

*Subang Jaya Medical Centre
Recognized as the*

2021

Company of the Year

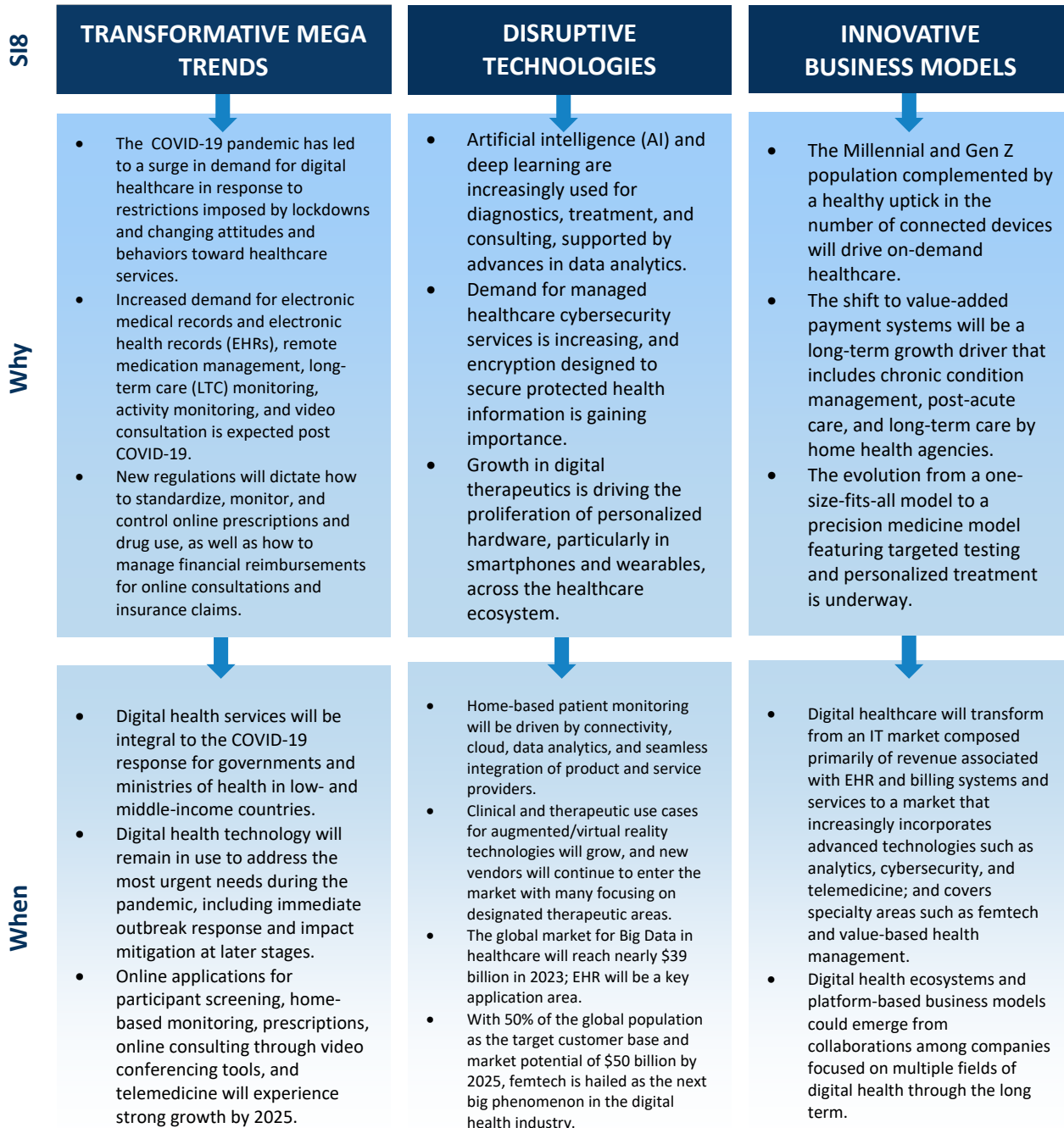
Malaysia Hospital Industry
Excellence in Best Practices



