

Performance Report **2021-2022**

Making A Difference.
► Saving Lives

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About IJN



OUR VISION

TO BE A GLOBAL CENTRE OF EXCELLENCE IN INTEGRATED CARDIOVASCULAR AND THORACIC CARE



OUR VALUES

- PROFESSIONALISM
- TEAMWORK
- QUALITY
- COMMITMENT
- CARING
- INNOVATION



OUR MISSION

- WE ARE COMMITTED TO PROVIDE THE BEST PATIENT SERVICES WITH THE SAFEST AND HIGHEST QUALITY CARE.
- WE ARE A CORPORATE ENTITY THAT IS COMMITTED TO PROVIDE AND DELIVER EXCEPTIONAL PATIENT EXPERIENCES.
- WE AIM TO DRIVE TRANSFORMATION, TECHNOLOGY AND INNOVATION THROUGH TRAINING, RESEARCH AND DEVELOPMENT.
- WE ARE COMMITTED TO DEVELOP AND EMPOWER TALENTS TO ENHANCE ORGANISATIONAL GROWTH.
- OUR OBJECTIVE IS TO BE FINANCIALLY SELF-SUSTAINING.

Making A Difference.
➤ Saving Lives

Cover Rationale



In our pursuit of 'MAKING A DIFFERENCE AND SAVING LIVES', IJN has exemplified unwavering commitment and resilience amidst the challenges of the COVID-19 pandemic. We have upheld exceptional healthcare standards, implemented rigorous infection control measures, and continuously improved our practices to ensure the safety and well-being of our patients.

Today, we continue to lead the way in pioneering innovation within the cardiovascular and thoracic care field, achieving significant milestones at both the national and regional levels. Our relentless commitment to clinical excellence, innovative research, cutting-edge technology, and strategic collaborations has solidified our position as an industry leader in this medical sector. Furthermore, our unwavering focus on enhancing patient-centric care has resulted in the establishment of new quality standards in healthcare.

By engaging with our stakeholders, and upholding excellence in patient care, education, and community engagement, we continue to meet high levels of patient satisfaction and advocacy. Our robust governance framework and risk management practices too enable us to effectively navigate crises while maintaining the highest quality standards.

As we look ahead, our strategic initiatives, which include expanded services, the adoption of advanced technology, and the reinforcement of our brand, reflect our ongoing commitment to making a profound impact on healthcare and ultimately saving lives.

IJN At A GLANCE



Established on

1 AUGUST 1992

THE LARGEST

independent cardiac centre in
Southeast Asia



2,401

healthcare professionals



8

operating theatres

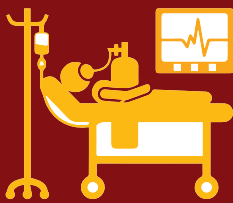
1

hybrid operating theatre



8

invasive cardiac labs



100

critical/high-dependency units

More than

5 MILLION

patients treated



175

doctors



449

beds

72 clinics

- Block A - **22** clinics
- Block A (Level 6) - **18** clinics
- Block B - **32** clinics



551

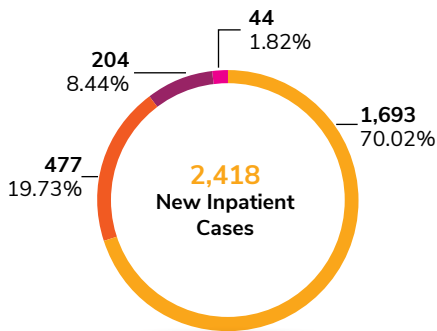
research papers published
since 1992



PATIENT Statistics

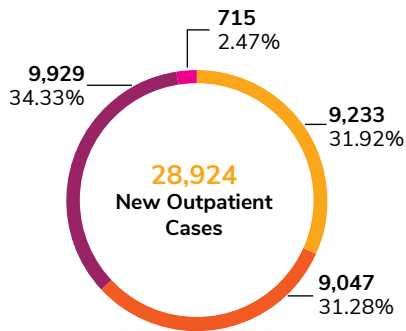
INPATIENT ADMISSIONS AND OUTPATIENT VISITS (2021-2022)

New Inpatient Cases



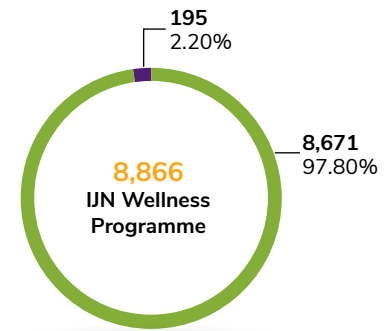
In terms of new inpatient statistics, the total number of new inpatient cases grew by 47% year-on-year (y-o-y), from 978 cases in 2021 to 1,440 cases in 2022. Of the total 2,418 new inpatient cases over the 2021-2022 period, approximately 1,693 or 70.02% of new inpatient cases emanated from patient referrals by the Ministry of Health (MOH).

New Outpatient Cases



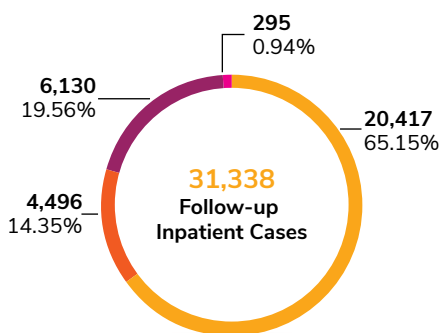
In terms of outpatient cases, there was a 20% y-o-y decline in the number of new outpatient cases, from 16,044 new cases in 2021 to 12,880 new cases in 2022. This was mainly due to the fact that there were no further referral cases for patients with heart disease from government hospitals that had been converted to COVID-19 centres during the pandemic. Of the total 28,924 new outpatient cases during the 2021-2022 period, private patients comprised 9,929 or 34.33% of new cases. This was followed closely by MOH and Non-MOH referrals comprising 9,233 (31.92%) and 9,047 (31.28%) of new outpatient cases respectively.

IJN Wellness Programme



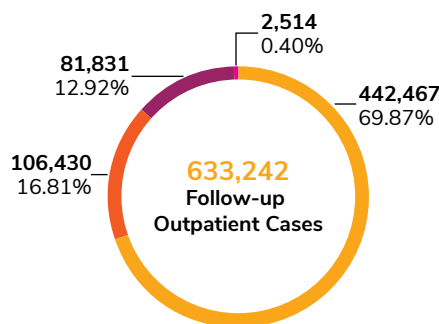
In terms of the IJN Wellness Programme, there was 59% hike in patient numbers (comprising both local and international payors), from 3,423 patients in 2021 to 5,443 patients in 2022. The bulk of the 2021-2022 period's total 8,866 payors comprised local payors who accounted for some 8,671 or 97.8% of the total number of wellness payors.

Follow-up Inpatient Cases



Similarly, follow-up inpatient cases grew by 12% y-o-y, from 14,792 cases in 2021 to 16,546 cases in 2022. Of the total 31,338 inpatient follow-up cases during the 2021-2022 period, cases from MOH referrals accounted for the majority i.e., 20,417 or 65.15% of such cases.

Follow-up Outpatient Cases



Meanwhile, follow-up outpatient cases grew by 6% y-o-y, from 307,909 cases in 2021 to 325,333 cases in 2022. Of the total 633,242 outpatient follow-up cases during the 2021-2022 period, cases from MOH referrals accounted for the majority i.e., 442,467 or 69.87% of such cases.

Types of Inpatient and Outpatient Payors

- MOH:** Ministry of Health (MOH) patients referred and sponsored by the MOH.
- Non-MOH:** Patients (other than MOH patients) sponsored by state governments, statutory bodies, local authorities, NGOs, and other charitable bodies, or under special arrangements.
- Private:** Local self-pay patients covered by insurance and corporate company GL's established in Malaysia.
- Foreigner:** Foreign self-pay patients covered by foreign insurance, foreign corporations, or foreign governments.

IJN Wellness Programme Payors

- Malaysian**
- Foreigner**

Board of DIRE



Datuk Saat Esa

Dato' Dr. Rozali Wathooth
Chairman

Datuk Harjeet Singh
a/l Hardev Singh

CTORS



Dato' Mohd Izani Ghani

Puan Rozida Zainol Abidin

Puan Hasmarulaini Omar

Datuk Dr. Muhamad
Radzi Abu Hassan

MANAGEMENT



From left to right:

Dato' Dr. Mohamed Ezani bin Md. Taib

Director & Head, Special & Expansion Projects (SEP)

Datuk Dr. Shaiful Azmi bin Yahaya

Head of Cardiology Department

Datuk Dr. Aizai Azan bin Abdul Rahim

Chief Executive Officer

Dr. Hasri bin Samion

Chief Clinical Officer

Encik Ismail Fahmi Abdul Rahman

General Manager, Human Capital & Organisational Development

Dato' Dr. Suhaini bin Kadiman

Head of Anaesthesia & Intensive Care Department

Committee



**Encik Mohd Amran
bin Shafie**

General Manager,
Hospital Support Division

**Dato' Dr. Alwi
bin Mohamed Yunus**

Head of Cardiothoracic &
Vascular Surgery Department

**Dato' Akmal Arief
bin Mohamed Fauzi**

Deputy Chief Executive Officer

Dr. Marhisham bin Che Mood

Head of Paediatric & Congenital
Heart Centre (PCHC)

Puan Norul Fariah binti Muda

General Manager,
Financial Management Division

Puan Anida binti Elias

General Manager, Nursing Division



AS A FINANCIALLY SOUND AND TECHNOLOGICALLY WELL-SUPPORTED CENTRE FOR MANAGEMENT OF CONGENITAL AND ACQUIRED CONDITIONS OF THE HEART, LUNGS AND BLOOD VESSELS, IJN'S TRAINEES HAVE BEEN FORTUNATE TO HAVE BEEN EXPOSED TO SOME OF THE MOST UP-TO-DATE ARRAY OF MANAGEMENT AND TREATMENT OPTIONS AVAILABLE.

DATO' DR. ROZALI WATHOOTH
Chairman, IJN Sdn Bhd

IJN: History and Glory

2022 marked the 30th anniversary of IJN's inception. In respect of cardiovascular and thoracic clinical services in the country, the situation today is a far cry from what it was just over three decades ago. Perhaps many would be unaware of the level of anxiety (or a sense of desperation even) experienced by numerous Malaysians or their dear family members who needed cardiac services, especially cardiac surgery, before IJN opened its doors in 1992. Our resources then were markedly constrained, resulting in limited access to care.

Fast forward to 2022, the scene, though still imperfect, has undoubtedly been significantly much better. The unflinching support of the government, especially from IJN's principal shareholder, the Minister of Finance Inc., and IJN's most significant stakeholder, the Ministry of Health, coupled with an insatiable hunger to excel by its staff at every level, have propelled IJN's ability to be the dominant provider of and a Centre of Excellence for cardiovascular and thoracic clinical services in the country.

IJN, the Klang Valley and the Ripple Effect Beyond

Less obvious and under the radar of most of the lay public is IJN's success story in its role as the main training centre for cardiovascular and thoracic specialists as well as related allied health personnel for the country. Many individuals who have been the products of such training subsequently went on to man other cardiovascular and thoracic services scattered all over the country at both public and private medical facilities. In other words, IJN has been able to double up not only as an excellent service provider but as a significant specialised training centre as well. In the process, IJN has directly and indirectly, contributed to the democratisation of cardiovascular and thoracic services in both the Peninsula and East Malaysia.

Chairman

High standards of service provision and credible training capability are closely intertwined. Being a national referral centre, IJN receives high patient loads year in and year out. Consequently, IJN's trainees have been blessed for being exposed to a very comprehensive range of clinical conditions and presentations involving all age groups with congenital and acquired conditions of the heart, lungs and blood vessels. And being a financially sound and technologically well-supported centre for management of these conditions, the trainees have also been fortunate to have been exposed to some of the most up-to-date array of management and treatment options available. The above combination of favourable circumstances may not necessarily be the scenario in many other so-called training centres elsewhere.

