

TOWARDS A DESTINATION MEDICAL CENTER

A THREE-SHIELD FOUNDATION:
PRACTICE, EDUCATION AND RESEARCH







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The success in securing a healthy environment for a society that is protected against diseases, is a true realistic reflection of the constructive policy, proper planning, and constant vigilance that offer our citizens a healthy physical, psychological and social living. An environment where all individuals are encouraged to reach and realize their best and true potential to effectively participate in the economic and social development process.

The Late Sheikh Zayed Bin Sultan Al Nahyan



As we grow in learning, we more justly appreciate our dependence upon each other. The sum-total of medical knowledge is now so great and wide-spreading that it would be futile for one man to attempt to acquire, or for any one man to assume that he has, even a good working knowledge of any large part of the whole. The very necessities of the case are driving practitioners into cooperation. The best interest of the patient is the only interest to be considered, and in order that the sick may have the benefit of advancing knowledge, union of forces is necessary.

William J. Mayo, M.D



MESSAGE FROM THE CHAIRMAN

Looking back on SSMC's journey throughout 2021, I feel a great sense of honor and pride to be a part of this remarkable, patient-first healthcare organization. While there have been many triumphs, there have also been unprecedented challenges that were successfully overcome with SSMC's dedicated leadership, transformative innovation, and patient-centered-care delivery.

SSMC was established as a joint venture between Abu Dhabi Health Services Company (SEHA) and the U.S. non-profit organization Mayo Clinic in November 2019, as part of the Abu Dhabi Economic Vision 2030 to elevate health care services in the Emirate. The developments and milestones achieved at SSMC over the past year have again validated SEHA's vision that Abu Dhabi has the ability to become a global health care hub, providing exceptional patient care with the support of Mayo Clinic's world-leading clinical solutions, and expertise within our community. Moreover, these achievements would not have been possible without the support of the UAE's wise leadership, Abu Dhabi government and the Department of Health-Abu Dhabi; through these strong relationships, we join forces to establish the Emirate as the ideal medical destination in the region.

As we move forward on our journey to becoming a destination medical center in Abu Dhabi, our focus will continue to be on our primary mission: to deliver holistic, innovative, patient-centered health care solutions, provided by our exceptional multidisciplinary teams. This level of care is made possible by the continuous exchange of talent, technology, innovation, and treatment methods that the partnership with Mayo Clinic provides.

We have worked hard to cultivate a thriving and vibrant culture within SSMC that integrates both SEHA and Mayo Clinic's values, namely: Respect, Integrity, Compassion, Healing – Care, Teamwork – Together, Innovation,

Excellence, and Stewardship. And during the past year, in efforts to truly integrate the global pioneer's best-practice and methodology into Abu Dhabi's health care landscape, we also adopted Mayo Clinic's three shields of Practice, Research, and Education, into the SSMC operating model.

As you read through this report, I am confident that you will gain a better understanding of the impact that the three shields have on Abu Dhabi's health care ecosystem, and that you will see SSMC's passion for every patient that walks through its doors. We continue to be committed to ensuring the medical complex is a cornerstone of Abu Dhabi's health care services, aligned with global quality and safety standards, and providing a new level of excellence in the region.

In closing, I would like to take this moment to wholeheartedly commend the SSMC team for their unwavering commitment to our core values and for being the drivers of progress, guiding SSMC towards our shared ambition of becoming a premier Destination Medical Center.

H.E. Salem Rashed Al Nuaimi
Chair of the Board



MESSAGE FROM THE CEO

BUILDING A COMPLEX CARE HOSPITAL

As I reflect on 2021, I am incredibly proud of the SSMC team and the ways in which we have served our patients. We are a team of committed experts focused on putting the needs of the patient first. Through the team's hard work, SSMC is laying the foundation to become the destination medical center that patients trust and turn to when they need complex and critical care.

In 2020, we embarked upon our strategic plan, and since then we've been making steady progress to deliver on our promise of service excellence, trusted quality and fiscal responsibility. SSMC will become the preferred medical center in the region, supported by a growing education shield and emerging research infrastructure.

SSMC staff are at the core of everything we do and all of the success we have had in helping our patients is thanks to them. The late Sheikh Zayed Bin Sultan Al Nahyan once said, "the real spirit behind the progress is the human spirit, the able man with his intellect and capabilities."

At SSMC our strategy is focused on delivering a new model of care through our people, our values and our culture. These strategic focus areas are supported by a governance model that brings people together through a shared responsibility to our patients and shared ownership of our outcomes.

This year, we welcomed 863 new staff, with focus on Emiratization, and our operation grew by more than 40%. This incredible growth was supported by our work focused on achieving operational excellence, growing our complex care capabilities, expanding our academic offerings, introducing new care technologies, and creating financial sustainability. To better meet the needs of

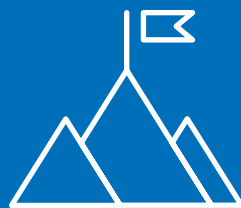
our patients, we opened a call center which facilitated 91,367 appointments, developed a Hematopoietic Stem Cell Transplantation program, introduced our "The Power of Care" campaign to highlight our holistic approach to patient-centered care, increased number of learners including nursing and medical students, interns, residents and fellows to 325, and introduced the use of artificial intelligence in the delivery of colonoscopies.

The accomplishments of the past year would not be possible without every member of the SSMC team and the support and guidance from the Abu Dhabi government and shareholders. Each member of our team honored our values by putting the needs of the patient first during a period rapid growth. Together, we laid the seeds for our transformation, and we are gradually becoming a trusted health care destination in Abu Dhabi. The engagement of the community continues to inspire us as we serve our patients.

The progress we are making is palpable, as witnessed by our patients and stakeholders. As I look ahead, I am excited for our future. SSMC Forward, our transformation program, is accelerating our journey toward SSMC's Destination Medical Center vision. Dr Will Mayo once said: "I look through a half-opened door into the future, full of interest, intrigued beyond my power to describe."

Naser Ammash, M.D.
Chief Executive Officer
Sheikh Shakhbout Medical City

MISSION, VISION AND PRIMARY VALUE



MISSION

SSMC delivers holistic, transformational health care solutions that exceed expectations and generate loyalty in the Emirates and beyond.



VISION

To be the leading integrated health care destination in the region.



PRIMARY VALUE

The needs of the patient come first.