Subang Jaya
Medical Centre

Strategic Imperatives

Frost & Sullivan identifies three key strategic imperatives that impact the digital health industry: transformative Mega Trends, disruptive technologies, and innovative business models. Every company that is competing in the digital health space is obligated to address these imperatives proactively; failing to do so will almost certainly lead to stagnation or decline. Successful companies overcome the challenges posed by these imperatives and leverage them to drive innovation and growth. Frost & Sullivan’s recognition of Subang Jaya Medical Centre is a reflection of how well it is performing against the backdrop of these imperatives.



Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Subang Jaya Medical Centre excels in many of the criteria in the hospital space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Brand Equity and Focus Leadership

Subang Jaya Medical Centre (SJMC) is the flagship hospital of Ramsay Sime Darby Health Care (RSD) in Malaysia. SJMC is a comprehensive tertiary healthcare provider with top expertise and best practices. The hospital has consistently set medical firsts among its Malaysian healthcare peers since opening in 1985. For example, Malaysia's first open-heart surgery, pediatric liver transplant, stem cell transplant, adult and pediatric bone marrow transplants, and brain neurosurgery were all performed at SJMC. To date, the hospital has completed over 500 successful bone marrow transplants for both adult and pediatric patients.

In addition, SJMC was the first private hospital in Malaysia to set up a comprehensive Blood Disease Centre, Nuclear Medicine Centre, and Vascular Interventional Radiology (VIR) Centre. The latter center of excellence is a trailblazer, having pioneered the world's first transarterial bronchial chemosaturation, combined with argon plasma coagulation and radiotherapy, for a patient with trachea cancer. An eminent consultant VIR and interventional oncologist at SJMC successfully performed the therapeutic procedure. In interventional oncology, SJMC has achieved other firsts for Malaysia, including the first transarterial alcohol embolization for large liver cancer and transarterial chemosaturation of liver metastasis. Another first under VIR was the intracranial arterial thrombolysis, angioplasty, and stenting of a stroke patient in Southeast Asia.

Furthermore, SJMC was among the first cancer treatment centers in Malaysia to routinely measure the performance of its cancer care services. Some excellent performance results recorded for its core healthcare services include the following:

Breast cancer care: SJMC's breast cancer performance results, especially breast cancer care, have been consistently about 90%, which is close to the world-class benchmark of 95%. The hospital's high-performing cancer care system translates into excellent patient survival outcomes, with a five-year standardized relative survival rate of 92%, which is among the highest internationally.

Colorectal cancer services (CRC): Most CRC patients were diagnosed with colon cancer (57%), rectum cancer (23%), or recto sigmoid junction cancer (21%). The overall survival rate at five years was 95% for patients with Stage I disease, 82% for Stage II disease, 56% for Stage III disease, and 15% for Stage IV disease. More impressively, the relative survival rate at five years was 122% for patients with Stage I disease, implying effective healing. For Stage II disease, the relative survival rate was 98%, which is no less remarkable.

“SJMC has shown excellent effort in transforming its healthcare services to the next level through various digital transformations. The hospital’s track record in cancer treatment positions it ahead of other hospitals in Malaysia.”

- Norazah Bachok, Analyst

With its expertise in cancer care, SJMC, in collaboration with Cancer Research Malaysia, which is the only non-profit organization in the country dedicated to cancer research, has published a series of clinical trials and studies. For example, one of the clinical trials performed between 2018 and 2020 was the Malaysian Soy and Mammographic Density (MiSo) Study, a breast cancer prevention study to determine whether women who consume a significant amount of soy have a lower risk of breast cancer.