IJN's ability to contribute to education and training over the past three decades is also related to its track record of being able to retain a strong, stable and committed pool of experienced and highly skilled personnel capable of providing repeated cycles of teaching and skills training over the years. This has benefitted not just the locals but also foreign clinicians and supporting staff as well. Thus, IJN is clearly also an invaluable asset in our national cardiovascular and thoracic manpower planning blueprint.

IJN Moving Up the Research Value Chain

Another area that has shown steady and significant growth in IJN is Clinical Research. Serious attention has been given to this area, again by committed and dedicated staff. Their efforts have enabled IJN to be favourably placed globally in international collaborative research as well as in endogenously generated research. This monumental endeavour has only been made possible through the initiatives and efforts of highly motivated and extremely capable individuals seeking to place the organisation further up the institutional research value chain.

IJN: Quality and Patient Safety

No matter what IJN claims itself to be, the ultimate verdict of its place in our Malaysian healthcare quality landscape is the one delivered largely by the recipients of IJN's care and services. Data collected as a continuous exercise indicates very favourable feedback from the public, reflecting another area of achievement by IJN. Clearly, the metrics used to measure the satisfaction levels of our end users have to be meaningful and actionable for continuous improvement purposes. IJN hopes that as and when these metrics are being benchmarked against international standards and universally accepted best practices, they assume a nuanced representation of IJN's service quality and safety. As far as IJN is concerned, its pursuit of quality and safety is infinite, with no designated endpoint, and with the unwavering dogma that no matter how good or great a situation may be, the driving belief is one whereby there is always room for further improvement.

IJN: Developments in Progress

Although delayed partly due to the aftermath of the COVID-19 pandemic, Phase 1 of IJN's expansion efforts in 2021 and 2022 are on-going for the comfort and benefit of IJN's patients and families. When completed, this will significantly improve IJN's parking facilities. At the same time, a new kitchen will replace the current dated one. A purpose-built nursery for the provision of a conducive and safe environment for the growing children of our young staff members and their families is also included.

Thank You

"What is IJN's secret of its success over the past three decades?". In my opinion, the unequivocal top of the list answer would have to be its PEOPLE – past and present. The culture that permeates through the organisation has been one that has been nurtured over time by its successive generations of leadership, especially its clinical leadership. On that note, and on behalf of the Board of IJN Sdn Bhd (IJNSB), I would like to thank every single member of the staff of IJN for his or her contribution and tireless efforts in ensuring ongoing success for IJN and specifically for making the institution a trusted entity in healthcare delivery in the nation. I would also like to extend my sincere thanks to all IJNSB's Board of Directors and the Senior Management of IJN for their unflinching support, dedication and commitment in ensuring effective and meaningful leadership for the organisation.

an's Message



IJN MADE SIGNIFICANT STRIDES FORWARD IN THE PERIOD UNDER REVIEW. WE TURNED IN A RESILIENT FINANCIAL PERFORMANCE AND MAINTAINED A ROBUST RETURN ON EQUITY; EXPANDED OUR REACH TO THE EAST WITH THE INAUGURATION OF A PAEDIATRIC CLINIC IN TERENGGANU; AND SUCCESSFULLY LAUNCHED OUR TELECONSULTATION SERVICES. WE ALSO SECURED RE-ACCREDITATION FROM THE JCI, MSQH, AND ENERGY MANAGEMENT GOLD STANDARD.

**DATUK DR. AIZAI AZAN
BIN ABDUL RAHIM**
Chief Executive Officer



Dear Valued Stakeholders,

It is my privilege to present a review of IJN's operations in our endeavour to uphold excellence in cardiovascular and thoracic care for 2021-2022. Despite the challenges of the COVID-19 pandemic, I am proud to say that our teams continued to demonstrate their resilience and commitment to excellence as well as patient safety and care – all of which helped lead us to new heights in healthcare quality and safety as well as research and patient experience.

Key Challenges and Milestones

The period under review presented us with a set of unique challenges that tested IJN's mettle and adaptability. We grappled with the rising costs of healthcare, the transition to digitalisation, and increased competition from emerging heart centres.

Despite these challenges, IJN made significant strides forward. We turned in a resilient financial performance and maintained a robust return on equity; expanded our reach to the East with the inauguration of a paediatric clinic at Universiti Sultan Zainal Abidin (UNISZA) in Terengganu; and successfully launched our teleconsultation services in July 2021. We also went on to secure re-accreditation from the JCI (5th Cycle Re-Accreditation 2022-2025) and MSQH (6th Edition), plus received a 3-Star Re-Accreditation for the Energy Management Gold Standard. On top of this, our adoption and implementation of a new human resource management system (HRMS) got off to a resounding start, effective January 2023.

I am also delighted to report that we won the Excellence Award for Most Advanced Healthcare Technology at the Asia Hospital Management Awards 2022 event, and received multiple Global Health and Travel Awards in 2021 and 2022. These accolades, bear testament to our unwavering dedication to delivering exceptional and innovative world-class healthcare services in various specialties.

CEO'S Review

Reinforcing Our Leadership in Cardiovascular and Thoracic Care

Our teams went on to fortify IJN's leadership position through several key initiatives:

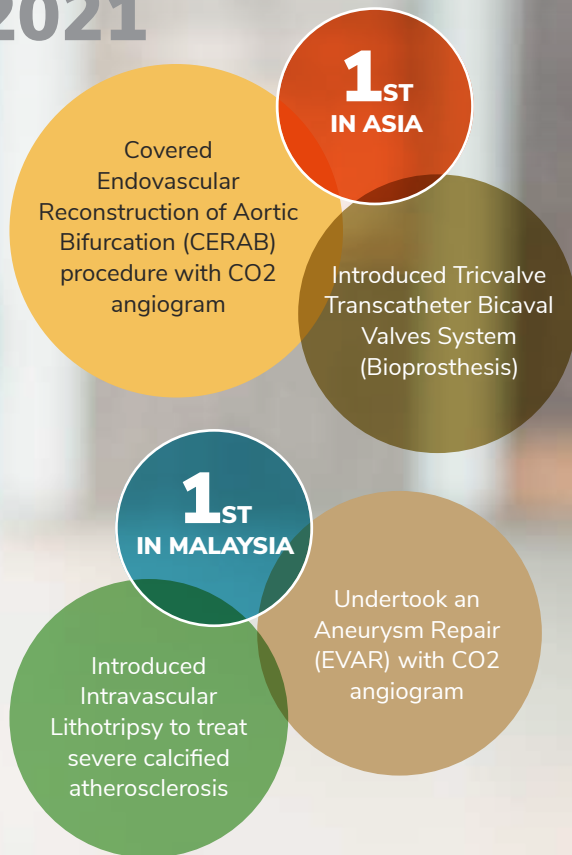
Clinical excellence and specialisation: To maintain a laser focus on the highest standards of clinical care in cardiovascular and thoracic specialities, we continued to recruit and retain top-tier medical professionals, kept abreast of the latest research and technologies, and continuously improved treatment protocols via collaboration with leading medical technology companies like Pfizer, Boston Scientific, and Medtronic.

Research and innovation: To remain at the forefront of our fields of expertise, we continued to conduct clinical trials and contribute to advancing medical knowledge. Our collaboration with esteemed academic institutions and pharmaceutical companies such as Monash University, University Malaya, University Technology Malaysia (UTM), Janssen, Novartis, and St. Jude Medical have certainly helped propel cutting-edge research initiatives.

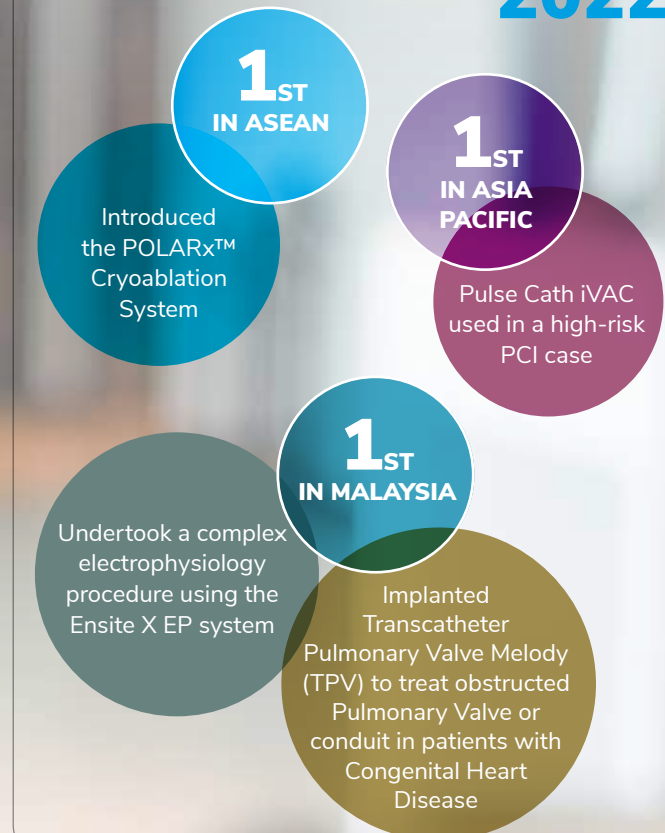
We are currently developing our databank on cardiovascular health, which we plan to analyse using Artificial Intelligence (AI). The output from the analysis will allow the medical team to make data-driven decisions to improve patient care and outcomes, recommend the best treatment, and play a key role in personalised or preventive medicine.

First-of-its-kind Milestones in Clinical Innovation

2021



2022



of Operations

Advanced technology and infrastructure: To offer the most advanced treatments and procedures, we continued to invest in state-of-the-art medical equipment and upgrade our facilities. Our investments to date encompass new devices, personalised medicine, advanced imaging technologies, minimally invasive techniques, smart hospital concepts, and an automated drug management system.

Collaboration and partnerships: By forming partnerships with other domestic and international healthcare institutions to undertake knowledge sharing, patient referrals, and joint research efforts, we steadfastly enhanced our capabilities. Our associations with Rumah Sakit Anak dan Bunda and Universitas Airlangga in Indonesia, as well as UniSZA, UTM, Universiti Kebangsaan Malaysia (UKM) and Management & Science University (MSU) in Malaysia, have done much to broaden our capabilities.

Education and training: To ensure continuous learning among the cardiovascular and thoracic care community, we continued to offer workshops, conferences, and fellowships to strengthen the expertise of our staff and other healthcare professionals.

Patient-centred approach: Our focus on providing compassionate and personalised care and excellent patient experiences has enhanced our reputation. The IJN Wellness Programme continues to draw good responses via the continuous promotion of health screening packages. I am delighted to report that many satisfied patients have become advocates for our institution and contributed to our reputation.

Marketing and branding: To solidify our leadership position, we continued to leverage effective strategic marketing initiatives, which included showcasing patient success stories, participating in medical conferences and events, and maintaining a strong online presence.

Quality and accreditation: To demonstrate IJN's commitment to quality and safety, we continued to secure and maintain the relevant healthcare accreditations such as the JCI, MSQH and HACCP. These accreditations stand as a testament to our commitment to quality and safety, bolster our credibility, and attract patients seeking top-notch care.

Governance and risk management practices: In an ever-evolving healthcare landscape, governance and risk management serve as the backbone of IJN's operations. From ensuring business continuity to upholding the highest ethical standards, our governance framework is designed to navigate challenges and sustain excellence.



Key Developments on the Governance Front

- ✓ **Business Continuity Plan:** In 2021, a cyber-attack tested our systems. Thanks to our 'Code White' protocol and a dedicated task force, we continued operations with minimal disruption.
- ✓ **Pandemic Crisis Activation:** We standardised internal processes to manage COVID-19 challenges, ensuring uninterrupted, safe healthcare services.
- ✓ **Establishment of the Integrity & Governance Unit:** We established this unit to oversee the implementation of eight key policies/areas, namely the IGU Charter, Due Diligence, Sponsorship, Anti-Bribery and Anti-Corruption, Gift Policy, Vendor Ethics, Whistle Blowing, and Core Functions.

Community engagement and global recognition: Our active participation in international medical forums and local community engagement activities went a long way in positioning IJN as a global leader in cardiovascular and thoracic care and a trusted health resource. In recognition of our endeavours, we went on to win the Corporate Social Responsibility of the Year Award at the Malaysia Excellence Business Awards 2021 event.