SSMC LEADERS



Naser Ammash, M.D.
Chief Executive Officer



Michael Ryan
Chief Administrative
Officer



Carolyn Millward
Chief Financial Officer



John Black, M.D.
Executive Director of
Strategic Expansion



Matthew Gettman, M.D.
Chief Medical Officer



Stacey Jones
Chief Operating Officer



Celine Assaf Khabbaz
Legal Director



Sultan Al Nuaimi
Senior Human Resources
Director



Ateq Al Messabi, M.D.
Deputy Chief Medical
Officer



**Abdulqader Almessabi,
M.D.**
Deputy Chief Medical
Officer



Eric Nelson
Associate Administrator



Dany Badreddine
Associate Administrator



**Zulaikha Al Hosani
R.N., E.M.H.C.A.**
Chief Nursing Officer



Abba Zubair, M.D.
Dean of Education

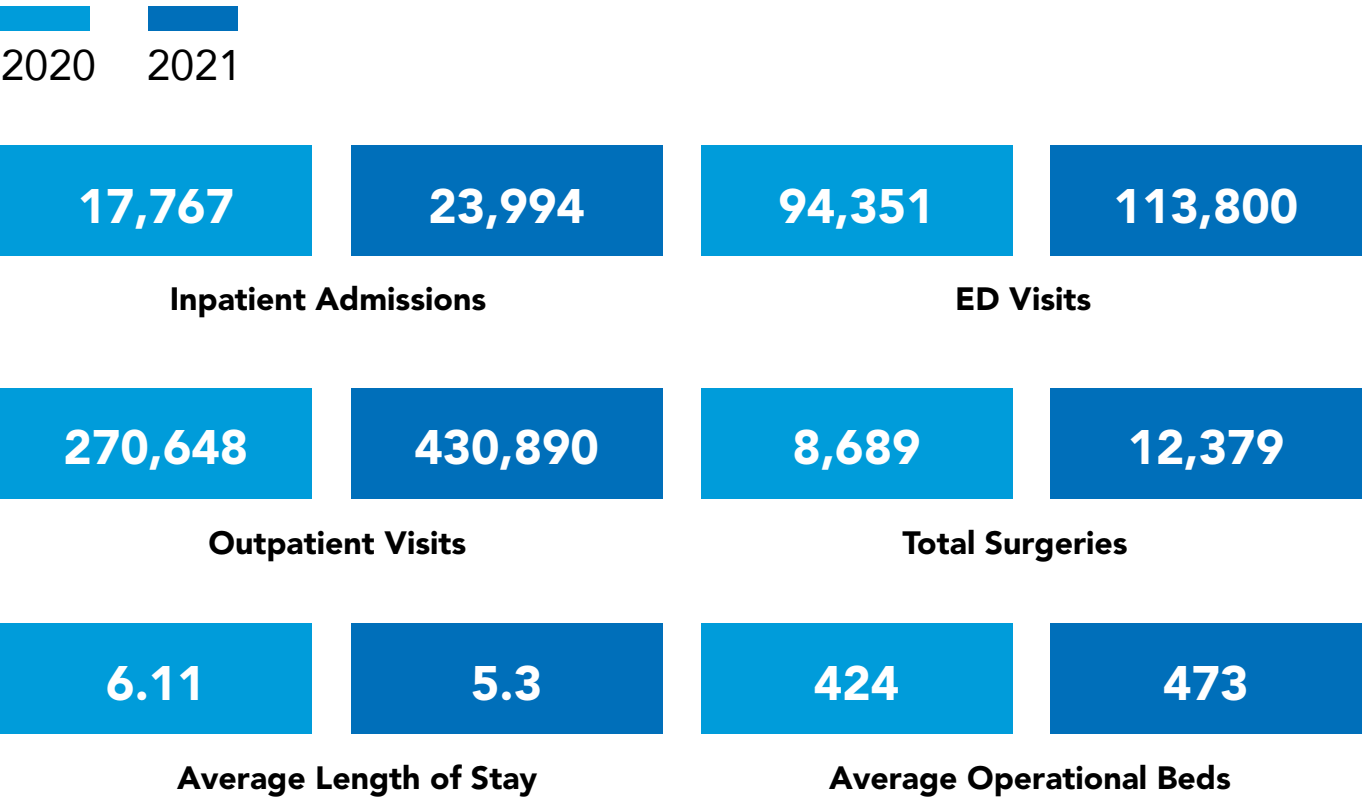


Kanika Khanna
Associate Administrator

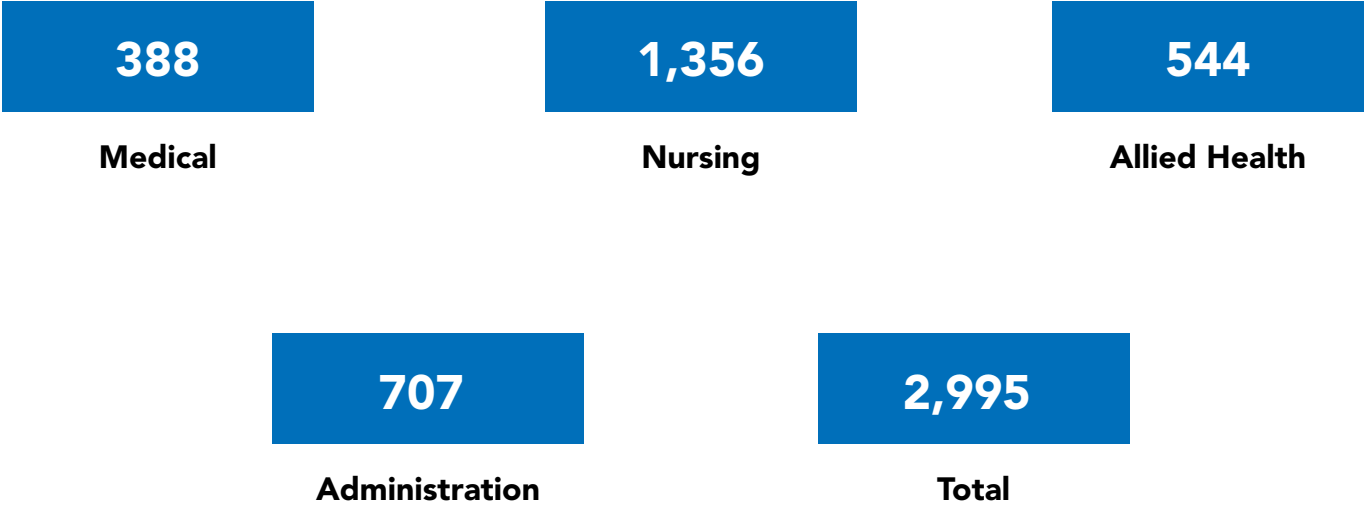


2021 BY THE NUMBERS

PRACTICE METRICS



STAFF METRICS





PARTNERS IN PATIENT-CENTERED CARE: MAYO CLINIC AND SEHA

Sheikh Shakhbout Medical City was established under a joint venture agreement between two key partners to provide integrated health care to patients with serious and complex illnesses:

- SEHA, which operates the largest public health care network in the UAE and envisions SSMC as the hub in its hub-and-spoke health system model; and
- Mayo Clinic, which is in a category-of-one in health care and provides the SSMC team access to renowned expertise, know-how, world-class services in all the three shields of practice, education and research that are essential components of the Destination Medical Center.

SSMC benefits from and leverages its close relationships with SEHA and Mayo Clinic through various initiatives to support the delivery of highly differentiated care and bring decades of experience to bear in a patient-centric model. Meaningful connections with its parent companies gives SSMC a myriad resources that are helping it provide life-saving treatment solutions to meet the community's most pressing health care needs.

Mayo Clinic: AskMayoExpert and eConsults

In addition to optimal on-site presence in Abu Dhabi, AskMayoExpert and eConsults are two of Mayo Clinic's Connected Care tools that provide SSMC health care professionals direct access to Mayo Clinic resources and expertise. These tools enable physician-to-physician consultations and access to a database of best-practice information on disease management, care guidelines, treatment recommendations and reference materials.

Mayo Clinic and SEHA: Visiting Clinician Program

SSMC regularly welcomes visits from SEHA and Mayo Clinic experts across departments and service lines. In addition to consulting on patient cases, these clinicians engage with our staff, and provide lectures, training and development to them.

Otolaryngology-Head and Neck Surgery Visiting Clinician Program

SSMC's Otolaryngology-Head and Neck Surgery visiting clinician program involves visiting professors to Abu Dhabi sharing their expertise with our staff and learners. Under the visiting clinician program, a collection of talks, lectures, symposia, conferences and workshops were delivered throughout 2021 covering diverse topics, including the latest updates in otolaryngology, the Mayo Clinic Model of Care, leadership and employee wellness.

The "Pediatric Airways Symposium: From the Nose to the Lungs," held in November 2021, highlighted the work of leading experts in the field to discuss new developments in pediatric airway disorders, a topic rarely covered in the region. The program demonstrates that the Division of Otolaryngology – Head and Neck Surgery is an academically advanced tertiary care facility offering state-of-the-art patient care, education and research.

Gastroenterology and Hepatology

Gastroenterology and Hepatology made progress toward clearly defined integration and connectivity goals in 2021, working more collaboratively within its division and the broader SSMC framework, to offer unparalleled clinical services and patient experience in the UAE and the Middle East as a leader in education and research for the region. SSMC's collaboration with Mayo Clinic enabled Dr. Barham Abu Dayyeh to introduce new, advanced minimally invasive endoscopic therapies for obesity and gastroesophageal reflux disease at SSMC.

SEHA: Ambulatory Healthcare Services

The 2021 goals for SSMC's partnership with SEHA's Ambulatory Healthcare Services AHS were to exchange expertise and foster a collaborative practice approach that would enable health care providers to deliver high-quality, safe, patient-centered services. The AHS partnership enhances and transforms the SSMC patient experience.

Objectives of the SSMC/AHS partnership include:

- Providing optimal access to SSMC offerings for AHS patients
- Promoting outreach of SSMC services to AHS
- Assuring patients' needs are met with the best patient experience irrespective of location
- Optimizing hospital referrals
- Promoting services line collaboration and coordination
- Integrating the health care system for a wide range of health needs

Despite the challenges due to the pandemic, there was a significant increase in the number of patient referrals from AHS to SSMC to 21,168 referrals.

Other collaborative services between SSMC and AHS in 2021 included neonatal jaundice screening and a well-baby clinic and the opening of a colorectal clinic in March 2021. A structured workflow is shared and followed for neonatal jaundice babies from and to AHS.



VALUES GUIDE SSMC'S ACTIONS

ESTABLISHING THE SHARED VALUES OF SEHA AND MAYO CLINIC



Building a world-class destination medical center is a bold ambition that requires the hearts and minds of every member of our team.

Michael Ryan
Chief Administrative Officer, SSMC

When SEHA and Mayo Clinic came together to form Sheikh Shakhbout Medical City, the objective was to facilitate an exchange of knowledge and innovation to bring world-class health care to patients in the UAE and the neighboring region.

As part of this vision and collaboration, SSMC is developing a culture that integrates both SEHA and Mayo Clinic's values, namely: Respect, Integrity, Compassion, Healing/Care, Teamwork/Together, Innovation, Excellence and Stewardship (RICH TIES). These values

help SSMC create a workforce that is aligned to our mission and ultimate goal of becoming a destination medical center.

During 2021, SSMC introduced RICH TIES as a guide for decision-making and our staff as they interact with one another, patients and their families. SSMC staff members are incorporating these organizational values in everything they do, building a culture of teamwork, collaboration and behaviors to ensure it delivers patient-centered care that is compassionate.

RICH TIES support a patient-first mission

RESPECT

Treat everyone in our diverse community, including patients, their families and colleagues, with dignity.

INTEGRITY

Adhere to the highest standards of professionalism, ethics and personal responsibility, worthy of the trust our patients place in us.

COMPASSION

Provide the best care, treating our patients and their family members with sensitivity and empathy.

HEALING/ CARE

Inspire hope and nurture the wellbeing of the person as a whole, respecting physical, emotional and spiritual needs.

TEAMWORK/ TOGETHER

Value the contributions of all, blending the skills of individual team members in unsurpassed collaboration.

INNOVATION

Infuse and energize the organization, enhancing the lives of those we serve, through the creative ideas and unique talents of each employee.

EXCELLENCE

Deliver the best outcomes and highest quality service through the dedicated effort of every team member.

STEWARDSHIP

Sustain and re-invest in our mission and extended communities by wisely managing our human, natural and material resources.



OUR CULTURE FUELS OUR VALUES

SSMC IS DELIBERATE IN DEFINING THE CULTURE NEEDED TO ACHIEVE ITS MISSION

The culture of Sheikh Shakhbout Medical City is critical to bringing its values to life and is at the core of patient-centered, transformative care.

In 2021, SSMC followed four guiding principles designed to create a culture that empowers the organization to contribute to the health and well-being of SSMC’s patients, each other and the community it serves:

INTEGRATE	CONNECT	LEARN	DELIVER
Proactively join forces with SEHA, Mayo Clinic, Abu Dhabi leaders, academic institutions, industry leaders and other like-minded partners to effectively serve our patients, deliver high-quality and trusted care, conduct pioneering research, educate the future workforce and advance the strategic priorities of SSMC.	In alignment with SSMC’s values, build relationships internally and externally to optimize team performance, leveraging the expertise and capabilities of our peers.	Become a knowledge-driven organization that continuously learns through formal and informal means and applies innovations to improve everything it does.	Exceed expectations by delivering patient care and other services with reliability, quality, timeliness and excellence in a fiscally responsible manner. This is the embodiment of the SSMC culture and is necessary to fulfill our promise to our patients, staff, stakeholders and the community.



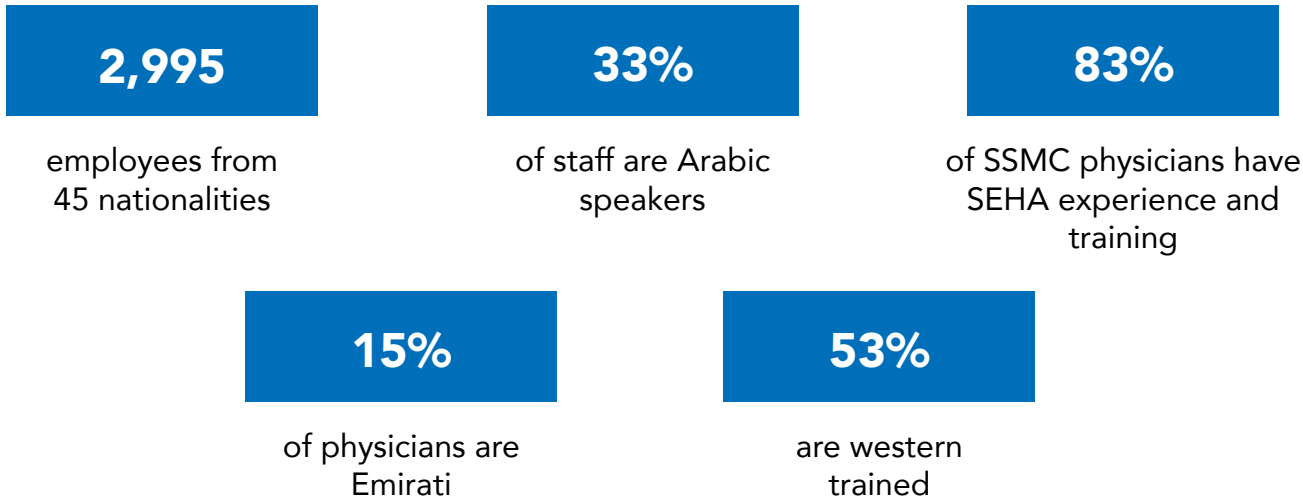
INVESTING IN TALENT TO SERVE PATIENTS

Building a national and regionally trusted medical facility requires a deep respect for talent. Sheikh Shakhbout Medical City is committed to developing the skills and expertise of its workforce to deliver compassionate, high-quality care.

