KFSH&RC, enhancing the organization's ability to manage uncertainty effectively. It is a comprehensive, systematic approach for helping identify, measure, prioritize, and respond to risks and opportunities potentially impacting KFSH&RC's most critical objectives, projects, and day-to-day operating practices.

KFSH&RC's Enterprise Risk Management framework and KPI performance is overseen by the Board of Directors' Quality Committee. Quarterly Risk Profile reports are shared quarterly with the Audit and Risk Committee, Chief Executive Officer, Healthcare Executive Leadership Committee, and Hospital general managers to ensure risk information is shared in an accurate, relevant, and objective representation of the risk profiles of the Hospital.

In compliance with National Cybersecurity Authority (NCA) regulations, KFSH&RC has also adopted a comprehensive cybersecurity strategy aligned with the standards and regulations promulgated by the National Institute of Standards and Technology (NIST) and the NCA, including penetration testing, vulnerability assessments, information security governance, and compliance management.

Compliance Assurance Reviews

Using a structured and systematic process derived from the International Organization for Standardization (ISO) 37301 compliance management systems standards, Compliance Assurance Reviews (CARs) have been conducted in a number of KFSH&RC departments in 2022. These reviews resulted in a comprehensive assessment of all the compliance obligations to which these departments must conform. The Compliance Division worked with each of these departments to develop Compliance Obligation Response Plans (CORPs), which are mitigation plans to ensure full compliance with all of their obligations.





مستشفى الملك فيصل التخصصي ومركز الأبحاث
King Faisal Specialist Hospital & Research Centre

Jeddah Mega Project

04 Identifying Challenges and Constraints, Proposing Solutions



**KFSH&RC remains steadfast
while navigating its course
towards its ambition**

Located in north Jeddah across approximately two million square meters of land, this 1,200-bed mega project allows for the expansion of KFSH&RC-Jeddah's services and the flourishing of a medical community

Identifying Challenges and Constraints, Proposing Solutions

While the year 2022's accomplishments certainly furthered KFSH&RC towards its goals, they served as indicators as to the Hospital's limits as well. Increased clinical operations and inpatient ward renovations placed significant weight on our resources, compelling KFSH&RC to function beyond its capacity. Despite best efforts to increase efficiency and decrease length of stay, the strain on our services remain.

Capacity

Increased clinical operations amid inpatient ward renovations placed significant weight on our resources, compelling KFSH&RC to function beyond its capacity. Despite best efforts to increase efficiency and decrease length of stay, the strain on our services remain.

The underlying demand growth means that we urgently need to secure additional capacity to avoid delays in providing care and mitigate the risks to patients and the organization's strategy and positioning.

On the alternative, lower targets of acceptance and surgeries may be set to ensure utmost quality of care with the best experience.

Completion of the KFSH&RC-Jeddah Mega Project

The ongoing construction of the KFSH&RC-Jeddah mega project requires governmental support in terms of ensuring the contractor's commitment and ability to complete the project within the timeline and provision of cash flow, particularly for equipment, furniture, and low current systems. The completion of the mega project will significantly alleviate additional capacity issues.

Transition into an Independent Non-profit Foundation

With the Hospital's transitioning into its independent non-profit status, the Board of Directors will need to approve the enabling financial and administrative bylaws in coordination with the Ministry of Finance (MOF). Currently, we are drafting these enabling bylaws in consultation with MOF to ensure efficient procurement and well-governed financial and administrative processes.

As we projected for the incoming year's activities and aims, we focused on aligning our 2023 internal budget, business plan, and development of key performance indicators with the transformational work being done. Consequently, the 2023 targets and projects that have been developed are consistent with how we expect to be able to drive performance in the short-term, while ensuring that we can transition into the new strategy and its targets when endorsed and funded.

With the full support of government leadership, the Board of Directors, and the members of the entire Organization, KFSH&RC remains steadfast while navigating its course towards its ambition.



The Capacity Command Center at KFSH&RC-Riyadh, launched in June 2022, enables a new level of efficiency, visibility and integration of measured outcomes, and utilization of resources, through real-time monitoring, simulation, and AI solutions

Conclusion

This annual report presents an overview on KFSH&RC's strategic direction. It also highlights its achievements and core pillars during the fiscal year of 2022 that have been influential in fostering the growth and development of the healthcare, research, and education sector.

Over the past year, KFSH&RC achieved a series of milestones in its training programs, initiatives, and international partnerships. The Hospital partnered and collaborated with leading local, regional, and international organizations to achieve world-class service in clinical, research, and education domains. These accomplishments have had a positive impact on the sectors mentioned above, promoting growth and development within the industry. This further solidifies KFSH&RC's position as a leading foundation in providing outstanding clinical care and a highly satisfying patient experience.

We express our sincere thanks and appreciation to the entire team at KFSH&RC, as well as to the esteemed members of our Board of Directors, and all our partners from the government and private sectors. Without their diligent efforts and genuine commitment, our mission of serving society with the highest level of healthcare and patient experience would have been extremely challenging. Their dedication is vital in propelling the sector forward and driving our shared vision of a prosperous future.





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Indicators



Appendices