Human capital development: Our people are undoubtedly our greatest asset. To ensure the delivery of world-class healthcare, we focus on a holistic approach to human capital development. Our comprehensive training programmes span clinical and technical skills to personal management and IT proficiency, ensuring that our teams are well-equipped to meet the challenges of modern healthcare. As a testament to our efforts, we won a Silver Award in the Employer of Choice (Private Sector) category at the MIHRM Malaysia International HR Awards 2021 event.



Moving Forward: Spearheading a New Era of Transformative Health

As IJN ventures forth, the escalating prevalence of non-communicable diseases (NCDs) in Malaysia underscores the critical role that we must continue to play in the nation's cardiovascular and thoracic care. To meet these challenges and seize emerging opportunities, we are embarking on several strategic initiatives:

Expanding our reach

- ✓ Stronger integrated disease management via new centres for heart failure, renal, and respiratory care, as well as a plan to establish a Cardiovascular Risk Reduction Clinic;
- ✓ Regional expansion by extending our services beyond the Klang Valley to the East Coast region; and
- ✓ Facility growth by expanding the world-class facilities adjacent to our current building.

Leveraging technology

- ✓ A new Human Resource Management System to manage HR matters for staff;
- ✓ The use of digitalisation and AI to enhance the patient experience and quality of care;
- ✓ The development of IJN mobile apps to facilitate bookings for clinic appointments, enable inpatient meal ordering, make available a doctors' directory and wellness package offerings, as well as incorporate heart-2-heart feedback systems; and
- ✓ Investments in IT projects, from laboratory information systems to e-procurement to help streamline our operations.

Strengthening partnerships

- ✓ International collaboration will help build alliances for better healthcare solutions; and
- ✓ The Flagship Medical Tourism Hospital Programme will help position IJN as a leading institution for medical tourism.

Enhancing the customer experience

- ✓ The establishment of a dedicated Customer Experience Department will enhance the customer experience;
- ✓ The implementation of offerings such as Medicine Home Delivery, MEDiLoc, and Drive-Thru Service will reduce waiting times at our clinics and pharmacies and improve patient satisfaction; and
- ✓ The introduction of drive through services for blood-taking will minimise waiting time for elderly and wheelchair-bound patients.

New business ventures

- ✓ The retail pharmacy at IJN was rebranded as 'IJN First Pharmacy' in 2022; and
- ✓ A new retail pharmacy outlet at 1 Utama shopping mall (outside of IJN) will be opened in due course.

Building our brand and reputation

- ✓ Our corporate rebranding exercise will provide a fresh look to match our evolving services; and
- ✓ The National Referral Centre will continue to serve the nation with world-class, affordable medical care.

By addressing these diverse areas, we aim to navigate the many challenges posed and capitalise on the opportunities presented. Our comprehensive strategy will ensure that IJN remains at the forefront of healthcare, delivering unparalleled service and care to our patients locally and internationally.

In Appreciation

The period under review serves as a testament to IJN's resilience and commitment to rigorous patient safety and quality care. On behalf of the Senior Management team, I wish to convey my deepest gratitude to the Ministry of Finance, the Ministry of Health, our Board of Directors, and the exceptional staff of IJN. Your unwavering cooperation, support and commitment to excellence have been instrumental in the institution's journey toward becoming a global centre for cardiovascular and thoracic care. As we look to the future, we remain steadfast in our mission to provide world-class healthcare services. I call upon all our stakeholders to lend us their unstinting support as we strive for an even brighter future.

Datuk Dr. Aizai Azan bin Abdul Rahim
Chief Executive Officer



DEPARTMENT OF CARDIOLOGY

Leading the Way in Cardiac Care

From its inception as Malaysia's pioneer cardiology centre, IJN has been instrumental in moulding the nation's cardiac medicine framework. Our endeavours are championed by our Cardiology Department, which is driven by an unwavering dedication to elevating regional cardiac care.

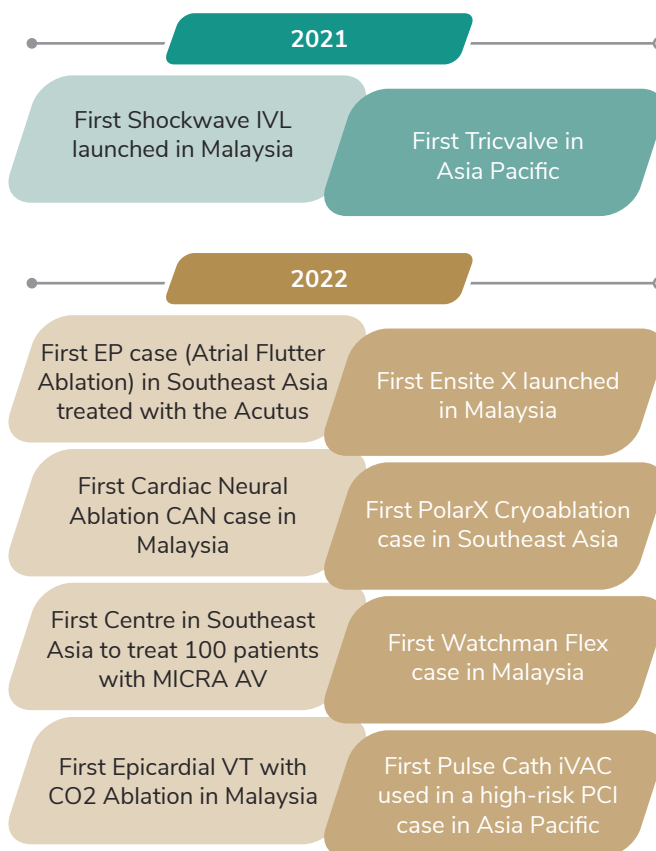
Over the years, we have expanded our range of services, moving beyond managing coronary heart diseases towards managing valvular heart diseases and advanced heart failure cases as well as addressing comorbidities such as diabetes mellitus, hypertension and obesity. We have also rolled out several services to address specific needs such as a women's health clinic to tackle the unique cardiovascular needs of women, as well as a respiratory laboratory to treat chronic lung disease and obstructive sleep apnoea. We also introduced an obesity clinic in response to the rising obesity rates in Malaysia.

Functioning as a tertiary referral centre, the Department of Cardiology has been instrumental in managing cardiovascular cases, training doctors, and reducing patient waiting times in the country. Our services are vast, catering to both inpatients and outpatients. These services range from outpatient consultations and specialised clinics such as the Heart Failure Teleconsultation Multidisciplinary Clinic and Women's Clinic, to advanced diagnostic and treatment facilities like the Invasive Cardiovascular Laboratory (ICL) and Non-Invasive Cardiac Laboratory (NCL). We also collaborate with other specialities which offer nephrology, pulmonology, and endocrinology clinics. This helps us ensure we maintain a holistic approach to patient care.

Quality and adherence to international standards have always been paramount to IJN. To ensure that we continue to exceed the expectations set for cardiac care, our Cardiology Department has aligned its practices with recognised standards such as the Joint Commission International or JCI Accreditation Standards for Hospitals (7th Edition); the Malaysian Society for Quality in Health or MSQH (6th Edition); the Private Healthcare Facilities and Services Act 1998 (Act 586) Regulations & Order, 2011; and various regulatory criteria pertaining to governance, employment and limits of authority, among others.

Breaking Ground in Medical Care

Over the 2021-2022 period, the Cardiology Department's commitment to enhancing patient care propelled it to achieve several clinical milestones, marking our participation in several 'first in man' trials. This spirit of innovation and dedication enabled us to pioneer procedures that were not only firsts in the Asia Pacific region but also unprecedented globally. These significant achievements are as follows:



During the COVID-19 pandemic, the Cardiology Department demonstrated remarkable adaptability, devising innovative solutions to surmount the challenges encountered in cardiology training. Engaging proactively with multiple industry partners and the National Heart Association of Malaysia (NHAM), we orchestrated online classes and webinars addressing various aspects of cardiac diseases.

In November 2021, we went on to host the 17th Malaysian Cardiovascular Interventional Symposium. Showcasing IJN's commitment to knowledge dissemination and collaboration that transcends geographical boundaries, we transmitted 17 live cases to an audience of local and international faculty and participants.

Moreover, our commitment to advancing medical care was evident in the state-of-the-art facilities at our ICL. Incorporating live transmission capabilities, the ICL enabled us to perform coronary procedures with precision and share our expertise and insights with medical professionals worldwide.

To sustain this culture of innovation and excellence, we continued our practice of collaborating with several international organisations with the aim of establishing IJN as a preferred investigational site for multicentre trials. This strategic positioning allowed us to remain at the forefront of new and essential developments within the field, continually enhancing our service delivery and patient care.

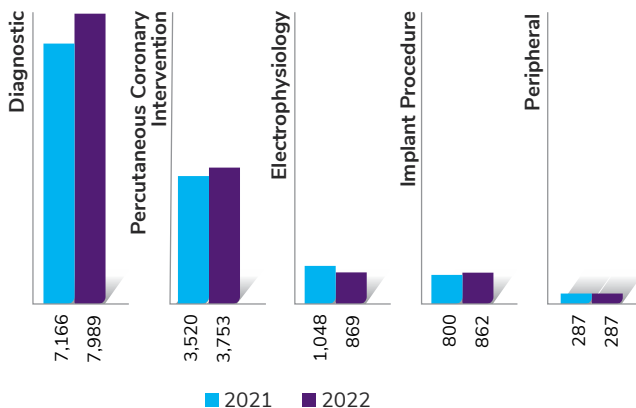
In line with our belief in advancing cardiac medicine, the Department's staff also continued to actively contribute to research, authoring and contributing to a variety of research publications.

Furthermore, our staff members actively engaged in various regional and international meetings, sharing their knowledge and insights as speakers, live-case operators, and presenters. This active participation not only facilitated the exchange of knowledge and expertise but also underscored IJN's position as a leader in the field of cardiology, both regionally and globally.

Departmental Activities 2021-2022

Over the course of 2021-2022, the Cardiology Department focused its efforts on ensuring the delivery of timely and efficient services. The following tables reflect the Department's workload as it strived for operational excellence.

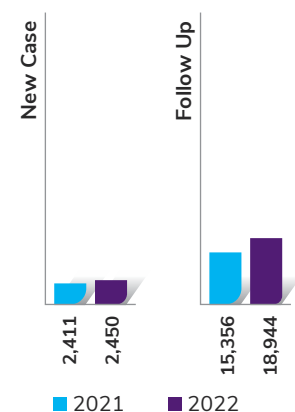
**ICL Procedures
2021 to 2022**



**Adult OPD Clinic
2021 - 2022**



**Adult Private Clinic
2021 - 2022**



Leveraging Talent and Innovation for Future Success

As we look to the future, the Cardiology Department is steadfast in its mission to elevate cardiac care. Central to our strategy is our dynamic workforce. We are committed to further nurturing their expertise through tailored training, mentorship, and international collaboration. By fostering a culture of innovation and research, we aim to position IJN at the forefront of cardiac advancements. Recognising the importance of retaining top talent, we are enhancing our work environment, offering competitive remuneration, and ensuring a balance of well-being and professional growth. Our vision is clear: by investing in our people and innovation, we aim to solidify IJN's Cardiology Department as a benchmark of excellence both locally and globally.



PAEDIATRIC AND CONGENITAL HEART CENTRE



Upholding Exemplary Standards

Since its inception in 2012, IJN's Paediatric and Congenital Heart Centre (PCHC) has continued to deliver excellence in paediatric and congenital heart care. Our unwavering dedication to this field has seen us evolve to cater to the diverse needs of our patients. As we continue to be guided by our mission to create an optimal treatment environment centred on patient needs, we remain confident in upholding our exemplary standards.

Our ability to provide comprehensive care for congenital heart cases is a crowning achievement. This accomplishment is owing mainly to the harmonious collaboration between our various divisions, facilitated by enhanced inter-departmental communication.