SJMC has received recognition from multiple local and international organizations for its outstanding performance within various healthcare services. SJMC is the first Malaysian hospital to be recognized as the Best Hospital in the Asia Pacific in 2020 and the only two-time winner of the Prime Minister Quality Award in the private healthcare category. Celebrating 35 years of service in 2020, SJMC has continuously upheld the highest standards of care and best practices in quality and patient safety. For example, the hospital has once again been accredited by Joint Commission International (JCI), in addition to being a Malaysian Society for Quality in Health-accredited hospital. The accreditation by the world’s foremost healthcare accreditor is a testament to SJMC’s efforts in demonstrating a deep commitment to high-quality care; a culture of safety for patients, visitors, and staff; a care delivery based on leading, evidence-based best practices; and leadership in complying with exacting standards. Other recognition for SJMC in 2020 from the Global Health APAC Awards includes Best Hospital of the Year in Malaysia, Oncology (Surgical) Service Provider of the Year in Asia Pacific, and Nephrology Service Provider of the Year in Asia Pacific.

Based on Frost & Sullivan analysis, transformation is vital to support Malaysia's transition toward Malaysia 5.0 by adopting and implementing the technologies of the Fourth Industrial Revolution that integrate both the physical and digital worlds. SJMC continually upgrades its hospital management information system, and the interconnectivity between departments ensures that all ancillary, administrative, support, and routine functions operate smoothly and in a coordinated manner. The

expertise of SJMC medical professionals, access to cutting-edge technology, and the delivery of best-in-class treatment set the foundation for the hospital and underscore its well-recognized brand name in the Malaysian healthcare sector. In addition, Frost & Sullivan recognizes that SJMC's strong brand continues to support increased patient volumes every year, resulting in growing revenue streams and profitability.

Best Practice Implementations and Customer Ownership Experience

According to SJMC, the factors that determine excellent healthcare services include broad advanced healthcare offerings, top-notch facilities, and integrated healthcare for end-to-end patient care. In addition, high survival rates, specialized staff, and vibrant patient support group activities are some of the critical areas that contribute to the sustainable success of any healthcare center. While all other hospital groups focus on creating a leadership position in managing various illnesses and conditions, SJMC successfully leads in several select cancer treatments. Moreover, significant advances in personalized medicine have made it inevitable for SJMC to incorporate targeted cancer therapies into more treatment paradigms.

With rapid advances in genomic technologies in the past decade, SJMC now offers a precision medicine approach to tailor treatment plans for individuals with targeted drugs using companion diagnostic tests. Furthermore, SJMC's pathology laboratory was the first in the country to initiate next-generation sequencing (NGS) for targeted cancer therapy. NGS has gained significant attention in recent years because it offers a comprehensive tumor molecular profile for cancer patients. NGS allows for the detection of large sets of genes (e.g., up to hundreds of genes) in a single test, instead of a gene-by-gene approach, thus providing greater sensitivity and a lower sample input than with traditional methods. NGS can integrate various types of mutations and genomic rearrangements in a single assay to support diagnosis, prognosis, disease monitoring, and therapeutic decision making.

Furthermore, the explosive growth in DNA technology and the translation of research findings into clinical utility within the therapeutic setting are already proving to be game-changers in how SJMC manages its cancer patients. Improvements and the convergence of multiple disparate technological advances (e.g., nucleic acid biochemistry, microfluidics, nanotechnology, and cloud access) are set to continue impacting the way the industry manages human diseases in the future. Cancer treatment, including hematology-oncology for adults and pediatric patients, was the most requested service at SJMC in 2020.