To achieve that goal, SSMC is investing in its staff, with a focus on:

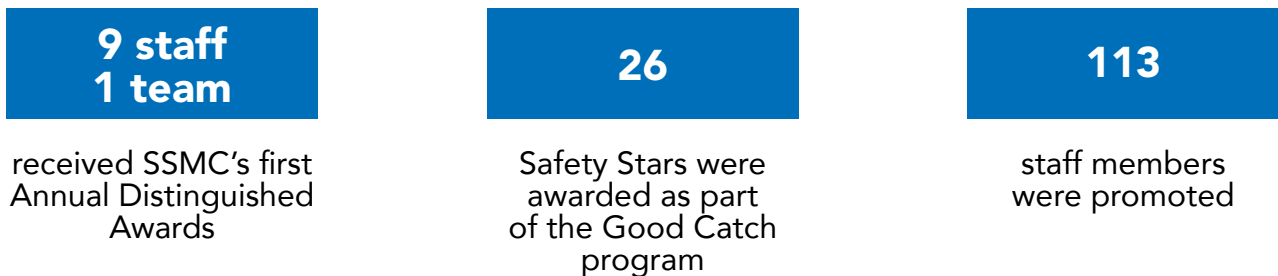
- Values and culture
- Model of care
- Professional development
- Staff engagement
- Celebrations and recognition

Staff stats



Celebrating our people

In 2021, SSMC established several initiatives to recognize staff members who lead by example and make a difference: the Annual SSMC Distinguished Awards, and the Speak Up and Good Catch programs.



Human capital is the most important resource of any health care system. Our staff are at the core of everything we do every single day. At SSMC, we are fortunate to have a growing, talented, resilient and agile workforce that shares our vision and mission in serving the unmet needs of every patient walking through our doors with compassion and excellence, ensuring we as an organization develop and transform health care delivery with the best outcome, and that we reach our goal of becoming a three-shield Destination Medical Center.

*Dr. Naser Ammash,
Chief Executive Officer, SSMC*

SSMC's Inaugural Annual Distinguished Awards

SSMC's first Annual Distinguished Awards, which include 10 categories reflecting all groups and functions of the organization that contribute to meeting the needs of our patients, were presented in November 2021. Similar prestigious awards are well established at Mayo Clinic and widely recognized as the highest honor acknowledging individual staff or teams for their achievements while upholding our primary value of putting the needs of our patients first. There was impressive staff engagement in the process, with more than 600 nominations received across all categories.

SSMC 2021 awardees include:

Distinguished Physician Leader



DR. EMMANUEL NSUTEBU
Division Chair and Consultant,
Infectious Diseases

Distinguished Nurse Leader



SIMI SHAILAMMA
Unit Manager, Medical Services

Distinguished Administrative Leader



DAVID JAMES
Operations Administrator

Outstanding Allied Health



TANIYA RAJ
Senior Speech Language Therapist

Exemplary Professional Services



ABDUL KARIM AJAM
Senior Recruitment and
Manpower Planning Officer

Exceptional Nurse



RABAB SAYED SOBH
Charge Nurse, Ambulatory
and Procedural Services

Distinguished Clinician



DR. ZAFAR IQBAL KHAN
Consultant, Cardiovascular Diseases

Outstanding Researcher/Investigator



DR. ASMA DEEB
Division Chair, Pediatric Endocrinology

Outstanding Educator



DR. ALAIN SABRI
Division Chair of Otolaryngology -
Head and Neck Surgery

Outstanding Team



PEDIATRIC INTENSIVE CARE UNIT

Speak Up and Good Catch programs

SSMC's Speak Up and Good Catch programs were introduced in 2021 to promote a culture where patient safety and openness to speak up on "near misses" and adverse events are viewed as learning opportunities and become key drivers for quality improvements. The Speak Up program is a collective effort that relies on every staff member's use of safety intelligence tools to foster a robust patient safety culture.

Every quarter, through the Good Catch award program, we recognize Safety Stars – employees who demonstrate a commitment to patient safety and quality by identifying and sharing near misses on our Speak Up platform and with SSMC's Quality and leadership teams. Every good catch has led to changes in processes and workflows, demonstrating our staff and organization commitment to the five pillars of patient safety, a campaign that started in 2020. During 2021, we recognized 26 Safety Stars.

Like SSMC Annual Distinguished Awards recipients, SSMC Safety Stars play an integral role in supporting our efforts to become the preferred destination for the care of the most complex and seriously ill patients while demonstrating SSMC's commitment to its staff. This commitment is the backbone behind the continued delivery of the safest care possible to our patients and sustaining a safe working environment.



SSMC AT THE CENTER OF SEHA’S HEALTH CARE SYSTEM

MODEL OF CARE IS KEY TO VISION

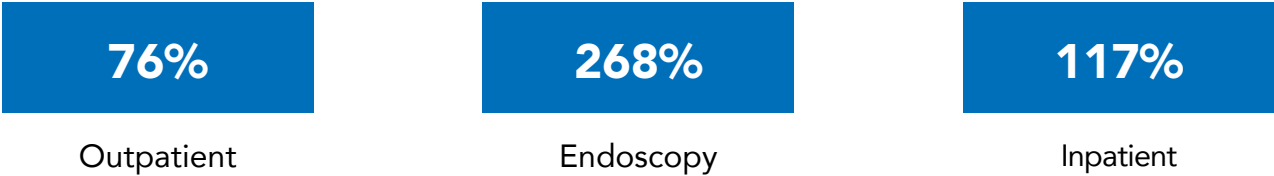
Sheikh Shakhbout Medical City was designed to be the hub of SEHA’s health care system for the care of the most complex and seriously ill patients that require the most integrated multispecialty practice supported by education, research and innovation.

The cornerstone to realizing SSMC’s vision to become the region’s preferred integrated health care destination and life-science hub is a model of care that delivers compassionate care – one patient at a time – from a multidisciplinary team of experts looking for the best and most innovative health care solutions to patients’ needs.

- Core elements of this model of care include:
- Collegial, integrated and cooperative multispecialty teamwork
 - Physicians taking responsibility for leading the team in partnership with local physician
 - Patient involved with decision making
 - Highest value of care with compassion and trust
 - Comprehensive timely evaluation with holistic approach
 - Emphasis on unparalleled patient experience and quality
 - State-of-the-art technologies and techniques
 - Connectivity to Mayo Clinic expertise and resources

In 2021, SEHA restructured its service line specialty councils to leverage SSMC’s expertise, integrating departments across the system to strengthen its offerings as a network and ensure that no matter which facility patients go to in the region, their needs are met.

Visits in 2021 for gastroenterology increased by:





Our strength lies in our network - by uniting, leveraging each other's strengths, and learning from one another, we are setting new benchmarks in terms of how we work together and the best-in-class care we provide to our community. We are fortunate to have partnered with global leaders, Mayo Clinic, to develop the 'hub' of our hub-and-spoke model; SSMC – imprinting Mayo Clinic's long-lasting legacy in globally-renowned patient care right here in Abu Dhabi, and as a result, transforming the care our patients can tap into closer to home. This is an integral part of our journey towards the future in establishing a modern, progressive network fit for the next 50 years and beyond.

Dr. Marwan Al Kaabi
Acting Chief Operations Officer, SEHA

Clinical integration

The group practice model made significant progress in 2021, when multiple service lines and teams were integrated with those from other SEHA facilities. Service lines that were recently integrated between SSMC and Sheikh Khalifa Medical City (SKMC), a flagship tertiary hospital in the UAE and the largest teaching medical center in Abu Dhabi, include:

- Cardiology
- Gastroenterology
- Hematology
- Oncology
- Orthopedics

These moves are already providing benefits, including expanded patient access, the provision of comprehensive, multidisciplinary and collaborative care, and increased patient referrals for specialized care.

Additionally, the strength of SEHA's legacy and Mayo Clinic's position as a global health care leader, SSMC regularly welcomes patient referrals from peers in the industry, expanding its service and reach within and outside its community. SSMC received nearly 182,000 patient referrals from across the SEHA network and beyond during 2021.

2021 service integration upgrades

An integrated Electrophysiology Lab was launched by SSMC's Cardiology Division in 2021. This service has been offered at SKMC (the only facility in the UAE performing pediatric electrophysiology procedures) since its inception in 2005, resulting in the diagnosis and treatment of thousands of patients. With SSMC and SKMC joining forces to strengthen the lab's offerings, clinical services are being provided by experts under a unified system across multiple health care facilities.

In June 2021, hematology and oncology services were integrated between SSMC and SKMC, combining SKMC's legacy capabilities with Mayo Clinic's international expertise to deliver the UAE's most comprehensive hematology and oncology care. As a result of the integration, SSMC's Hematology and Oncology Division opened a new 30-bed inpatient unit, an eight-bed apheresis unit, and a new division of transfusion services.

The only hematology-centric fellowship program in the UAE accredited by the Accreditation Council for Graduate Medical Education-International was formally offered at SKMC, and now is integrated with SSMC. SSMC now provides extracorporeal photopheresis for transplant complications and for acute hematology and leukemia and will soon unveil a comprehensive Stem Cell Transplant Center at the facility.

This integration provides patients with enhanced access to primary and expert care across specialties. By adopting a comprehensive and collaborative approach, hematology and oncology patients now receive multidisciplinary care with improved access to expertise and innovative treatment methods through Mayo Clinic, elevating the overall patient experience and ensuring a seamless continuum of holistic care.

SSMC'S MODEL OF CARE EVOLVES IN 2021

Sheikh Shakhbout Medical City follows a multidisciplinary approach to ensure the best possible outcome for each patient. Multidisciplinary teams include staff from all parts of the Practice shield, from nurses and dietitians to attending doctors, pharmacists and physical therapists. Team works together to devise personalized care and treatment plans that provide coordinated, high quality care for each patient.

This group practice model of care elevates and enhances the patient experience. All employees across the enterprise have a responsibility for service excellence and quality. This is a shared responsibility toward our patients. To continuously improve the patient experience and encourage two-way communication, SSMC developed a robust Patient Experience Strategy, which includes education and training, and increasing partnerships between the Patient Experience, Practice and Operations teams, as well as community engagement.