For those in need of in-depth heart evaluations, we are equipped with state-of-the-art imaging techniques such as Computed Tomography Angiogram (CTA), Cardiac Magnetic Resonance Imaging (CMR), and Transoesophageal Echocardiogram (TEE). These tools empower us to diagnose and address intricate heart conditions with utmost precision, paving the way for effective treatments.

Key PCHC Activities 2021-2022

During 2021-2022, the PCHC continued to grow in its stead as a leading treatment centre in Malaysia's cardiovascular and thoracic care landscape, handling over half of the nation's congenital heart disease cases.

To ensure our ability to sustain this workload for the long term, we continued to conduct daily educational sessions for medical staff to equip them. IJN also promoted participation in specialised workshops and conferences to ensure the professional growth of staff.

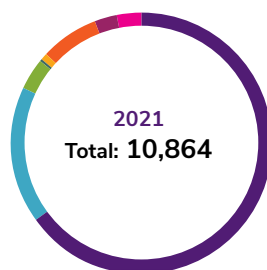
The centre continues to uphold international standards such as IQIC and JCI, which underscore its commitment to quality. As an extension of this commitment, the Department also rolled out the IJN Quality Improvement & Patient Safety Plan 2021-2022 which outlines the commitment to improve standards of excellence within its operations.

For 2021-2022, the centre engaged in the following clinical activities:

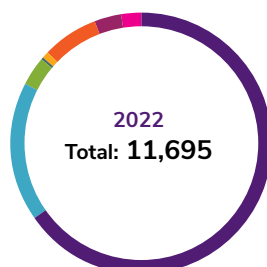
Elevating Cardiac Care

Over the past five years, the PCHC has broadened the spectrum of its outpatient services. Our extensive services include general paediatric cardiology and specialised clinics that address conditions like adult congenital heart diseases, pulmonary hypertension, heart disease during pregnancy, cardio-genetics, foetal echo, arrhythmia, and pacemakers. Additionally, we provide advanced outpatient examinations, including 3D Echocardiography, Holter monitoring, King of Heart cardiac event monitoring, and implantable loop recording, among others.

Clinical Activities 2021 to 2022



General Paediatric Cardiology	7,088
ACHD	1,828
Cardio-Obstetrics	417
Foetal	39
Cardio-Genetic	94
Pacemaker	768
Arrhythmia	319
PHT	311

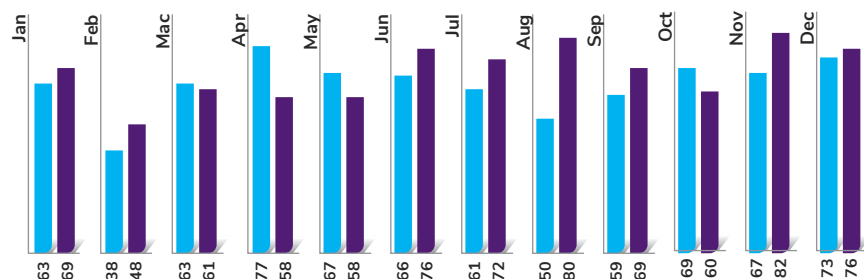


General Paediatric Cardiology	7,635
ACHD	2,028
Cardio-Obstetrics	429
Foetal	28
Cardio-Genetic	90
Pacemaker	808
Arrhythmia	403
PHT	274

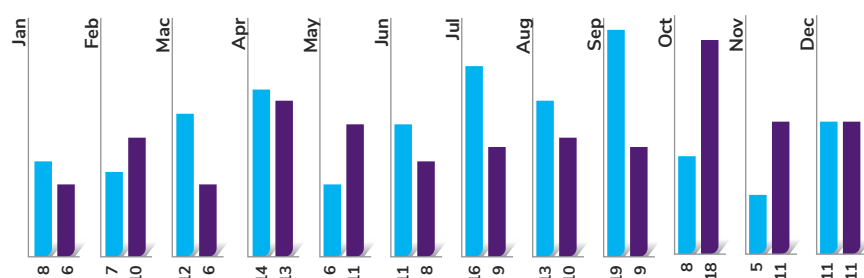
Clinic Visit Trend 2018-2022

Year	2018	2019	2020	2021	2022
New cases	1,475	1,452	1,131	1,133	1,202
Follow-ups	10,6251	11,093	9,742	9,731	10,493
Total	12,100	12,545	10,873	10,864	11,695

Total Number of Heart Surgeries Conducted between 2021 and 2022



Open Heart 2021 2022



Close Heart 2021 2022

Year	2018	2019	2020	2021	2022
Open Heart	956	911	835	753	809
Close Heart	145	170	165	130	122
Miscellaneous	295	323	318	290	347
Total Operation	1397	1404	1318	1173	1278

Today, the PCHC continues to champion patient support through the Nadi PCHC, an independent, patient-centric organisation established under the centre's auspices. This volunteer-driven initiative, comprising hospital staff, patients, parents, and corporate entities, serves as a vital support network for those with children suffering from heart disease. It facilitates sharing best practices among parents and clinical experts and aids children with complex congenital heart disease in their developmental journey.

A Vision for the PCHC's Future

As we navigate the path ahead, the PCHC remains steadfast in its mission to be a beacon of excellence in paediatric and congenital cardiology. We will continue to focus on enhancing the core competencies that have been instrumental to our success.

This commitment is deeply rooted in our professional ethos and serves as a living tribute to the vision of our founding members. Today, we are proud to stand alongside an esteemed cadre of healthcare professionals at IJN, all unified in our singular aim to deliver unparalleled healthcare services. Together, we are setting new benchmarks in paediatric cardiology services, driven by a team of distinguished professionals who share our unwavering commitment to healthcare excellence.

In our relentless pursuit of clinical excellence, we are thrilled to introduce groundbreaking procedures and services that will significantly benefit our patients:

- Melody Transcatheter Pulmonary Valve Programme:

This state-of-the-art, non-surgical procedure has shown promising results. In 2022, we successfully treated three patients. This procedure represents a significant milestone in non-invasive treatments for congenital heart patients.

- 3D Printing Services:

Embracing technological advancements, we have integrated 3D printing into our diagnostic and treatment planning. Utilising CT scans and MRIs, this technology provides unparalleled detail in diagnosing complex lesions and streamlines the pre-operative planning process. It mainly benefits cardiovascular surgeons and interventional cardiologists dealing with intricate congenital heart diseases.

Beyond its clinical applications, our 3D printing service has also become an invaluable educational tool. It has garnered significant interest among researchers, surgical fellows, and cardiologists, particularly those specialising in complex congenital heart diseases. Many leading centres in North America and Canada have already adopted this innovative approach, making it an integral part of their educational and research initiatives. By adopting these innovations, the PCHC has bolstered its clinical capabilities and solidified its reputation as a leader in paediatric cardiology services.



CARDIOTHORACIC AND VASCULAR SURGERY DEPARTMENT



Continually Pushing Boundaries

The Cardiothoracic and Vascular Surgery Department stands as a testament to IJN's unwavering commitment to lead, advance, and set benchmarks in cardiothoracic treatment within Malaysia. Established with a clear mission, the Department has grown to be a leader in its field, continually pushing the boundaries of technical expertise in the realm of cardiothoracic and vascular healthcare. Our journey, marked by dedication and a shared vision, has seen us make significant strides, especially in the domain of corrective surgery.

We steadfastly pursue improvement, consistently revisiting and refining existing processes and procedures to enhance the quality, safety, and efficiency of our clinical practice. The fruits of these endeavours are evident in the heightened efficiencies and qualitative advancements that we have achieved, allowing our surgical team to undertake a greater volume of procedures without compromising on the quality of service.

To date, we offer the following cardiothoracic services:

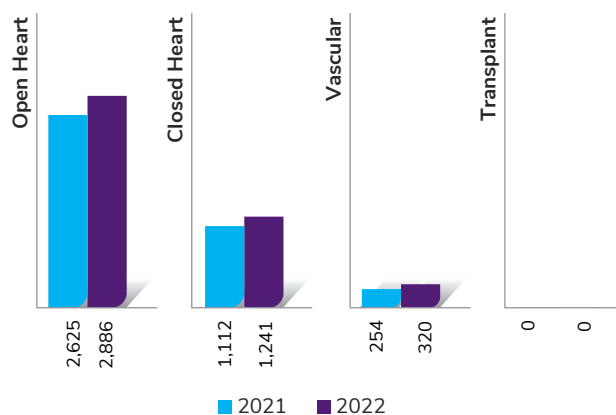
- ✓ Adult cardiac surgery;
- ✓ Paediatric cardiac surgery;
- ✓ Aortic surgery;
- ✓ Thoracic surgery;
- ✓ Heart and lung transplant surgery;
- ✓ Ventricular assist device;
- ✓ Extracorporeal membrane oxygenation (ECMO);
- ✓ Vascular surgery; and
- ✓ Endovascular procedures.

During the period in review, the Department expanded its range of services to include vascular services. Our vascular surgery service, a specialised surgical domain, addresses diseases of the vascular system, including arteries, veins, and lymphatic circulation. This field integrates traditional open surgery with advanced endovascular techniques. This segment is led by our appointed consultant vascular surgeon, who is highly trained in the diagnosis and management of diseases of the vascular system.

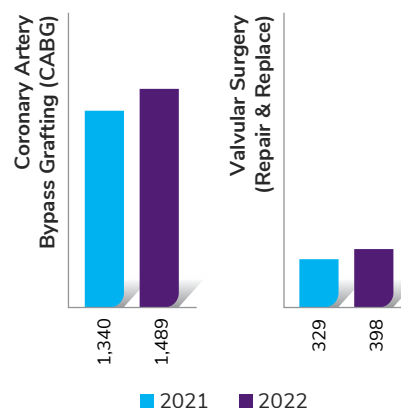
Delivering a Resilient Performance

In 2021, the Department faced a challenging landscape, primarily influenced by the ongoing COVID-19 pandemic. Despite these challenges, we remained steadfast in our commitment to patient care and medical excellence. We performed a total of 3,991 surgeries throughout 2021, marking a slight decrease of 4.1% or 170 cases as compared to the 4,161 cases in 2020. This decline was expected considering the number of lockdowns and restrictions imposed due to the pandemic. In 2022, as restrictions lifted, we went on to perform 4,447 surgeries, reflecting an increase of 11.43% or 456 cases over the number of operations in 2021.

Total Number of Adult Cardiac Surgeries 2021 to 2022



Total Number of Patients by Surgeries 2021 to 2022



In terms of outpatient services, 2021 saw us treating 12,686 patients at the normal clinic and an additional 5,062 patients at the private clinic. The pandemic unavoidably impacted the Department's operational workload, with a noticeable reduction in cases carried out in the operating theatre in 2021 as compared to 2020. In 2022, we saw a rise in outpatients as the public returned for outpatient treatment. A total of 13,245 patients were treated at the normal clinic and another 6,163 patients at the private clinic.

On the accreditation front, we successfully renewed our JCI reaccreditation in 2022. To ensure consistent quality and adherence to best practices, continuous education, and audit sessions were organised with an emphasis on staff compliance with standard practices and hospital policies.

In terms of research and recognition, two of our team members were awarded Young Investigator Awards (YIAs) at the 21st Annual MATCVS Scientific Meeting in 2021. Securing the first and third places, respectively, their studies focused on IJN's response and treatment measures during the COVID-19 pandemic. For the 22nd Annual MATCVS Scientific Meeting, another team member was awarded a YIA for his presentation centred on dual antiplatelet administration after coronary artery bypass surgery. The Department also made significant contributions in terms of presentations and publications during the 2021-2022 period.

The pandemic's grip meant that many of our planned academic activities for 2021 were either postponed or deferred. Despite these setbacks, we successfully organised a wet lab in December 2021, ensuring strict adherence to the defined standard operating procedures (SOPs). We also transitioned to virtual in-hospital Continuing Medical Education (CME) activities, with physical sessions gradually resuming by the fourth quarter of 2021. Throughout these activities, we ensured that we always maintained strict adherence to the SOPs released by the Ministry of Health. As we transitioned to the endemic stage in early 2022, physical educational activities resumed with more wet labs taking place. As our series of in-house CME sessions, workshops and Objective Structured Clinical Examinations (OSCE) recommenced, these were all met with excellent response from participants.