With over 45 major disciplines and sub-disciplines, SJMC is equipped with the latest medical systems and technologies to help doctors improve their practice, from better diagnoses and surgical procedures to improved end-to-end patient care. Other state-of-the-art equipment and services available within SJMC's facilities include the following:

SOMATOM Drive Dual Source CT Scanner: Introduced by SJMC, this scanner is the first in Malaysia that sets a new standard in low radiation dosing with fast scanning for a better patient experience, enhanced diagnostic accuracy, and advanced 3D and 4D imaging. The new high-performance dual source CT scanner, which has been approved by the US Food and Drug Administration (FDA), improves diagnostic imaging accuracy across various clinical disciplines, such as pediatric, cardiology, oncology, and emergency medicine. The system's new tin filter and low-voltage capabilities reduce patient X-ray

dosing and the required dose of contrast media. For example, in CT lung cancer screening, the radiation dose is as low as 15 chest X-rays, while the standard average is equivalent to 100 chest x-rays.

Neurosurgical services: SJMC stays ahead in neurosurgical services with its state-of-the-art facilities and equipment for its highly sophisticated Brainsuite. This solution features the latest innovative and revolutionary medical technologies, including the Buzz® Digital Operating Theatre, BrainLab Curve Image-Guided Surgery System (Curve Navigation System), Kinevo 900 Microscope – The Robotic Visualization System, and the BrainLab Airo Mobile Intraoperative CT scanner system (the first in Malaysia). SJMC’s Brainsuite can be used across different specialties and for complex cases involving the brain (e.g., cranial surgery and skull base tumor removal); spine; neurology; ear, nose, and throat (ENT); orthopedics; trauma; and maxillofacial. Brainsuite offers real-time access to patient data and optimized navigation with pre-operation planning and surgical visualization, thereby increasing surgical efficiency in the operating theatre (OT) and enhancing the surgical workflow to minimize procedure risk and to reduce procedure time.

“With strong capabilities, expertise, and state-of-the-art facilities, SJMC offers a wide selection of innovative healthcare services, leading to a greater number of patients every year.”

- Norazah Bachok, Analyst

Apart from the equipment in Brainsuite, SJMC provides a rehabilitative facility that is equipped with up-to-date, cutting-edge solutions, such as a snoezelen, a sensory integration room designed for children with special needs to have fun and learn in a relaxing atmosphere. In 2020, SJMC introduced its robotic rehabilitation equipment and services, including the following:

Neurorehabilitation uses a lower extremity-powered exoskeleton to assist with the ambulatory activities of individuals with neurological or musculoskeletal conditions at an early stage. Neurorehabilitation expedites the recovery process through repetitive movement, including controlled and coordinated patterns of movements that allow the relearning process to take place more effectively. **Electromyography (EMG)** is a robotic glove that assists movement when detecting the patient’s intention to move. In addition, EMG provides biofeedback of muscle performance during speech-language therapy sessions. **A Fourier M2 robot** interacts with the upper limbs throughout the hands and forearms through a control stick, with straps for the hand and gutter support for the forearm. The device uses motors in two planes and a haptic feedback system to enable the robot to support/challenge the user through four modular programs. **EMG-triggered stimulation (ETS)** provides external stimulation when detecting muscle contraction. **Neuromuscular electrical stimulation (NMES)** provides continuous stimulation to assist in motor nerve and muscle rehabilitation.

Frost & Sullivan commends SJMC for its strong presence in the cancer community and other centers of excellence. Moreover, SJMC’s continuous service improvements through various best-practice initiatives have led to a highly satisfying customer ownership experience, resulting in a notable leading position for SJMC with trusted capabilities in the industry.

Addressing Unmet Needs

The COVID-19 pandemic has impacted all sectors of the Malaysian economy, including healthcare. In addition, the pandemic has resulted in many people staying at home and/or working from home and making more purchases and conducting meetings online; therefore, digitalization has become the norm. New technologies have changed customer perceptions, with many patients wanting healthcare services provided more efficiently in suitable, convenient, and near-normal settings. Healthcare systems, therefore, need major systemic and transformational reform to remain viable in the years ahead.