Department model of care examples

Hematology and Oncology

SSMC's Division of Hematology and Oncology is a prime example of how following a multidisciplinary approach improves patient care. Working collaboratively and across disciplines allows physicians to see and consider all aspects of a cancer patient's case so they can formulate treatment plans for patients with the benefit of a 360-degree view.

In 2021, SSMC launched numerous multidisciplinary tumor boards, including those for breast, lung, thoracic, head and neck, and GI cancers. These boards review cancer cases in an interdisciplinary fashion and typically include surgeons, medical oncologists, radiologists and any other physicians involved with the patient's care.

Dr. Shahrukh Hashmi, chair of the Division of Hematology and Oncology, shares the SSMC approach to cancer care: "In 2021, we worked toward establishing our Comprehensive Cancer Program to offer access to a full range of services for complex cancer care. To that end, we are building resources and therapeutic initiatives to give oncology patients the comprehensive care they require from diagnosis to treatment to survivorship." To make these strides, SSMC has

strategically recruited experienced consultants in both oncology and hematology and increased enrollment in its hematology fellowship program to train the next generation of hematology physicians. It also expanded its care team to include dedicated nursing staff for the oncology practice.

Pediatrics

SSMC's Department of Pediatrics includes seven divisions offering complex care, which differentiates it from other facilities that offer similar specialties. In 2021, recognizing the need for care focused on adolescents, SSMC established the Division of Adolescent Medicine. A Mayo Clinic physician, Dr. Philip Fisher, with extensive experience in the field, consults with this division, which also engages residents and learners from other departments to broaden experience.

The division started a first-in-the-Emirate Adolescent Medicine Outpatient Clinic, where the most common diagnoses relate to nutritional problems. Additionally, the Division of Pediatric Endocrinology offers complex pediatric endocrinology care and is staffed by a full-scale multidisciplinary team, including pediatric endocrinologists, psychologists, dietitians and educators.





INTEGRATING SSMC’S THREE SHIELDS

The integration of the three shields – Practice, Education and Research - is fundamental to Sheikh Shakhbout Medical City’s vision.

THREE SHIELDS, ONE PURPOSE

Practice

Ensures that the health care services SSMC provides to the community to prevent, diagnose, treat and rehabilitate are holistic, comprehensive and in line with the latest international and Mayo clinic best-practices.

Education

Ensures that the learning environment will enhance teaching, training, utilizing new technologies that are organizational priorities, which empower and develop staff and the organization to meet current and future health care needs.

Research

Ensures patients have access to health care innovations and medical discoveries – two hallmarks of a destination medical center – through local research as well as collaboration and partnerships.



PRACTICE SHIELD



We have witnessed ongoing progress at SSMC toward becoming a destination medical center. As part of our longer-term vision to operate as a medical hub in Abu Dhabi, SSMC is serving a wider region and continues to focus on improving the clinical care we provide. Through an integrated and team-based model of care focused on treating patients with serious and complex medical issues, our emphasis on quality of care and the patient experience cannot be overstated.

Dr. Matthew Gettman
Chief Medical Officer, SSMC



COLLABORATIVE AND COORDINATED CARE

BECOMING THE DESTINATION MEDICAL CENTER OF THE MIDDLE EAST

In 2021, Sheikh Shakhbout Medical City ramped up the scope of services it provides to the community, engaged more subject matter experts, and introduced new and innovative treatment methods to better serve its patients. Additionally, with technology and innovation driving growth and unprecedented change in the health care field, SSMC is actively pursuing opportunities to integrate technology (e.g., artificial intelligence) into our diagnosis and treatment processes – all to elevate the patient experience and ensure more accurate diagnoses, safer procedures and quicker recovery times.

By leveraging our capabilities and international expertise, in partnership with SEHA and Mayo Clinic, SSMC was able to perform innovative and complex procedures in 2021.

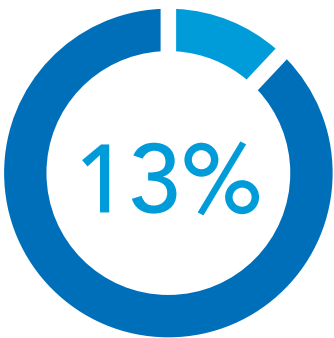
These include:

- Abu Dhabi's first hip arthroscopy
- Successful treatment of a patient with myasthenia gravis (a chronic and exceptionally rare thoracic condition) with a minimally invasive approach
- The first in Abu Dhabi and the third in the UAE to successfully complete a complex thoracolumbar scoliosis deformity correction procedure
- Use of AI in gastrointestinal endoscopies to enhance detection of precancerous polyps of the colon
- A first-in-the-Middle East intelligent, vision-saving eye implant with the "eyeWatch" device for aggressive glaucoma
- A first-in-Abu Dhabi knee-replacement surgery using a hand-held accelerometer – a minimally invasive, computer-guided technology

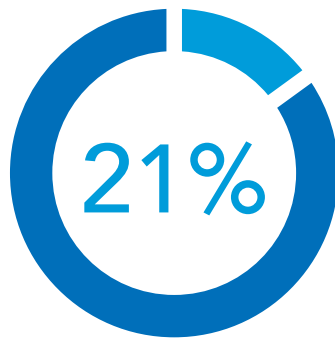
As part of SSMC's ongoing commitment to leverage technology to transform patient care, Dr. Siddiq Anwar, SSMC consultant nephrologist, joined innovators and specialists from the Mohamed bin Zayed University of Artificial Intelligence and Khalifa University to develop an AI platform – RenAIssance – that helps detect, diagnose and aid the management of acute kidney injury to simplify care and improve patient outcomes by leveraging AI to assist in medical decision-making. Dr. Anwar and the RenAIssance team have secured research funding from a leading ultrasound device company to further develop their machine learning algorithm.

Practice increases and improvements

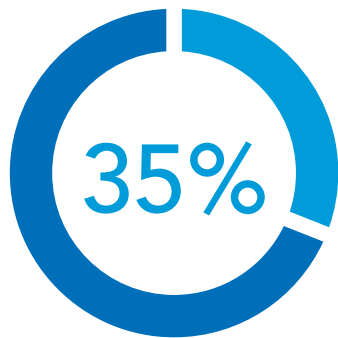
Across the entire practice in 2021 compared to 2020, we noted the following:



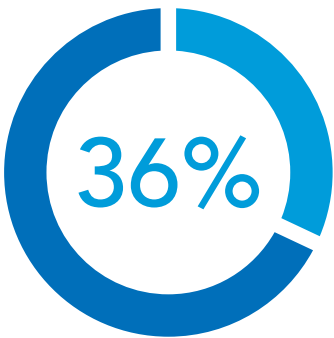
improvement in average length of stay, with the last eight months of 2021 remaining under a benchmark of 5.2 days



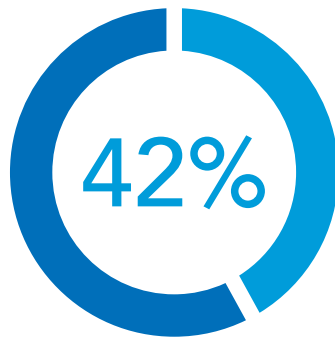
increase in ED visits



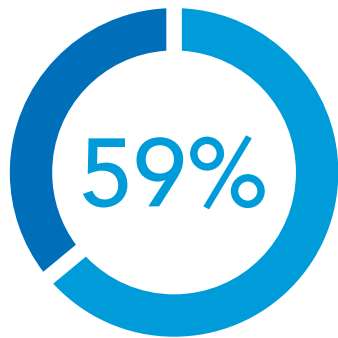
increase in inpatient admissions



increase in inpatient discharges



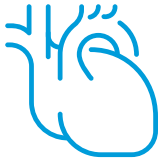
increase in total surgeries




increase in outpatient visits

2021 ACHIEVEMENTS


SPECIALTY PROGRAMS



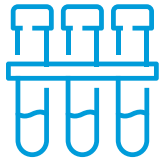
Cardiology
Electrophysiology Lab



Gastroenterology
Inflammatory Bowel Disease Clinic

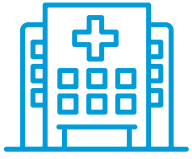


Radiology
Differentiated subspecialties

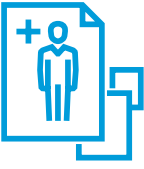


Laboratory Medicine
Expanded specialties


NEW SERVICES



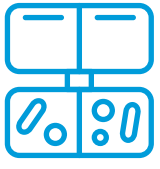
Adolescent Medicine Clinic
(the first-of-its-kind in the UAE)




Executive Health Program




Nurse-led Anticoagulation Clinic



Outpatient Parenteral Antibiotic Therapy

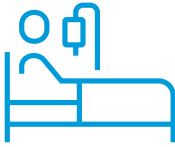


Apheresis Unit

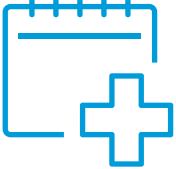


Clinical Social Work


EXPANDED CAPACITY



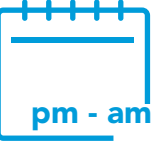
50
new inpatient beds




3,500
additional outpatients seen weekly



6
additional operating rooms



2x
per week evening clinics



Weekly
Weekend clinics



CLINICAL AND QUALITY AND SAFETY PROGRAMS

Putting patients first involves not only ensuring that the care being delivered is of high quality, but also that there are measures in place to protect them and keep them safe while they are at Sheikh Shakhboub Medical City. To that end, SSMC is pleased to report its 2021 initiatives to enhance clinical quality and patient safety, which include improving the physician-to-patient staffing ratio to further drive patient safety and quality care.

JCI readiness efforts

In 2021, Joint Commission International readiness efforts were put in place to prepare for the first SSMC JCI accreditation in early 2022. The SSMC Quality team, in partnership with operations and practice teams, developed the strategy and introduced initiatives to best prepare for this important milestone. This included completing employee awareness and education around the JCI Accreditation Standards for Hospitals, 7th Edition, using multiple channels of communication, and completing a mock survey in March 2021. These efforts were key enablers to gradually improving SSMC's JCI accreditation readiness score, reaching 100% at the end of the year, with 180 JCI policies reviewed, approved and published.