While the Department's marketing programme was temporarily halted due to the pandemic, our team remained proactive in promoting awareness. We leveraged platforms like Facebook, Instagram, and FM radio to educate the public about healthy lifestyles, common heart diseases, and our new vascular services as well as continued to be involved in IJN's CSI programme.



Additionally, in collaboration with the MPCS Amrita Institute of Medical Sciences and the Children's HeartLink Centres of Excellence in India, as well as the Malaysian Paediatric Cardiac Society, IJN hosted a webinar series titled 'Challenges in Pediatric Heart Surgery in Low-Resource Environments.' This series sought to provide participants with a deeper understanding of the anatomical spectrum of TOF Pulmonary Atresia and MAPCA. It also offered insights into the comprehensive assessment techniques for surgical planning and shed light on the current management approaches and available surgical options.

Focused on Expanding and Refining Our Care of Patients

Today, the Cardiothoracic and Vascular Surgery Department not only exemplifies excellence in patient care but also spearheads advances in clinical and experimental research, laying the groundwork for the next generation of cardiothoracic and vascular surgeons. Serving as a primary referral centre, we cater to patients with heart, lung, and vascular diseases from both MOH hospitals and private healthcare practitioners. Our comprehensive surgical offerings cater to both adult and paediatric patients, ensuring they receive the utmost care from our ICU facilities post-operation, followed by a structured recovery process tailored to each patient's unique needs. In essence, the Department is a cornerstone of IJN, adding significant value by delivering unparalleled healthcare services and shaping the future of cardiovascular medicine.

As we look to the future, our ambition is to expand and refine our service offerings. The recent inclusion of our enhanced vascular services positions us as a comprehensive cardiovascular centre, thus aligning the Department seamlessly with IJN's vision of becoming a global centre of excellence in cardiovascular and thoracic care. In the realm of Thoracic Medicine, the department has also integrated a team comprising respiratory physicians and respiratory paramedics in order to provide comprehensive thoracic and respiratory care.

Driven by a commitment to excellence, we are dedicated to advancing our surgical services in the cardiac, vascular, and thoracic domains. With a foundation built on core values that prioritise top-tier service, IJN is well-positioned to elevate cardiovascular medicine both locally and on the global stage.



ANAESTHESIOLOGY AND INTENSIVE CARE DEPARTMENT



Serving as a Benchmark of Excellence

The Anaesthesiology and Intensive Care Department is a model of excellence in cardiovascular anaesthesia and medical perfusion throughout Southeast Asia. Our leading position allows us to significantly influence the outcomes of surgeries and procedures and shape the broader landscape of cardiovascular and thoracic medicine.

Beyond our role in pre-, during and post-surgery patient care, we have also established ourselves as a prominent hub offering trainees from various local and global cardiac centres comprehensive training and certification as cardiac anaesthesiologists and medical perfusionists. This has fostered a community of professionals who have ascended to leadership positions in their respective fields across different countries, further solidifying our status as a benchmark of excellence.

Our Progress in Driving Innovation and Patient Care

In the period under review, the Anaesthesiology and Intensive Care Department embarked on several projects, each reflecting our commitment to innovation and patient care.

New Service Innovations

March 2021 marked the inauguration of the Cardio-Robotic Programme, a joint venture between IJN and PERKESO that focuses on rehabilitating patients in the critical care area. Given that prolonged ICU stays often lead to operating theatre cancellations, this programme aims to reduce the duration spent in the ICU while enhancing patient recovery.

The much-anticipated launch of the respiratory Extracorporeal Membrane Oxygenation (ECMO) machine slated for introduction in early 2021 was postponed due to the COVID-19 pandemic and the need to allocate critical care area (CCA) beds for COVID-19 patients. The service was launched later in 2021 following the hospital's acquisition of a retrieval ECMO machine and a new ambulance designed for the safe transport of ECMO patients. This service is a collaborative effort between the Cardiology, Cardiothoracic Surgery, and Anaesthesiology and Intensive Care departments.

The Department also launched its rehabilitation ward in the third quarter of 2021. Located at Ward A2Z2, this six-bed facility is dedicated to offering comprehensive respiratory and musculoskeletal therapy to patients transitioning from the CCAs, ensuring they receive the support they need on their journey to recovery.

JCI Accreditation and Certification Programme

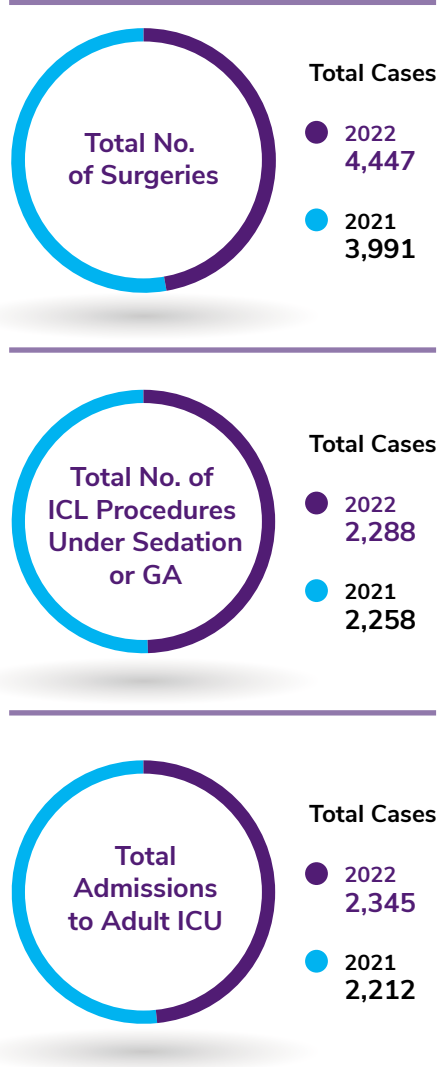
In 2021, we embarked on a meticulous journey towards the next JCI reaccreditation cycle slated for Q4 2022. We emphasised the importance of continuous education sessions and rigorous audits throughout the year. These measures ensured unwavering compliance and adherence to IJN's standard practices, policies, and procedures.

As 2022 dawned, the Department faced a myriad of challenges. While the global health crisis demanded dedicated efforts to combat the spread of COVID-19 infections, the team also worked tirelessly towards the Electronic Medical Records (EMR) Go-Live initiative. However, due to unforeseen circumstances, the launch of the EMR Go-Live project was postponed. Undeterred, our staff demonstrated their resilience and unity, channelling their energies toward the 5th cycle of JCI reaccreditation.

The commitment of every staff member was evident in their active participation in all JCI-related educational sessions and audits. Their collective efforts were geared towards ensuring that the Department's practices aligned seamlessly with the hospital's policies and procedures. These two years of preparation culminated in the JCI audit held in December 2022. Our dedication and diligence bore fruit even as we successfully passed the 5th cycle of JCI reaccreditation.

In the way of training, both 2021 and 2022 saw us welcoming 49 master students per annum from various universities for their clinical attachments. Each student diligently reported for duty and seamlessly completed their one to two-month anaesthesia rotations at IJN within the stipulated timeframe.

Despite pandemic restrictions, we continued to carry out our various responsibilities on the patient care and operational fronts. The number of cases the Department undertook in 2021 and 2022, respectively, can be seen in the following table:



Summary of IJN Workshops (2021-2022)

The year 2021 saw a significant reduction in continuing medical education (CME) activities and workshops due to pandemic limitations. Nevertheless, our team adapted to the circumstances by organising virtual in-house CME activities. As the year progressed, we cautiously resumed physical CME activities in the third quarter.

With the transition to the COVID-19 endemic phase in 2022, IJN confidently resumed physical meetings, CME activities, and workshops. These were among the workshops we conducted:

Ultrasound-Guided Regional Anaesthesia (UGRA) Workshop

In February 2022, IJN collaborated with consultants from Special Interest Group Regional Anaesthesia (sigRA) HKL to conduct a workshop to equip the specialists and medical officers in the Department of Anaesthesia and Intensive Care at IJN. The workshop addressed the growing need for regional over general anaesthesia, especially with the introduction of vascular surgery in IJN, as well as for patients with complex comorbidities.

Bispectral Index (BIS) Monitoring Workshop

As the field of anaesthesia evolves, there is a pressing need to monitor patients' awareness levels during general anaesthesia. In line with this and the Department's aspiration to continually refine services and patient care, we conducted a BIS Monitoring workshop in November 2022. By focusing on this non-invasive monitoring technique, we ensured that the latest advancements were integrated into IJN's anaesthetic practices. These workshops underscore IJN's dedication to staying at the forefront of medical advances providing the best care for its patients.

Expanding the Traditional Roles of Anaesthesiologists

As the Department charts its path into the future, we envision a transformative role for our anaesthesiologists. They will oversee patients during surgical procedures and take on a comprehensive 'peri-operative physician' role. This entails engaging with patients before their surgeries to ensure optimal preparation and subsequently providing post-operative care in the ICU.

The advent of Big Data and Artificial Intelligence will also influence our trajectory. By investing in cutting-edge, IT-based monitoring equipment, we aim to position ourselves to harness these technologies for enhanced patient care and research.

All these initiatives underscore our unwavering commitment to spearheading advancements in cardiovascular medicine on the local, regional, and international fronts.





IMAGING CENTRE



Pioneering Excellence in Cardiac Imaging

Established in 1992 as IJN's Radiology Department and having undergone an upgrading and rebranding exercise in 2018, the Imaging Centre has grown exponentially to become the first choice of the Malaysian public for cardiac imaging services. We are now equipped with state-of-the-art imaging technology such as the Positron Emission Tomography-Computed Tomography or PET-CT Scan and the Cardiac CT Scan, and have reinforced our position as a national hub for excellence in cardiac imaging.

The Imaging Centre's mission revolves around three core objectives:

- Delivering top-tier patient care;
- Pioneering advancements in imaging technology and education; and
- Fostering professionalism and skill development among our staff.

We ensure accurate, prompt, and transparent reporting by adopting a patient-centric approach and adhering to international standards such as JCI accreditation.

In ensuring that our patients continue to receive prioritised care, we actively collaborate with local hospitals, such as the Kuala Lumpur Hospital, to ensure that our patients have access to other specialised imaging services. We have consistently operated at full capacity to cater to Malaysia's pressing demand for dedicated cardiac imaging. To ensure that the Centre can continue operating at full capacity, IJN is setting up an Imaging Clinic to serve as a comprehensive hub for external patients. This initiative will offer non-invasive imaging investigations to external patients, expediting their treatment process.

Regarding technology, 2018 marked a significant milestone for us with the acquisition of a state-of-the-art PET-CT scanner and upgrades to our existing CT scanner and SPECT-CZT. These advancements underscore the Centre's commitment to integrated healthcare by offering a comprehensive suite of non-invasive diagnostic imaging.

The Cardiac PET-CT scan allows for cellular-level assessments, aiding in diagnosing heart diseases, cancers, and inflammatory conditions. Meanwhile, the Cardiac CT scan, an x-ray-based technology that provides a detailed three-dimensional view of the heart, is invaluable in detecting early signs of heart disease.