Despite these challenges, many healthcare centers, including SJMC, have put extra effort into the digitalization transformation, with advances in digital technologies allowing clinicians to deliver healthcare services in a safe environment. Additionally, the pandemic has been a catalyst for the broader adoption of telemedicine. In 2020, SJMC launched a virtual consultation platform called Telehealth Plus when social distancing and non-essential contact first became the norm. The hospital provides follow-up patients with access to healthcare in their homes to maintain continuity of care and to ensure equity of care by offering services to patients living both near its facilities and at greater distances throughout Malaysia. The Telehealth Plus digital platform can be used for general health screening consultations and for providing select allied health services, such as sessions with physiotherapists, occupational therapists, speech therapists, clinical psychologists, and dietitians. Since its launch, the Telehealth Plus platform has been most popular among pediatric, urology, and dermatology patients and has been a popular choice for therapy sessions for children with special needs.

SJMC continues to introduce innovative and disruptive technologies within healthcare services and expects to offer neuro-spine services as one of its growth strategies within the next three to five years. With these innovative initiatives and additional growth strategies, Frost & Sullivan applauds SJMC's efforts that will lead to business sustainability and propel the hospital to the next level.

Customer Purchase Experience

SJMC offers a first-class patient experience to all stakeholders through “a journey for life as healthcare partners” to deliver quality healthcare services. This approach conveys to patients that SJMC can meet all their healthcare needs for life. To differentiate from other hospitals in Malaysia, SJMC focuses on innovation to improve efficiencies in providing premium healthcare services to all stakeholders. SJMC continues to foster an efficient customer experience by promoting an online appointment policy system and moving toward a mobile application. In addition, SJMC provides educational and informative materials through electronic resources, social media, and print channels. The hospital adopts and promotes to all staff a consistent approach to customer service based on agreed standards of professionalism, behavior, and presentation, as defined in its EXCITE values. Moreover, the hospital delivers value by gaining a deeper understanding of patients' needs and expectations and applying this knowledge to improve the delivery of optimal clinical care and hospitality services in a high-quality facility. SJMC participates in and expands clinical outcome studies to understand what matters most to patients.

SJMC understands that delivering outstanding and compassionate patient care means putting patients first and treating them as individuals. With the tagline 'People caring for people,' SJMC and its experienced healthcare team ensure patients receive the essential care and support they need through every stage of their health journey. To this end, SJMC recently established the following:

Integration of healthcare provides end-to-end patient care, from registration to discharge, and includes multidisciplinary and interdisciplinary coordination and teamwork.

Speak Up for Patient Safety is a Vanderbilt-based program that escalates the awareness of patient safety and encourages the staff to challenge potentially risky behavior. The program includes a feedback platform where anyone can report unsafe behavior confidentially, with the system responding to that feedback. The program is part of SJMC's commitment to reinforce a culture of safety and quality.

With continuous efforts in providing customers with a better experience, SJMC successfully maintains a strong patient base every year, at an average of 400,000 to 500,000 patients annually for the past few years.

Conclusion

SJMC has shown strong capabilities in various healthcare products and services, especially cancer treatment. Amidst the competitive and robust market-leading strategies adopted by other market participants, SJMC is positioned as an outstanding and innovative healthcare provider that develops strategized and disruptive technologies within various healthcare services, such as its comprehensive Blood Disease Centre, Nuclear Medicine Centre, and VIR Centre.

SJMC stays up-to-date on technology and treatment methods and continues to build its reputation for being the first in Malaysia to offer many treatment plans. SJMC invests in and delivers high-quality and effective care for patients by adopting the latest state-of-the-art medical equipment, such as the SOMATOM Drive Dual Source CT Scanner and numerous robotic medical devices. SJMC's strategic growth plans and continuous service improvements through various best-practice initiatives have led to a highly satisfying customer ownership experience, increased patient base, and higher revenue, thus positioning SJMC ahead of all other hospitals in Malaysia.

With its strong overall performance, Subang Jaya Medical Centre earns Frost & Sullivan's 2021 Company of the Year Award in the Malaysian hospital industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first to market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