Hospital Quality Index

In collaboration with Mayo Clinic, SSMC's Hospital Quality Index (HQI) was established in September 2021 to align performance measures with those of Mayo Clinic, particularly in terms of patient safety and service quality. The long-term objective is to ensure continuous and systematic improvement in quality and patient safety through a comprehensive set of measures that monitor performance over time. The 25 measures were evaluated and refined by Mayo Clinic, resulting in an index across four key domains in quality and patient safety. Some examples of measures under each domain – and each domain's weighting in the index – include:

EFFICIENCY 12.5%



of index weight

- Average length of stay for adult patients in intensive care units
- Average length of stay for patients admitted with acute myocardial infarction
- Average length of stay for patients who underwent high-risk or low-risk bariatric surgery

EFFECTIVENESS 25%



of index weight

- 30-day all-cause readmission rates for patients with the following diseases: heart failure, pneumonia and urinary tract infections
- Time taken from Emergency Department registration to admission as inpatient within 180 minutes
- For labor and delivery patients, elective delivery and early induction without medical indication at 37 to 39 weeks per 100 deliveries

MORTALITY 31.5%



of index weight

- Rate of in-hospital mortality rates for inpatients with the following diseases: acute myocardial infarction, heart failure, pneumonia and chronic obstructive pulmonary disease

SAFETY 31.25%



of index weight

- Rate of hospital-associated or worsening pressure injury (stage II and above) per 1,000 inpatient days
- Rate of inpatient falls resulting in injury per 1,000 inpatient days
- Rates of surgical site infection per each of 100 elective and 100 emergency caesarian sections for labor and delivery patients

Quality and safety strategy

In collaboration with the Mayo Clinic Clinical Quality team and after conducting a thorough assessment of strengths, weaknesses, opportunities and threats, SSMC's Quality Strategy Program was developed based on the guiding principle of its strategic plan. SSMC's aim is to deliver high-quality and trusted care with a focus on our people as key enablers for building efficient and effective quality processes and systems. By integrating processes for clinical practice, a culture of safety, risk management, policy management and weekly care review conferences, SSMC achieved multiple important milestones and results in the Occupational Health and Safety Program.

Quality in action

Expanding Otolaryngology options

SSMC's Division of Otolaryngology – Head and Neck Surgery launched its Endoscopic Laryngeal Laser Program in 2021, offering a wide range of procedures for various pathologies of the larynx including nodules, polyps and benign and malignant tumors. The division established subspecialties to streamline the diagnosis and management of benign and malignant head and neck tumors, as well as hearing and balance disorders. Additionally, this division introduced the adult voice program, a medical and surgical specialty that manages many unique patient conditions with a wide variety of speech pathologies.

A new subspecialty in this division focuses on hearing disorders that require cochlear implants. Cochlear implant surgery is a very delicate, life-changing procedure performed on patients who range in age from infants just a few months old to adults of varying ages. The treatment involves pre- and post-surgical care that brings together multiple disciplines including otolaryngology, audiology, speech therapy, pediatrics, radiology, nursing and other related specialties.

In addition to performing one of the UAE's first successful surgical placements of an innovative active bone-anchored hearing implant, the SSMC otolaryngology team performed more than 50 cochlear implants during 2021, achieving positive results for both complex and revision cases. This caseload is comparable to western standards, making our cochlear implant program the largest program in the UAE and one of the largest in the region.

Because these hearing disorder patients cannot speak without the implant, these procedures allow patients to lead completely normal lives.

Developing innovative OB-GYN programs

Throughout 2021, SSMC's Department of Obstetrics and Gynecology restructured, recruiting new consultants and installing strong and effective leadership to ensure optimal performance and successful patient outcomes.

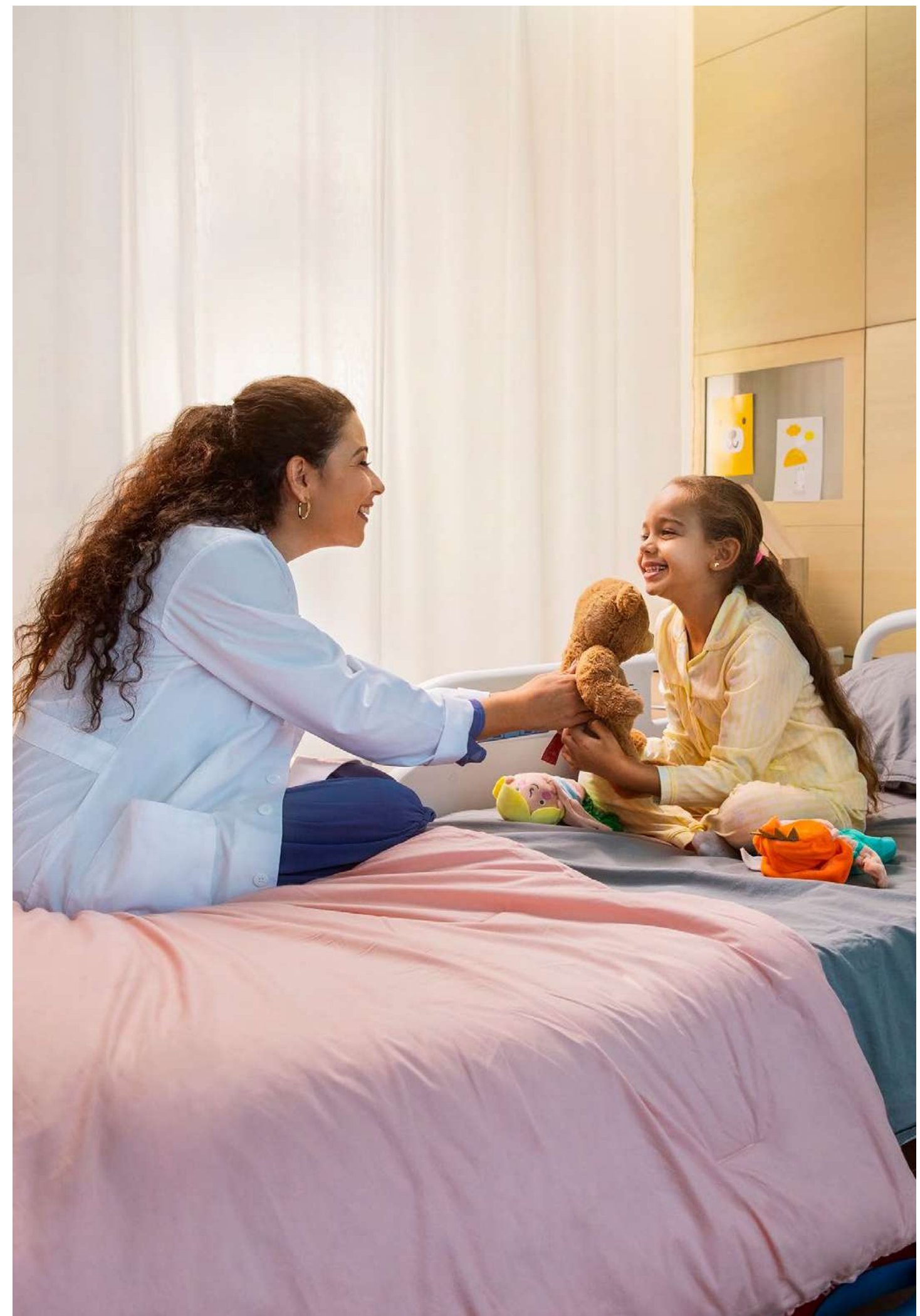
The OB-GYN Department developed innovative programs that will position it as a center of excellence for the following services:

- Cytoreductive surgery
- Hyperthermic intraperitoneal chemotherapy for ovarian cancer
- Management of placenta accreta spectrum disorders during pregnancy, leading to a significant reduction in morbidity and mortality caused by this condition

The department also converted open procedures into minimally invasive procedures for both benign and malignant gynecological diseases. These changes resulted in an increase in transfers and referrals from the UAE and neighboring countries for complex OB-GYN services.

In 2021, SSMC also began planning enhancements for some of this department's facilities, including plans to remodel the Emergency Department and Labor Ward Unit and create a new Comprehensive Prenatal Diagnostic Unit and an Outpatient Hysteroscopy Procedure Room.

SSMC's OB-GYN Department is committed to training and retraining our faculty members through novel and tailored educational programs that hone their abilities to perform open surgical procedures, laparoscopic minimally invasive treatment methods and ultrasounds. Additionally, the department is pursuing research opportunities, with several projects initiated and presented in national and regional conferences in 2021.





2021 COVID-19 EFFORTS

OUR STRATEGY FOR SUSTAINING A COVID-FREE MEDICAL FACILITY

In 2021, Sheikh Shakhbout Medical City continued to play a key role in national efforts to manage the impact of COVID-19 and stop the spread of the virus within the Abu Dhabi health care system. Although SSMC had operated as a COVID-19 hospital in the early stages of the pandemic, in June 2020 SSMC transitioned into a COVID-free facility.

Last year SSMC did treat those COVID-positive patients who needed complex care. The majority of COVID patients (around 2,000) seen in our facility were transferred to a COVID facility within SEHA after initial diagnosis. The Department of Health-Abu Dhabi identified SSMC as a facility that focuses on non-COVID patients and especially those with serious and complex health care needs.

SSMC implemented effective strategies, including working closely with other SEHA hospitals and designated health care facilities, to ensure the safety of our patients and staff, encouraging COVID-19 vaccination and maintaining infection prevention measures across the SSMC Campus.

Still, SSMC's Emergency Department functioned as a COVID ED for many SEHA hospitals that did not have the capacity to do initial assessments even though they may have had inpatient or ICU capacity. As a result, the SSMC ED evaluated and handled initial treatment for 5,307 COVID-19 patients.

SSMC's COVID-19 task force – established in 2020 and chaired by an infectious diseases consultant, including SSMC executives, key stakeholders and SEHA-developed evolving protocols which aided early identification of COVID-19 positive patients and subsequently early transfer out to COVID-19 designated hospitals, such as:

- A fast-track process in the ED for isolation and triage of patients with flu-like illness,
- COVID-19 testing
- Rapid PCR testing

When finding beds for patients in other SEHA facilities was difficult, the ED created a vital holding area for seriously ill COVID-19 patients until there was space at receiving hospitals.

All clinical specialties in SSMC developed pathways for safe management of patients suspected or confirmed to have COVID-19.

Vaccination program success

SSMC's Nursing and Occupational Health teams developed an effective vaccination campaign in January 2021, which led to a rapid uptake of COVID-19 vaccination across the workforce throughout the year.

Vaccination Stats:

By March 2021, more than 70% of SSMC's staff had been vaccinated, and by the end of 2021, more than 90% of staff were fully vaccinated.

As part of the efforts to reduce the spread of infection, a system was developed for weekly staff PCR tests. In addition, the SSMC Infection Prevention and Occupational Health teams worked together to ensure that staff members who were exposed to or tested positive for COVID-19 were cared for and that return-to-work protocols were in place to help protect the safety of our patients.