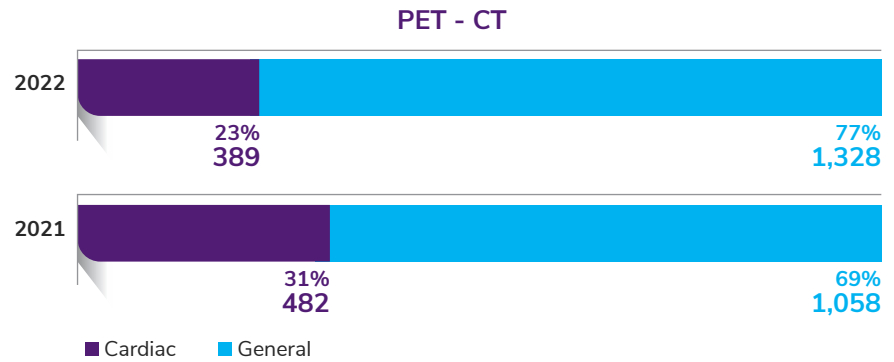
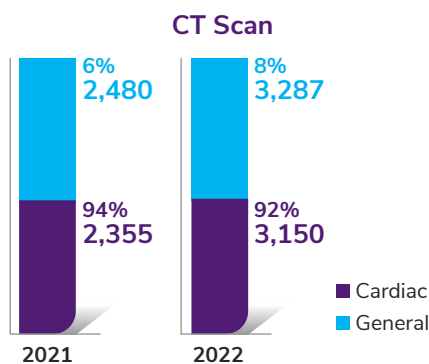
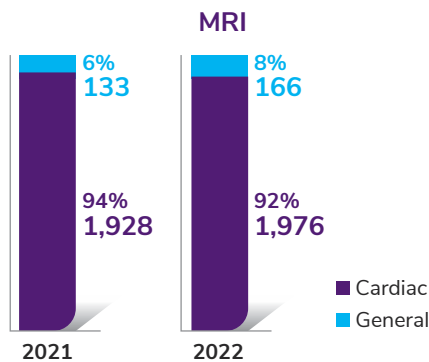
Remaining Resilient amidst Pandemic Challenges

As the Imaging Centre approached its third decade of operations in the period under review, our legacy of excellence remained undiminished, even in the face of unprecedented challenges. Marked by the global pandemic, 2021-2022 posed significant obstacles to the health industry. During the height of the pandemic, the Centre experienced a downturn in patient numbers, reflecting the broader concerns of an apprehensive and wary public.

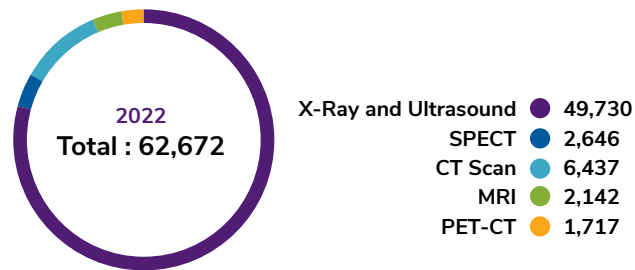
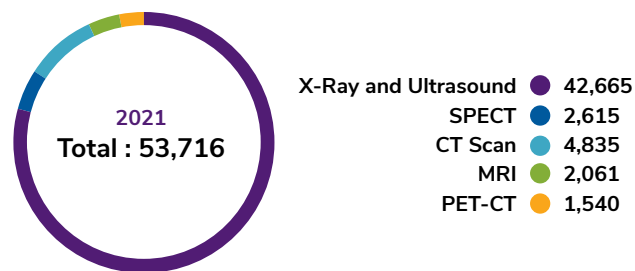
However, our unwavering commitment to patient care and adaptability in those trying times ensured we could recover swiftly.

Leveraging our state-of-the-art technology and the expertise of our dedicated professionals, we implemented rigorous safety protocols and streamlined our processes. The above approaches served to ensure the safety of our patients and staff and reinforce the public's trust in the Centre's services. As the COVID-19 pandemic stabilised, the Centre witnessed a steady resurgence in patient numbers and the public's confidence in our capabilities.

Even as we navigated these challenges, we continued our pursuit of excellence, staying at the forefront of technological advancements and maintaining our position as a leading hub for cardiac imaging. Our resilience over the 2021-2022 period is reflected in the following tables:



Total Imaging Procedures 2021 to 2022



Leveraging All the Right Resources to Advance Forward

The Imaging Centre at IJN is deeply committed to elevating Malaysia's cardiac imaging capabilities. By harnessing cutting-edge technologies such as Artificial Intelligence and Big Data analytics, we are pioneering advanced imaging techniques that offer more profound insights. Our research is seamlessly integrated into our clinical practice and shared locally and globally, ensuring our findings benefit the broader medical community.

As we look ahead, we will focus on fortifying the Centre's foundation by expanding our team of specialists and support staff. This expansion aims to enhance our capacity and proficiency further while setting new benchmarks in the field of medical imaging.

Our journey thus far has been defined by a spirit of collaboration and unity. The synergy between our doctors, nurses, radiographers, radiologists, and cardiologists, all bound by a shared vision, has thus far been instrumental to our success. In furthering this collective strength, we look forward to enjoying the success we have established thus far and strengthening our position as a premier cardiovascular imaging centre.



CLINICAL RESEARCH PROGRAMME



A Catalyst for IJN's Extensive Research Activities

As Malaysia's premier cardiovascular and thoracic care centre, IJN shoulders the dual responsibility for treating patients and spearheading advancements in understanding cardiovascular and thoracic diseases. Central to this mission is the Directorate of Clinical Research, which empowers clinical and non-clinical staff at IJN to apply high-quality research that drives our progress.

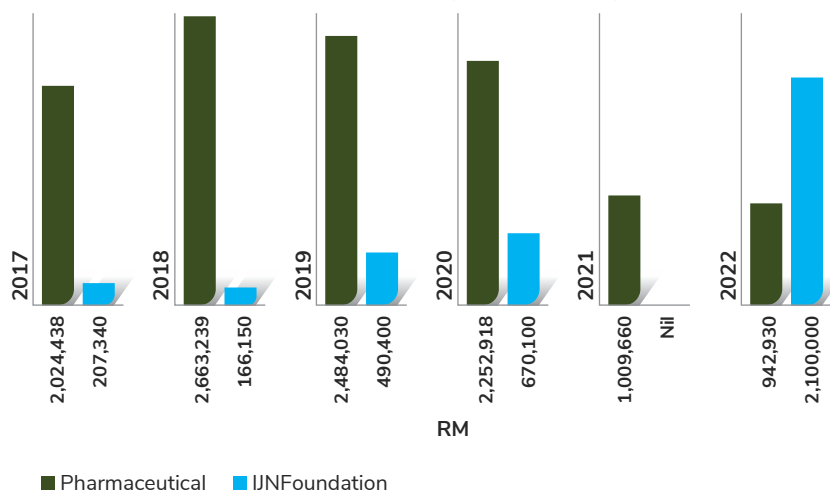
The Directorate of Clinical Research has consistently been a catalyst for nearly three decades, driving and coordinating IJN's extensive research activities and fostering strong collaborations with leading pharmaceutical, medical device companies and universities. This commitment has bolstered IJN's esteemed reputation, as reflected in the growing number of grants it has received. Between 2021 and 2022, IJN secured approximately RM4.0 million for 28 research projects from 13 sponsors/funders.

IJN also actively collaborates with national and international institutions. A notable example is the IJN-UTM Cardiovascular Engineering Centre (IJN-UTM CEC), established in partnership with Universiti Teknologi Malaysia. The IJN-UTM CEC focuses on producing Malaysian-made medical devices, aiming to reduce acquisition costs. Since its inception in 2013, the IJN-UTM CEC has generated 48 intellectual properties and fostered the growth of clinician-scientists through collaborative research with universities.

While collaborations with industry giants are crucial, internally initiated research by IJN's clinical and non-clinical staff is equally significant. Due to IJN's experience, the hospital is often awarded complex cases, some of which are unparalleled in Malaysia or even the broader region. Standard treatment approaches may fall short in such scenarios, necessitating tailored solutions. The research conducted by IJN specialists is instrumental in bringing these unique challenges to light, enriching not only IJN's expertise but also the global landscape of cardiovascular and thoracic care.

The Research Committee oversees all research activities and development activities at IJN. Serving as an advisory body to IJN Management, this committee provides guidance on talent development in research, infrastructure enhancement, research grants, and aligning research with national agendas. Tasked with formulating research strategies and action plans, the Research Committee also ensures the provision of the necessary resources and financial support to the Directorate to facilitate research endeavours, thus positioning IJN for continued success in this field.

Research Grants (2017 – 2022)



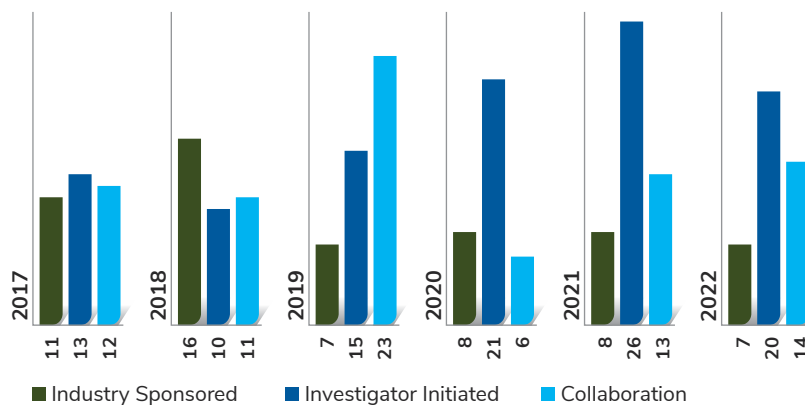
Pursuing Excellence amidst Challenges

IJN has consistently demonstrated its commitment to advancing cardiovascular and thoracic research through the Directorate of Clinical Research. Despite the unprecedented challenges of the pandemic during the period under review, IJN maintained its rigorous standards and achieved significant milestones.

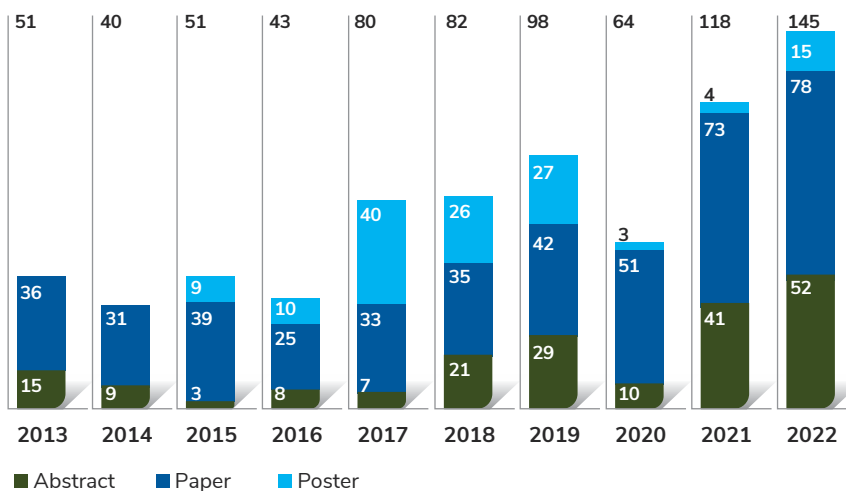
Key Performance Indicators for Research Programmes

The year 2022 saw IJN surpass its Key Performance Indicators (KPIs) for research programmes conducted and for the number of new research programmes and publications in international journals. The Directorate approved 41 new research programmes, while research grants amounted to approximately RM3.0 million. Publications exceeded expectations, with 78 articles published in high-impact journals, compared to the targeted 25. Based on reports provided by the Web of Science, one of the largest and most trusted citation indexes worldwide, the number of citations recorded in 2021 and 2022 were 1,736 and 1,593, respectively. Additionally, the H-index for 2022 stood at 39.

New Research Approved



Number of Publications



Visualising A More Patient-centred Tomorrow

As we move forward, the clinical research activities will continue to align with the IJN Research Strategic Plan 2021-2025 which will ensure the growth and enrichment of IJN's research and development capabilities for the long term.

One such initiative is the IJN's move to integrate Big Data analytics and Artificial Intelligence into the hospital's practices. This initiative stems from our recognising the need to embrace cutting-edge technologies to ensure IJN's relevance as we transition as a society into the age of digitalisation. Through this initiative, we aim to pioneer the development of precision, predictive, and prescriptive medicine for cardiovascular and thoracic diseases.

On another note, the Directorate of Clinical Research remains committed to upholding the IJN Research Strategic Plan established in 2020. This blueprint sets the hospital on the right path to establish itself as a sustainable and trusted patient-centred cardiovascular clinical research hub by 2025.

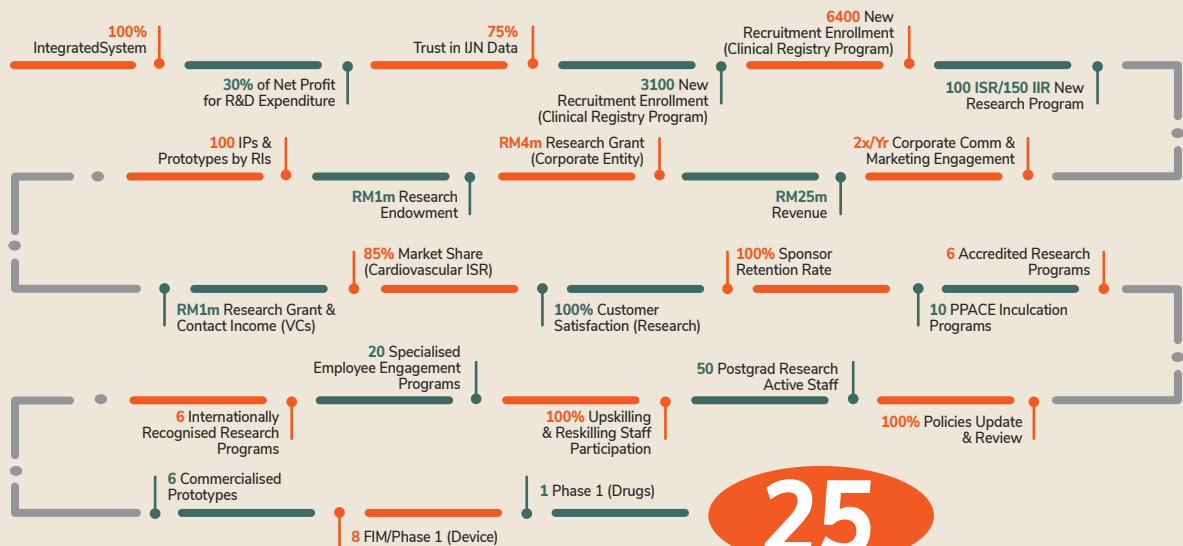


IJN Research Strategic Plan



In addition to these priorities, IJN remains steadfast in its research-related collaboration with key partners. Together, we strive to produce impactful research and drive human-centric innovations in cardiovascular medicine, ensuring unparalleled patient care and service experiences.

DESIRED SUCCESS 2025



25



QUALITY MANAGEMENT DEPARTMENT

Fostering a Culture of Continuous Improvement

The Quality Management Department (QMD) at IJN plays a pivotal role in upholding the hospital's mission and core values, ensuring the delivery of healthcare services that are safe, timely, equitable, effective, efficient, and patient-centred. As the gatekeeper of quality for IJN's operations, the QMD is dedicated to fostering a culture that meets and surpasses world-class standards. As such, we remain steadfast in our aim to continuously enhance patient outcomes and experiences while promoting a continuous improvement ethos throughout our organisation.

This commitment to excellence extends to our pursuit of national and international accreditations to benchmark and shape our quality standards. Since 2005, IJN has been accredited by the Malaysian Society for Quality in Health (MSQH), thereby underscoring our active commitment to safety and ongoing quality improvement in alignment with Malaysian standards. Moreover, since 2009, we have earned the Joint Commission International's (JCI) Gold Seal of Approval® for our unwavering dedication to providing top-tier healthcare services. We view these accreditations, among others, as testaments to our continuous pursuit of excellence.

Proactively Upholding World-Class Standards

In 2022, the QMD played a primary role in steering the organisation to maintain both MSQH and JCI accreditations for the 5th cycle. By actively maintaining these standards and leveraging them as benchmarks to shape our service quality, we are reinforcing our position as a leading global hub for cardiovascular and thoracic care.

Our commitment to ongoing enhancement is carried out as per the IJN Quality and Patient Safety Plan, which outlines the organisation's strategic objectives. The plan, developed by the Quality and Patient Safety Committee or QPSC, comprising members from clinical and non-clinical departments in the hospital, is revised every three years.

In developing the plan, the QPSC set clear improvement objectives, encompassing patient safety, effective care, patient experience, and hospital efficiency. These objectives were accompanied by specific quality markers that ensured that all targets were met in accordance with the predetermined standards. These markers ranged from International Patient Safety Goals and infection control objectives, to patient experience surveys.

All plans developed by the QPSC were subject to the approval of IJN's senior-level management and Board of Directors before they were carried out within the relevant sectors. The QPSC also presented quarterly progress reports that detailed the implementation status of these plans. Although IJN faced unprecedented challenges from the COVID-19 pandemic which began in 2020, and the plan had to be reviewed and reframed, nonetheless it continued to be upheld and implemented. The IJN QPS Plan 2020-2023 achieved all set goals and targets by the end of 2022 as per the expected timeline.

Prioritising Superior Patient-Centric Outcomes

At IJN, our collective strength lies in our unified commitment to prioritising patients. Every member of our team plays a pivotal role in ensuring patient safety. We believe that by delivering exceptional patient experiences, we can achieve superior health outcomes. To this end, we actively listen and respond to our patients' needs.

In understanding that awareness is crucial to addressing safety concerns effectively, we have implemented an online reporting system that allows staff to report patient safety events anonymously. Managed by the QMD, this non-punitive approach encourages open reporting, ensuring that our team feels secure in sharing concerns without fear of repercussions. The system has been applied to all our hospital sectors, thus allowing our staff to quickly analyse events and respond with the appropriate measures as well as establish preventive and control measures against potential recurrences.

Our unwavering commitment to quality continues to see the QMD actively eliminate all forms of complacency from our processes as we journey toward excellence. This commitment positions IJN as a leading player in cardiovascular and thoracic care. As we move forward, we remain steadfast in our mission to prioritise quality in every aspect of our endeavours.

		TARGET 2020-2022	STATUS Q1, 2022	STATUS Q2, 2022	STATUS Q3, 2022	STATUS Q4, 2022
GOAL 1	Improving Patient Safety	91%	90%	94%	91%	88%
GOAL 2	Improving Patient Experience	91%	86%	92%	91%	93%
GOAL 3	Improving Effectiveness	91%	88%	82%	91%	100%
GOAL 4	Improving Efficiency	<ul style="list-style-type: none"> Energy saving : 5% Utilization of electronic system for processes through technology : 90% 	<ul style="list-style-type: none"> Energy saving : 20% Utilization of electronic system for processes through technology : 94% 	<ul style="list-style-type: none"> Energy saving : 19% Utilization of electronic system for processes through technology : 92% 	<ul style="list-style-type: none"> Energy saving : 18% Utilization of electronic system for processes through technology : 95% 	<ul style="list-style-type: none"> Energy saving : 18% Utilization of electronic system for processes through technology : 92%



ACCREDITATION MILESTONES

At IJN, we aim to embody a culture of growth, innovation and high quality service into every element of our framework. As an important ingredient to our success, we have endeavored to maintain our high service quality by acquiring new certifications as well as maintaining existing ones.







A HEART FOR COMMUNITIES – IJN'S CORPORATE SOCIAL INITIATIVES

Extending Compassionate Care to Communities

IJN's commitment to improving Malaysia's healthcare goes beyond the boundaries of our hospital-based operations and services and extends to caring for the community at large. In line with this vision, we formally introduced our community-based initiatives under our Corporate Social Initiatives (CSI) Programme in 2007. Comprising outreach activities, this programme sees IJN staff conduct free health check-ups for community members.

The programme features screening services such as body mass index (BMI) assessments, blood pressure tests, and blood tests for glucose and cholesterol levels. These screenings are supported by additional nurse consultations, which provide patients with valuable follow-up guidance and advice based on their screening results. In addition, we also provide doctor consultations and medicine dispensation.

The CSI Programme has also been expanded to include mobile clinics. Equipped with Electrocardiogram (ECG) and Echocardiography (ECHO) machines, these mobile clinics support further investigations on high-risk findings detected during the preliminary examinations. During such cases, the attending doctor provides further consultation so those screened can receive treatment at the nearest hospital.

By way of paediatric care, the CSI Programme offers BMI assessments and thorough head-to-toe physical examinations, ensuring a comprehensive evaluation of each child's health. Recognising the importance of specialised tests, the programme also includes additional diagnostic procedures such as ECG, ECHO, and exhaled carbon monoxide tests specifically for smokers.



The programme has also played a pivotal role in enhancing community health and well-being through various engaging and educational community health events. The many innovative initiatives to date have included a healthy cooking competition, which aimed to promote nutritional awareness and healthy eating habits. The programme also extended its outreach through home visits, providing personalised health guidance and support directly to individuals in their living environments.

For younger audiences, we conducted children's programmes which were both educational and entertaining. These included colouring contests designed to engage children in creative activities while subtly imparting health-related knowledge. The hand hygiene initiative too was significant as it taught children the significance of cleanliness in preventing illnesses.

Another notable segment of the CSI Programme was the 'Basic Life Support Programme', which equipped participants with life-saving techniques. These included demonstrations of essential skills to handle cardiac emergencies, such as Cardiopulmonary Resuscitation (CPR), baby choking emergency procedures, and the use of Automated External Defibrillators (AED).

We also held 'Heart Talk' sessions to educate the public about preventive cardiac health measures. These talks offered valuable advice on preventing heart disease, emphasising the importance of proactive health management.

Expanding Our Impact through Partnerships

IJN actively engages with organisations, media agencies, and NGOs that share our commitment to enhancing the effectiveness of our CSI activities. These collaborations have yielded highly successful outcomes even as we capitalise on the diverse expertise of these organisations and pool our resources.

In line with IJN's aim to improve access to quality healthcare, the CSI Programme continued to offer a range of vital services throughout 2021-2022.

From the time that community health screenings kicked off in 2007 until December 2022, IJN screened some 46,070 attendees at 144 locations nationwide. In 2021, our outreaches focused entirely on aiding the government-propelled COVID-19 vaccination campaigns.

IJN Community Outreaches (2007-2022)

Year	2007-2011	2012-2014	2015	2016	2017	2018	2019	2020	2021	2022
Adult	2,500	6,351	3,058	5,571	6,810	7,396	5,185	1,904	COVID-19 Vaccination*	1,847
Child		823	313	771	1,620	927	436	375		183
Locations	10	23	11	17	20	22	24	8	4	9

Recognised for Enriching Community Well-Being

Our dedication to CSI has garnered numerous awards and recognitions, both locally and internationally. These accolades include the CSR Malaysia Award in 2016 and 2018, the Star Sterling Award in 2017, the CSR Leadership Award in 2019, and various Corporate Social Responsibility of the Year Awards between 2019 and 2022.

Community-Related Awards and Accolades			
2016-2017	2018	2019	2020-2022
<ul style="list-style-type: none"> • CSR Malaysia Awards (2016) • STAR Sterling Award (2017) 	<ul style="list-style-type: none"> • CSR Malaysia Awards 	<ul style="list-style-type: none"> • The 11th Annual Global CSR Awards – CSR Leadership Award (Gold) • Malaysia Excellence Business Awards – CSR of the Year • Malaysia Health & Wellness Brand Awards – CSR 	<ul style="list-style-type: none"> • Healthcare Asia Awards (2020) – CSR of the Year (Malaysia) • Malaysia Excellence Business Awards (2021) – CSR of the Year • Malaysia Health & Wellness Brand Awards (2020) – CSR

IJN takes great pride in the positive, tangible impact that we have made through our CSI efforts over the years. As we continue to grow in our stead as a leading heart institute, we remain steadfast in our commitment to providing better care to all Malaysians.

BRINGING HOPE IN THE PANDEMIC

As part of our commitment to public health during the pandemic, we deployed IJN's Mobile Vaccination Team to aid the Government's drive to bring COVID-19 vaccinations to remote areas of Malaysia.

Formed in June 2021 amidst a spike in COVID infections, the task force required extensive coordination and approvals from various authorities, including the COVID-19 Immunisation Task Force (CITF), Ministry of Health (MOH), Malaysian National Security Council (MKN), local leaders, and state health departments. Despite the complexity of the operation, IJN's experience in administering COVID-19 vaccinations since 1 March 2021 enabled the task force to swiftly transition to the mobile programme while adhering to detailed specifications, SOPs, and guidelines.

The programme involved a core group of trained doctors, nurses, pharmacists, and support staff embarking on four-day trips to various locations. Each trip involved meticulous planning, from setting up the site with the necessary facilities to handling emergency situations and ensuring a smooth crowd flow system.