RETHINKING OPERATIONS AND ADMINISTRATION SERVICES

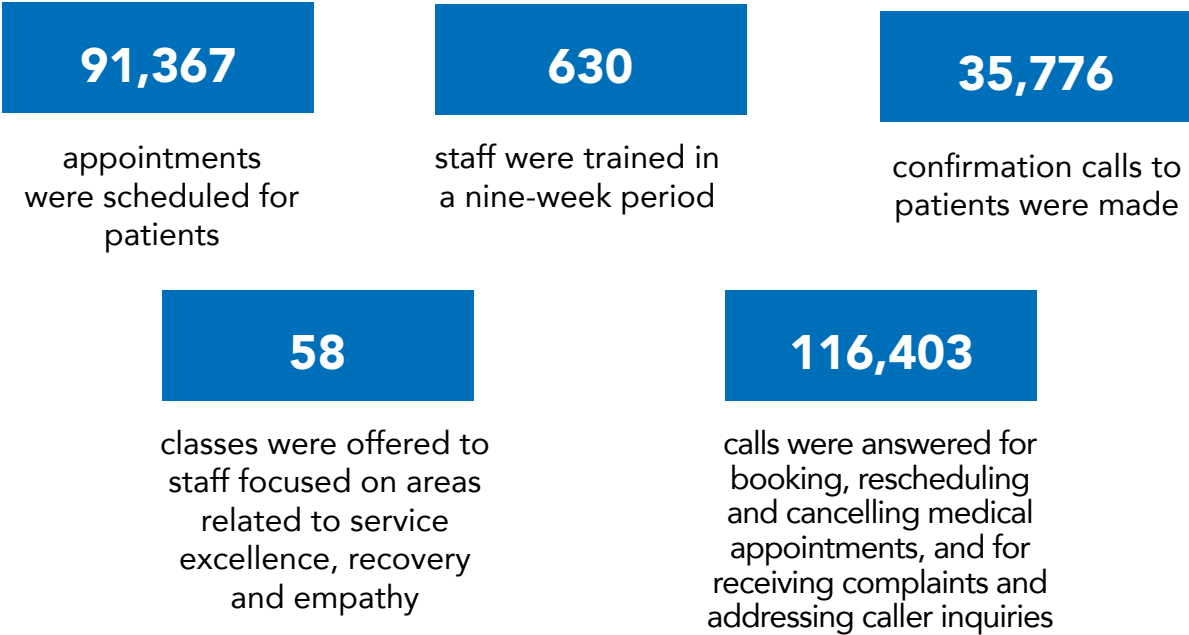
A FULL-SERVICE APPROACH TO PATIENT CARE



We've made exceptional progress in improving the patient experience over the course of the last year, which included developing and implementing our SSMC Experience Strategy, which defines five different program lines to support the practice in elevating our patient experience. We are building a bridge between the community and our hospital in different ways using a variety of platforms that foster trust and continue to introduce the SSMC health care experience in the area

Stacey Terrell Jones
Chief Operating Officer, SSMC

2021 efforts to improve patient services:



Sheikh Shakhbout Medical City's values are Respect, Integrity, Compassion, Healing – Care, Teamwork – Together, Innovation, Excellence, and Stewardship. As one of the largest tertiary hospitals in the UAE, its goal is to ensure that SSMC delivers clinical excellence and a superior patient experience while honoring those values.

New patient experience strategy

In 2021, understanding the patient experience and building a strategy that would improve the patient journey was an important priority for all members of the SSMC care community.

The key message of the new SSMC Experience Strategy is: "Everyone is the Patient's Experience." SSMC created five distinct Experience programs to support this key message and the overall strategy:

- Patient Experience Office to resolve day-to-day challenges in the patient's journey
- Training and Education to train all staff on such topics as service excellence, service recovery, the Mayo Clinic Model of Care and connecting with empathy
- Improvement Partnership to bring together Practice and Operations leadership to review patient perceptions in their specific areas and look for ways to improve the patient's journey
- Community and Humanities to engage and connect with patients and their families through music, arts and community forums
- Reporting and Analytics to create robust patient perception data, spot trends, identify Practice and Operations opportunities, gain insight and provide feedback and direction to staff

STREAMLINING STRUCTURE FOR A BETTER PATIENT EXPERIENCE

The Sheikh Shakhboub Medical City care model extends beyond the interactions patients have with their medical team. From appointments, registration and billing to coordination of care, safety protocols and data integrity, every department and staff member is part of the SSMC patient experience. In 2021, the hospital made multiple structural and operational changes to improve the SSMC experience of patients and their families.

Administrative leadership models

SSMC uses a leadership model and governance adapted from Mayo Clinic that supports the SSMC model of care and operation. Decision making is supported through a cross-functional committee structure by leaders working together in physician-administrator-nursing dyads and triads, with shared responsibility for our patients and the organization, and shared ownership of outcomes. The SSMC leadership model harnesses diverse perspectives and encourages engagement and teamwork to optimize health care delivery and take it to the next level.

Call Center

SSMC's Call Center launched in July 2021 to improve operational efficiency with management of patient access, including scheduling appointments pursuant to phone calls, electronic referrals, the patient portal and internal orders. The center's professional multilingual team has excellent knowledge of SSMC practices and an awareness of local culture, which continuously improves communication with patients and the community.

The Call Center has also improved communication among the call center team, practice leadership and all relevant departments. The team monitors and records calls for quality assurance, created decision trees for each practice to ensure each patient is scheduled with the right physician or right team, and supports the scheduling team.

Admission and Transfer Center (ATC)

The Admission and Transfer Center (ATC) was established to ensure safe patient transfers using streamlined processes for inbound and outbound transfers between SSMC and other UAE health care facilities. Led by a medical director and unit manager using a dyad model of leadership, the ATC staff number increased from five to nine experienced nurses by the end of 2021. According to the new ATC workflow, the inpatient and Emergency Department patient transfer process follows specific protocols to facilitate an efficient and safe transfer of the patient.

In 2021, the ATC:

- Handled 6,668 requests
- Completed nearly 5,000 transfers in and out of SSMC
- Transferred more than 2,000 COVID-19 patients out of the hospital and into designated facilities
- Makes or receives approximately 200 phone calls and processes 190 emails every day, which relieves clinical staff of the patient data collection burden, frees up physicians' time so they can focus on patients and clinical matters, and increases patient safety

Protective Services

The SSMC's Department of Protective Services was established in 2021, comprising Security Operations, Security Control, and Readiness and Continuity Services. This new department is charged with providing a safe and secure environment for our patients, visitors and staff through a recognized framework of security, readiness and continuity.

In 2021, SSMC's Department of Protective Services:

- Launched the Security Command Center, a new central platform accessible 24/7 for all security related matters by all staff
- Developed, approved and published an Emergency Management Plan & Security Management Plan
- Established initiatives including Visitor Access Control (Inpatient Units), operational adjustments for COVID-19 regulations, patient/visitor elevator controls, and new security checkpoints across SSMC
- Implemented an Annual Business Impact Analysis
- Performed a Hazard Vulnerability Assessment as part of the SSMC Readiness and Continuity services
- Completed a test of SSMC Readiness and Continuity processes in collaboration with Abu Dhabi Civil Defense, SEHA and the SSMC team



I was responsible for providing a safety watch over a severely depressed female patient who attempted suicide while admitted at SSMC. My security colleagues and I were able to talk with the patient and her family to help her to overcome her emotional condition. Over time she became stable, and to my surprise, she returned to offer her personal gratitude to the Protective Services Department and the Security Operations team once she was discharged. From this experience, I recognized the importance of SSMC values in putting the needs of the patient first, and as a security guard working in the health care industry, I believe in going above and beyond to ensure patient safety.

Fatmata Sesay
Security Guard

Clinical Documentation Integrity team

In 2021, SSMC recruited a high-caliber Clinical Documentation Integrity team and completed the development of the CDI program and related policies and workflows. This program encompasses a coordinated multidisciplinary team and includes members of Quality, Coding and Revenue Cycle teams in addition to physicians, resulting in the concurrent capture of accurate and complete documentation during each patient's stay at SSMC.

The CDI program enables SSMC to understand patient outcomes, highlight complications of care and provide an accurate reflection of patient complexity. It allows for reflection of the true patient acuity and severity of illness and adds value to different quality and operational metrics including risk of mortality, severity of illness, length of stay and case mix index.

In partnership with the clinical practice, SSMC identified CDI champions to complete physician education and training and developed documentation tip sheets.

Centralized model for administrative services

A well-trained, professional administrative support team is a critical foundation for any organization. Rapid shifts in business conditions have led leaders to re-evaluate which service delivery and structure model will have the most business impact. In 2021, SSMC initiated a new model for administrative services that allows the provision of the necessary administrative support to doctors, increasing standardization in best practices, and facilitating coordination of all enterprise activities between physicians and other departments.



EDUCATION SHIELD



As one of the three shields that define the SSMC model of care, and a key differentiator that will position SSMC as an academic destination medical center, education is at the forefront of our strategic development. As part of our mission to train the next generation of physicians and allied health leaders, we continued to improve and develop new educational programs throughout 2021 and build relationships with local and regional universities and health care institutions.

Dr. Abba C. Zubair
Dean of Education, SSMC

ENHANCING MEDICAL EDUCATION EXTERNALLY

BECOMING THE MEDICAL EDUCATION DESTINATION CENTER OF THE MIDDLE EAST

SSMC learner stats

325+	50+	90+	50
learners were educated	medical students	nursing and allied health students	Interns
100+	25	4	4
Residents	Fellows	Accredited residency programs were established	Accredited fellowship programs



There are two objects of medical education: to heal the sick and to advance the science.

Charles H. Mayo

Attracting and retaining the most talented and skilled staff will help Sheikh Shakhboub Medical City to achieve its vision, mission and primary value. To contribute meaningfully to improving community health outcomes, SSMC must champion best practices in continuing medical education, maintaining and improving standards, implementing accreditation standards, mentoring, educating and working collaboratively with other health care providers.

The Education shield adopted by SSMC marries these two goals. As noted above by Dr. Charles H. Mayo, focusing on medical education is integral to caring for patients. Indeed, teaching, training,

learning, growing and advancing medical knowledge and skills are vital to building and bolstering the foundation of all patient care.

“During 2021, SSMC demonstrated its commitment to training the health care workforce across the medical and clinical education continuum in collaboration with local, regional and international stakeholders,” according to SSMC Dean of Education Dr. Abba C. Zubair. “We proudly seek to make the UAE a leading destination for medical education that attracts talent from all over the world.”

Education shield’s guiding principles

SSMC’s Education shield relies on the following principles:

- Improve patient-centered care by enhancing teaching expertise and learning experiences
- Integrate effective and appropriate technologies that complement current teaching strategies
- Ensure equitable access to platforms, services and centers that support educational excellence
- Develop our capacity to enable individual and collective leadership and innovation
- Foster an environment that promotes excellence in educational research
- Cultivate a supportive learning environment for learners and faculty members

SSMC’s Education shield works alongside:



*The students joining SSMC’s training program from Khalifa University are the top scorers in the UAE’s International Foundations of Medicine exams, which includes Basic Sciences exams and Clinical Sciences exams.

2021 ACCOMPLISHMENTS

- DOH accreditation for SSMC as a provider of continuing medical education (category 1)
- Accreditation expansion for residency and advanced fellowship programs
- The first accredited Hematology, Rheumatology & GI Adult Fellowship programs in the UAE
- Successful site visit for the GME Institute by ACGME-I in September 2021 for Continued Institutional Accreditation
- Successful re-accreditation for the Rheumatology Program by ACGME-I for four years
- Graduated the first class of GI fellows in UAE
- 96% overall satisfaction of Residents in Educational Content in (ACGME-I) Survey Report
- 87% Board Pass Rate (Arab Board and Jordanian)

Clerkship

SSMC's Clerkship program welcomes students from UAE's medical universities during their final year(s) of study to gain exposure to various fields of medicine and directly participate in patient care. The program is completed twice a year for eight weeks.

During 2021, 29 students from Khalifa University and 20 students from Gulf Medical University took part in bedside teaching and training as part of their clinical training. Rotations included internal medicine, surgery, obstetrics and gynecology, pediatrics, medical imaging and neurology, family medicine, and psychiatry. Students join morning rounds, in-depth discussions on patient cases, and have the opportunity to explore select patient cases with department Chairs during a bespoke Chairman Round.

Case study: UAE's only Hematology Fellowship

- Five fellows are currently enrolled in the Hematology Fellowship Program
- Two fellows joined the UAE hematology fellowship in 2021
- A three-year program is now available

The SSMC Hematology Fellowship Program offers a three-year postgraduate fellowship in adult hematology. Following the integrated model, training is designed to prepare fellows for a career in clinical hematology by providing formal instruction in the various benign and malignant hematological diseases, clinical experience and opportunities to acquire expertise in several diseases. The training also coaches learners on how to work with other disciplines to provide multidisciplinary care and lead multidisciplinary teams (including lab, pathology, imaging, palliative, nursing, therapists, surgeons, etc.).

The program objectives are diverse; from producing graduate adult hematologists with adequate knowledge and skills to cope efficiently with the relevant health problems of patients with blood disorders, to training fellows to become self-disciplined and self-dependent learners and providing an educational environment that promotes health care standards.

The program also seeks to train fellows to perform research, emphasize a research-oriented approach to problems and produce graduate fellows meeting internationally acceptable standards with appropriate attitudes and medical ethics, while realizing the importance of a team approach to medical issues.

INTERNAL EDUCATION PROGRESS: OUR LEARNERS

42

Grand Rounds attended by 2,500+ from SSMC, SEHA & Khalifa University

7

Special Guest Lectures attended by 590 from SSMC, SEHA & Khalifa University

38

CME lectures organized by SSMC medical departments

As an academic medical center, in 2021, Sheikh Shakhbout Medical City focused on building the Education shield as one of its top strategic priorities, continuing and expanding physician internship across departments and service lines; residency across emergency medicine, internal medicine, otolaryngology and pediatrics; and fellowship across cardiology, gastroenterology, hematology and rheumatology.

SSMC is creating a stimulating educational environment that encourages creativity, inquiry and critical thinking by adapting to the unique needs of each learner. SSMC is continuously evaluating, refining and improving educational programs and staff development opportunities to ensure that its workforce has the tools, training and mentorship it needs to provide informed and forward-thinking care to patients.

Continued Medical Education Center

Over the past year, SSMC has collaborated with CME accreditation authorities such as the Department of Health – Abu Dhabi (DOH) and obtained a license for SSMC to be a CME provider in the UAE. SSMC also collaborated with Mayo Clinic School of Continuous Professional Development and initiated the process to accredit SSMC CME activities beginning with SSMC Grand Rounds.

SSMC created CME guidelines, policies and a CME committee comprising representatives from all medical departments, allied health staff and nursing staff to establish effective communication channels with all learners and offer CME programs tailored to their needs.

In 2021, SSMC hosted a number of successful CME events in collaboration with Mayo Clinic, including the first CME on Complex Care at SSMC, which was attended by 780 health care professionals from the private and public sectors and had a 96% overall satisfaction rating. SSMC also hosted the first pediatric airway symposium and the first stroke education workshop for nurses, with a 95% total satisfaction rate.



Leadership Development Program

A significant part of developing the SSMC workforce is training and equipping the health care leaders of tomorrow. SSMC employees who are keen to develop their leadership skills have a wide array of programs to enroll in:

Mayo Clinic Leadership Program

- Launched in November 2021 as a virtual program, 180 leaders from across different specialties and disciplines, including allied health, nursing, medical and administration, enrolled in 24 courses with 95% overall satisfaction rating. Face-to-face modules were scheduled to begin in May 2022.
- The program curriculum includes leadership values and knowledge components, Mayo Clinic leaders' perspectives, podcasts, and reflection assignments. The topics include performance management, development of others, accountability, decision-making, effective time management and delegation, leadership confidence, and how to approach difficult conversations

Individualized Coaching Program

- 21 of SSMC's executives and leaders enrolled in courses focusing on such topics as advanced levels of self-awareness, self-mastery and personal effectiveness; sharpened emotional, behavioral, and social intelligence; an adaptable leadership style; planning for and acting on organizational priorities; and strengthening talent management skills
- This program offers participants a one-on-one approach to training and development, with each member receiving a customized training program that is tailored according to their development needs and objectives.

SSMC Leadership Lecture Series

- Every month, SSMC welcomes internal and guest speakers to discuss leadership topics. For example, in December 2021, Dr. Youssef Maalouf, chair of cardiology division, medical director of the office of international and executive care and consultant cardiologist, SSMC, spoke about adapting to change. During the session, Dr. Maalouf provided guidance to leaders on how to accept change, remain positive, get a fresh perspective, focus on what they can control, set new goals, and stay connected to colleagues.
- Other lecturers explored a wide array of topics, ranging from stress management with tips on how to avoid staff burnout, to how to maintain a work-life balance, to mentorship in academic medicine.



Exchange Program



My time visiting Mayo Clinic was amazing, providing me a valuable platform to share my experience in the UAE, observe and collaborate with my peers in the United States, and plan for future collaborations.

*Dr. Asma Deeb,
Chair of the Division of Pediatric Endocrinology and
Chair of the Research Ethics Committee, SSMC*

The exchange of knowledge and best practices is an integral part of SSMC's relationship with Mayo Clinic. In 2021, the SSMC and Mayo Clinic exchange program was launched, giving SSMC-based talent the opportunity to travel to the United States to engage with Mayo Clinic international colleagues, share their expertise, and learn latest methodologies to bring to the UAE health care ecosystem.

Dr. Asma Deeb, division chair of Pediatric Endocrinology and chair of the Research Ethics Committee at SSMC, kicked off this program, traveling to Mayo Clinic in September 2021. With the guidance of SSMC Chief Medical Officer Dr. Matthew Gettman, a tailored one-week program was developed for Dr. Deeb during her time at Mayo Clinic, where she met with the chair of Pediatrics at Mayo Clinic and the department's pediatric endocrinologists.

Dr. Deeb enjoyed the opportunity to connect with subspecialty experts from Mayo Clinic, including clinical geneticists, pediatric radiologists, metabolic bone disease experts and adult endocrinologists. She presented to Mayo Clinic's team of pediatric staff and endocrinologists through a series of sessions and had interactive sessions with endocrine fellows and pediatric residents.

The visit resulted in the ongoing exchange of expertise on complex patient cases, the engagement of Mayo Clinic experts to participate in SSMC-led and local industry events during 2022, plans to collaborate on joint research programs in the field of diabetes, collaborative work on reproductive endocrinology, and robust plans to continue the fellow exchange program between Mayo Clinic and SSMC.



RESEARCH SHIELD



Research is a distinguishing element for Mayo Clinic, and here at SSMC, we share that commitment of solving complex research questions for the benefit of our patients. Through our unique culture of collaboration and teamwork, in addition to our best-in-class facilities and resources and our connectivity to Mayo Clinic knowledge and expertise, our team can quickly bring proven diagnostics and therapeutics to patients and share this knowledge with the next generation of doctors and scientists.

*Dr. Shahrukh Hashmi
Acting Medical Director of Research, SSMC*



BUILDING A RESEARCH HUB

BECOMING THE MEDICAL RESEARCH CENTER OF THE MIDDLE EAST

The Research shield will enable Sheikh Shakhbout Medical City to become a leader in medical innovation and exploration in the region and will build a foundation for the UAE to help transform the future of health care.



As one of SSMC's three shields, research is essential to finding out which treatments work better for patients, and it plays a critical role in discovering new treatments, which allows our team to provide the highest-quality care for every patient.

Charles H. Mayo

In 2021, SSMC's newly formed research department concentrated on developing a 10-year strategic plan, which encompasses the building of a stand-alone research center, and the hiring of highly skilled researchers to (1) increase the scope of the department's capabilities and engagement with SSMC's clinical teams; and (2) work with external health care organizations including Khalifa University and Mohamed Bin Zayed University of Artificial Intelligence.

Moving forward, SSMC will actively promote the work taking place under its Research shield and raise awareness of important research partnership opportunities.

2021 ACCOMPLISHMENTS

33

studies approved by SSMC's Research Ethics Committee (IRB)

2x

proposals doubled compared to 2020

> 164

papers published in peer-reviewed journals

2

clinical trials activated

2

clinical research coordinators, one research assistant and one project manager hired

5

clinical trials in development by the end of 2021 (currently 31 industry studies in development)

In 2021, SSMC signed a memorandum of understanding with Novartis, which has agreed to sponsor education, patient awareness and research activities at SSMC.

As a future destination medical center, SSMC has fostered a learning environment in line with its commitment to develop the Life Science Innovation Hub in Abu Dhabi, where medical education, research and innovation continuously advance the practice.

PATIENTS AND PHYSICIANS: IN THEIR OWN WORDS

MULTIDISCIPLINARY TEAMS COME TOGETHER TO IMPROVE PATIENTS' LIVES

Removing a 7.8kg tumor

At the end of January 2021, a 37-year-old father of three from the Philippines visited SSMC and was diagnosed with a large tumor that had grown to 7.8 kilograms. By the time the patient underwent surgery in March, his tumor had expanded to roughly 30 centimeters in diameter and was pressing against his organs, having occupied his abdomen from just below the diaphragm to the pelvis and pushing his stomach, colon and kidneys to the side, ultimately putting the patient's life at risk.

Patient: "When they first told me I had cancer, I felt like someone had poured cold water over my head. Going back to the Philippines for treatment was not an option. All my family is here, and no one would be able to take care of me back home," said the patient.

Following the patient's diagnosis, Dr. Salem Al Harithi, consultant, colorectal and hepatobiliary surgery, and the team identified the tumor as removable, but the procedure had risks, including the potential of having to remove organs that had begun to connect to the mass.

Physician: "We were planning to remove the right colon because it looked stuck to the mass and there was risk of massive bleeding if you damage one of the major vessels," said Dr. Al Harithi. "Thankfully, when we did the operation we found a huge mass, which we removed completely without damaging or removing the organs. It went well. Blood loss was minimal."

The patient only spent five days in the hospital in recovery before continuing to rest from home, without the need for radiotherapy or chemotherapy.

Patient: "When they did the surgery, I cried from joy. I expected the worst and never imagined that everything would turn out the way it did. I feel lighter and healthier."

First hip arthroscopy in Abu Dhabi

Complaining of excruciating hip/groin pain for four years, a 69-year-old Emirati patient visited SSMC, where she was diagnosed with a hip labral tear. Hip labral tears can be caused by trauma, structural abnormalities or repetitive motions.

To relieve the patient of her symptoms, the medical team opted to repair the labrum arthroscopically and the procedure was completed successfully by Dr. Sheik Hussain, consultant, orthopedic surgery. The arthroscopic procedure involved the insertion of a narrow tube attached to a fiber-optic video camera and surgical tools through small incisions, the size of a buttonhole.

Physician: "The patient's symptoms involved painful catching and locking sensation, and despite her age, there was minimal arthritic changes along with a labral tear confirmed by MRI scan. This was a key factor in our decision to proceed with a minimally invasive tactic as opposed to a more traditional approach."



Following the hip arthroscopy and labral repair, the mother of two and grandmother of 10 spent one day in the hospital before going home, underwent physiotherapy, and continued visiting SSMC for follow-ups to monitor her progress. She reports drastically decreased hip pain and better function.

Patient's son: "My mother spent extensive time feeling pain in her hip, with limited hope of a definitive diagnosis or treatment. Dr. Hussain and the orthopaedic team at SSMC identified the underlying problem and better yet, had a solution, she was so pleased, as were we. We're so grateful for their compassionate and expert care, which allowed her to not only get the treatment that she needs but do so in a way that didn't add pressure on her physical or emotional wellbeing."

Successful surgery for spinal deformity

A 16-year-old patient from Egypt was diagnosed with a curvature of the spine and was told by previous doctors the problem could be managed through exercise. Unable to exercise during the pandemic, the patient's pain intensified. After examinations at SSMC, complemented by a series of X-rays and MRI scans, the patient was diagnosed with severe thoracolumbar scoliosis.

In addition to significant deformity, this condition caused back pain with the potential to result in frequent falls due to the lack of a stable center of gravity. There was also concern that, if left untreated, the condition would affect the function of the lungs and associated breathing. Following careful evaluation, it was determined that surgical correction was the best course of treatment.

The patient's surgical team underwent an extensive two-week period of pre-operative planning to ensure success, including conducting a mock surgery and consultation with a multidisciplinary team. The patient's three-hour surgery was carried out just below the cervical spine to the lumbar spine and was the first scoliosis procedure to be conducted at the hospital. It resulted in the correction of the curvature from 80-degree scoliosis, leading to a 100 percent correction of her spine.

Patient: "I went into surgery feeling very happy that my pain will finally be over. I am now back to school and look forward to running and swimming again."



SSMC FORWARD: THE ROAD AHEAD

TRANSFORMING OUR FUTURE TOGETHER THROUGH TEAMWORK



Our journey toward becoming a destination medical center requires a patient-centered and collaborative approach to change. To accelerate that journey, we introduced a new organization-wide transformation initiative – SSMC Forward. This three-year program focuses on transforming patient care, improving service delivery across the continuum of care, and building a collaborative culture of teamwork and excellence.

Michael Ryan
Chief Administrative Officer, SSMC

SSMC Forward – A look at 2022 and beyond through transformation

Sheikh Shakhbout Medical City’s 2022 plan consists of 10 top priorities that are key to realizing our goals. The SSMC Forward program is one of those elements to drive the changes necessary to reach the long-term goal of becoming a destination medical center.

This comprehensive initiative aims to transform services across the continuum of care by developing core business processes, maturing data and digital capabilities, and building a high-performance culture necessary for world-class service delivery and continuous improvement. The SSMC Forward program is divided into 12 clinical and administrative workstreams with a combined portfolio of 52 projects to be completed over three years.

A critical pillar of this transformation effort is ensuring SSMC’s people, data, systems, and processes are well-suited to meet growing patient needs and sustain continuous improvement efforts. As part of this commitment, SSMC is rolling out a management operating system called Daily Teams to establish a front-line culture of solving problems across all disciplines in an organization that reflects more than 50 nationalities and varied ways of working.

In addition, capability for complex project execution is now enhanced at SSMC through the activation of a Program Management Office. This enterprise PMO provides the framework and structure for executing projects on target and within budget.

Underlying the comprehensive change efforts within SSMC Forward is the necessity to transform the organization’s data capabilities en route to becoming data-centric in its decision-making. This change will occur through implementing a full-scale data improvement program focused on data governance, data literacy and improved analytical decision-making.

Transforming patient care

With a target of increasing the patient “likelihood to recommend” score to 90% within two years, the 52 initiatives within SSMC are focused on achieving up to 30%-50% improvements in patient journey times, access, service quality and efficiency. Embedding Mayo Clinic’s guiding principle “the needs of the patient come first” into the solution design of every clinical project will help SSMC reach these goals.

SSMC is utilizing LEAN methods to remove waste, health systems engineering and Six Sigma methods to optimize performance, and design-thinking to improve experience. SSMC Forward enhances value to patients across the entirety of their experience.

Notable outcomes during the initial stages of the SSMC Forward program include



Shorter ED wait times



Reduced outpatient registration times



Increased operating room capacity

These outcomes translate to a better experience and unlock significant value (improved patient outcomes per unit cost) from our services.

Transforming core processes and capabilities

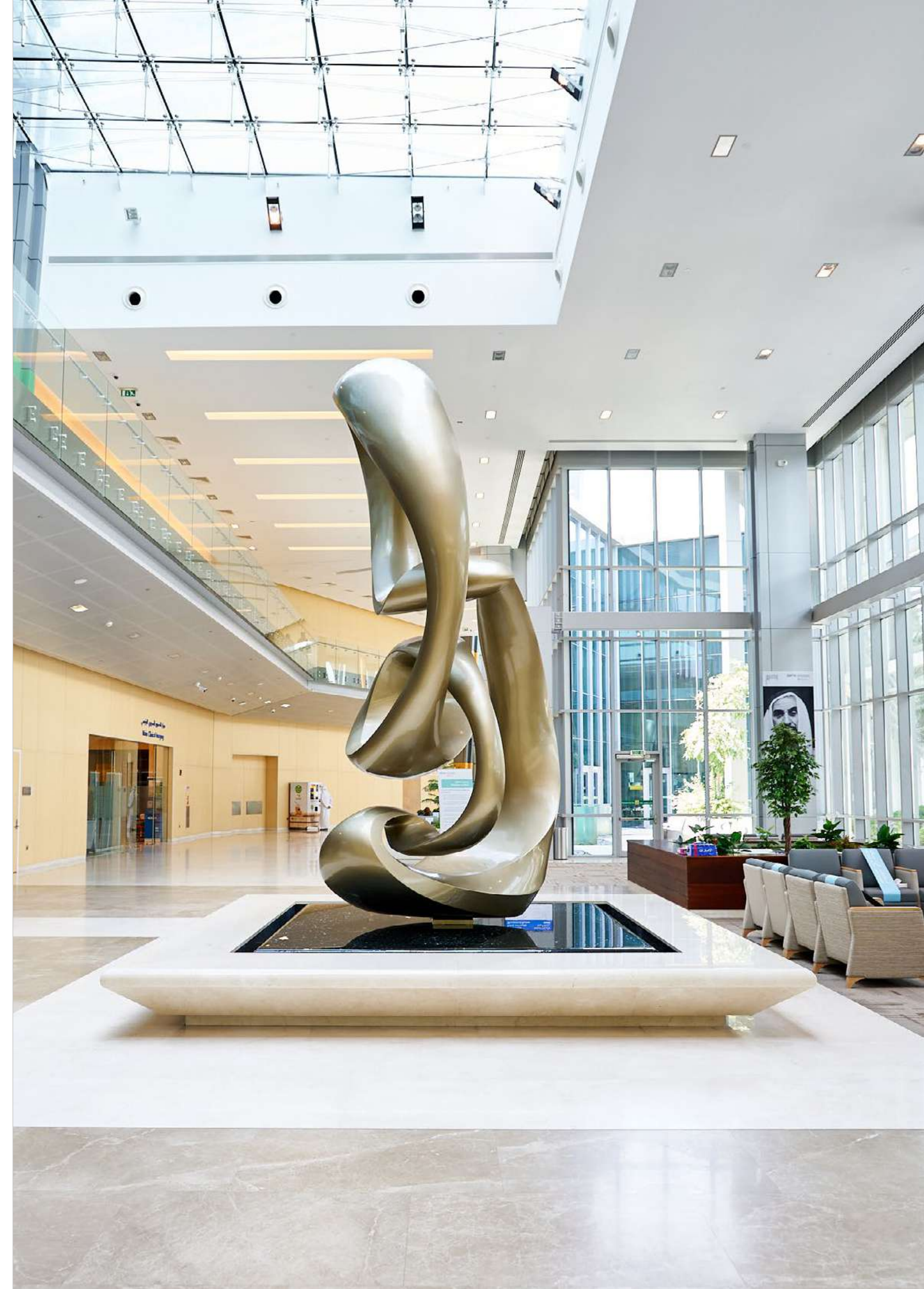
As SSMC continues to grow its services, it is pivoting from a “newly activated” hospital focused on establishing services to one focused on continuous improvement and evaluation. Facilitating SSMC’s move toward steady-state operations, the SSMC Forward program is installing a “management system” across all disciplines and departments. This management system, called Daily Teams, builds on the Mayo Clinic principle of “unit-based teams” to build effective routines, front-line improvement capabilities, KPIs, and self-audit systems directly into all front-line units. Initial Daily Teams implementations have shown it enables staff to identify, evaluate and solve 20-30 patient-facing problems monthly while aligning with strategic priorities.

Transforming our cultural capabilities

By building a collaborative culture of teamwork and excellence, SSMC Forward promotes a culture that supports staff well-being and nurtures leadership behaviors through coaching and skills development. The SSMC Forward transformation portfolio was designed through in-depth feedback and collaboration across the organization, ensuring a clear strategy with execution plans. In addition, SSMC Forward incorporates Mayo Clinic’s guiding principles and values into practice via a breadth of specialty training, mentorship, and skills exchange programs with Mayo Clinic planned through 2022 and 2023.

Building on its guiding principle of “integration,” the SSMC Forward program has bridged efforts with SEHA teams to resolve system-wide issues such as length of stay and patient access. Furthermore, the program has fostered a new partnership with the Engineering faculty of Khalifa University to introduce optimization solutions into clinical practice to improve productivity and performance.

As SSMC Forward progresses, ongoing efforts to ensure that the SSMC vision for a destination medical center remains front and center are essential. The scale and impact of transformations across the organization are growing, and SSMC is excited to be part of this journey alongside our patients and staff.



THANK YOU

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