IJN's Mobile Vaccine Team facilitated the vaccination of 600-800 people daily, including high-risk cases, as it could handle emergency reactions. The standard of care was exemplary, with meticulous attention to detail and safety, including crowd control and registration managed by RELA and local NGOs.

Over the course of the programme, approximately 15,000 doses of Pfizer and Sinovac vaccines were administered, fully vaccinating 15,502 people across seven locations in three states. The initiative was also audited and praised for its adherence to high standards. This outreach, differing from IJN's usual tertiary referral centre work, demonstrated the institute's dedication to healthcare and community support during challenging times.



IJN COLLEGE



A Boutique Institution for Cardiovascular and Thoracic Higher Education

Positioning itself as a boutique higher education institution, IJN College (IJNC) offers comprehensive programmes and training that relate to cardiovascular and thoracic education. This city college is situated at two very strategic locations: it operates at the IJN Main Building itself and occupies two floors at the Yayasan Selangor Building, five minutes from IJN. A covered walkway provides comfort for students and staff travelling between the two buildings.

Since its establishment in 2007, IJNC has consistently provided holistic training to professionals in the cardiovascular and thoracic domains and other allied professionals and graduates aiming for internationally recognised career advancement. Today, all its programmes are accredited by the Malaysian Qualifications Agency (MQA) and endorsed by the Ministry of Higher Education.

Initially envisioned as a training hub, IJNC began by offering graduate certificates designed for healthcare experts in the cardiovascular and thoracic fields. In 2018, the college broadened its academic offerings to encompass advanced diplomas in cardiac-centric programmes. This was followed by the introduction of diploma programmes in various disciplines; however, the pace of marketing activities for these programmes was hindered for two years due to the COVID-19 pandemic. As of 2022, IJNC has regained momentum and is undergoing a transformative phase. Buoyed by increasing student enrolment and overwhelmingly positive public feedback, the college is preparing to elevate its status to a university college.

Our Vision

IJNC aspires to be a global centre of excellence in higher education, specialising in cardiovascular and thoracic sciences, allied health sciences, and managerial sciences. To this end, we have developed the following objectives to ensure that we continue to cultivate and deliver a well-rounded experience to our students and stakeholders:

- To deliver high-quality education in cardiovascular and thoracic sciences, allied sciences, and managerial sciences, thereby empowering the next generation of professionals;
- To create a holistic learning environment that exceeds stakeholder expectations through academic excellence and practical knowledge;
- To uphold professional standards through a commitment to excellent performance;
- To instil core values such as teamwork, quality, commitment, care, innovation, and entrepreneurship; and
- To operate on a financially sustainable and independent platform.

IJNC is a burgeoning institution poised for significant growth and transformation. Its comprehensive educational offerings, vision, and mission make it a leading choice for those seeking to excel in cardiovascular and thoracic sciences, among other disciplines.

Strengthening Our Overall Student and Academic Offering

Students at IJNC have the privilege of choosing from a diverse range of subspecialty programmes and training modules. The curriculum for each programme is meticulously designed, incorporating structured coursework, clinical competency assessments, and independent research opportunities. The college aims to foster intellectual development and proficiency in candidates and scholars across all higher education levels through these materials.



IJNC consists of three faculties, which offered the following courses during the period in review:

Faculty of Cardiovascular and Thoracic Sciences

- ▶ Graduate Certificate in Cardiovascular and Thoracic Sciences (GCCVTS);
- ▶ Advanced Diploma in Cardiac Nursing (ADCN);
- ▶ Advanced Diploma in Cardiac Medical Emergency (ADCME);
- ▶ Advanced Diploma in Cardiac Paediatric Nursing (ADCPN); and
- ▶ Post-Basic Infection Control.

Faculty of Allied Sciences

- ▶ Diploma in Pharmacy;
- ▶ Diploma in Physiotherapy; and
- ▶ Diploma in Medical Health and Sciences.

Faculty of Managerial Sciences

- ▶ Diploma in Psychology;
- ▶ Diploma in Business Administration;
- ▶ Diploma in Accounting;
- ▶ Diploma in Human Resource Management;
- ▶ Diploma in Healthcare Management; and
- ▶ Diploma in Occupational Safety and Health.

During the period under review, the COVID-19 pandemic cast a shadow over the education sector and IJNC was no exception. As the Malaysian economy grappled with the repercussions of lockdowns and business shutdowns, this hampered our student recruitment initiatives. It was not until 2022, with the easing of movement restrictions, were we able to rejuvenate our student admission process.

Furthermore, as an institution, we faced structural constraints. Our designation as a college meant we could not offer degrees, masters, or Ph.D. programmes, limiting our ability to expand academic offerings that would mirror the specialised expertise of IJN as the National Heart Institute.

In understanding the pressing need to amplify student enrolment, we revamped our marketing approach in 2022. IJNC's key strategies encompassed the following:

- Bolstering the sales team with proficient members;
- Mobilising non-sales personnel in promotional endeavours;
- Rolling out robust social media campaigns;
- Collaborating with sales agents to bolster recruitment; and
- Crafting persuasive selling propositions.



These concerted efforts yielded positive results for students when enrolment surged to over 400 students in 2022. Continuing this momentum, the college aspires to onboard 1,000 students by December 2023.

Steadfastly Expanding Our Academic Horizons for Future Growth

With an eye on the future, IJNC is already engaged in in-depth discussions with IJN consultants to envision its transformation into a college university that offers niche programmes that relate more to IJN's status as a renowned National Heart Institute. This pivotal decision promises an elevated institutional status and the introduction of advanced academic programmes in niche areas like anaesthesiology, cardiology, cardiothoracic surgery, and paediatric cardiology. By actively confronting and navigating these challenges, IJNC is charting a course toward substantial growth and evolution, ensuring its academic offerings resonate with domestic and global requirements.

As the college continues to evolve, our commitment to developing training programmes aligns seamlessly with IJN's mission to nurture the next generation, equipping them with the knowledge, skills, and spirit to pioneer advancements in the cardiovascular and thoracic domains. With a clear vision for the future, we have charted out a 10-year business plan (2023-2032). By 2025, we aim to elevate IJNC's status to that of a university college, with the aim of becoming a full-fledged university by 2030.

In terms of market reach, IJNC's strategic focus on healthcare professionals, graduates, and scholars with an interest in cardiovascular, thoracic, allied, and managerial sciences has enabled the college to establish a distinctive niche in the educational sector. By offering a blend of rigorous academic content and hands-on learning experiences, the college meets the evolving demands of the employment market, making it a top choice for those aiming to master theoretical knowledge and practical skills.

This alignment with market needs, combined with its comprehensive course offerings and clear vision, positions IJNC as a premier institution in its domain, setting the stage for substantial growth and evolution in the future.



IJN FOUNDATION: EMPOWERING HEARTS, TRANSFORMING LIVES

Number of Patients Assisted between 2018 to 2022

Year	No. of Patients	Amount Disbursed	Adults vs Children
2018	267	RM4.6 million	109 Adults 158 Children
2019	393	RM6.4 million	208 Adults 185 Children
2020	599	RM7.2 million	298 Adults 301 Children
2021	844	RM7.8 million	482 Adults 362 Children
2022	752	RM7.0 million	318 Adults 434 Children

In the heart of Malaysia, the IJN Foundation (IJNF or the Foundation) has emerged not just as an organisation, but as a source of compassion and hope in the lives of many. Over 2021 and 2022, this beacon of kindness has continued to extend its reach, touching the hearts and transforming lives under its noble mission: 'Mend a Heart, Save a Life'.

At its core, IJNF is more than a non-profit entity; it is a sanctuary for underprivileged families grappling with the overwhelming challenges of heart disease. With its tax-exempt status, the Foundation has been a pillar of support, focusing on three critical areas – the Patient Assistance Programme (PAP), Research and Clinical Studies, and Educational and Training programmes. These initiatives are not mere programmes; they are lifelines for those in dire need.

The Foundation's financial support embraces all ages, from the tiniest newborns to the eldest adults, each with their own story of struggle and hope. IJNF has been particularly attentive to children afflicted with congenital heart disease, offering them not just medical interventions, but a chance at a life they deserve.

The year 2021 marked a significant increase in the number of hearts the Foundation reached, a testament to the heightened challenges brought about by the COVID-19 pandemic. This crisis underscored the vulnerability of those with heart conditions, amplifying the urgency for compassionate care and financial support. The rise in adult congenital cases has further highlighted the enduring need for such support across all ages.

IJNF's approach to heart disease, a leading cause of mortality in Malaysia, is not just clinical but deeply humane. The Foundation's efforts in facilitating financing for critical heart procedures and surgeries are made possible through collaboration with IJN as well as the generous support of corporate contributors and individual donors. Each contribution, each effort, is a step towards mending a heart and saving a life.

The last five years, that is, from year 2018 to 2022 showed that the Foundation's impact has grown, evident in the increasing number of patients assisted. This growth is not just in numbers but in the expansion of hope and the deepening of compassion. The introduction of new treatments and procedures for high-risk patients is a reflection of IJNF's commitment to innovation and care.



Muhammad Asyraf
Suharmin
(TOF + MSCT)

Hope Chew Zi Xing
(TOF Correction)

Samuel Edwin Chuo
(Ventricular Septal
Defect)

Some of the many paediatric heart patients IJNF has assisted.

The IJNF Charity Golf Tournament in 2022 stands as a symbol of communal spirit and generosity, with plans for its return in 2024. This event is more than a fundraiser; it is a gathering of hearts and minds united in a common cause. The Foundation actively engages with current and potential CSR partners, aligning with its mission to support heart patients and their caregivers. Emphasising its Patient Assistance Programme and the Ramadhan campaign, which provides sahur and iftar for caregivers, the Foundation welcomes contributions of any size to enhance patient health and well-being.

In conclusion, IJNF's journey over the past two years has been one of unwavering dedication and heartfelt service. It is a journey of mending hearts and saving lives, driven by the power of human compassion and the collective will to make a difference. As the Foundation looks forward to the future, it stands ready, with open arms and a steadfast heart, to continue this journey of hope, healing, and humanity.



RAKAN IJN



The volunteers of Rakan IJN or Friends of IJN have served IJN since 1999, when the society was established with a mission of providing for the wellbeing and comfort of patients and caregivers. Rakan IJN volunteers share IJN's mission of excellent patient care, and have supported patients and caregivers through various activities and programmes. These include sharing experiences with patients as patient visitors, supporting the Children's Ward with a playroom and recreational activities, establishing a mobile library service and support centre, as well as assisting with the IJN Physiotherapy Department's cardiac rehabilitation programme.

In line with Rakan IJN's moto of 'We Light up Your Heart', the society has come a long way in its efforts to meet the needs of patients and their caregivers. Rakan IJN volunteers give their best in providing a climate of comfort, cheer and support to patients, whether it is by way of helping meet their basic needs, or simply by having friendly and encouraging chats with them.

The years 2021 and 2022 saw Rakan IJN providing much needed supplementary care, especially so with the limitations of travel and contact due to the COVID-19 pandemic. Over this time, Rakan IJN volunteers also set up a halfway house for caregivers and mothers of children from Sabah and Sarawak, providing them a place to stay just next to the hospital.

Rakan IJN is supported by kind donors and this has enabled the society to meet patients' extra needs and provide equipment which would otherwise not be available. Starter packs comprising toiletries, towels, swaddles and socks are given to each child checking into the Children's Ward. Rakan IJN also provides complimentary packs for adult patients who are in need of items such as towels, toiletries, palikats and sarongs. Rakan IJN food vouchers are also provided for caregivers, and these are given out by IJN counsellors, enabling caregivers to use them at the food outlets at IJN.

Our Mobile Librarians also ensure the upkeep of ward magazine racks for the comfort of patients and caregivers.

Among the main projects that were initiated throughout 2021 and 2022 were the refurbishment of the Children's Ward playrooms and the provision of interactive recreational toys and equipment. Toys and items such puzzles and colouring books were also given to each bedded child to keep them entertained.

During each festive season, our volunteer patient visitors ensure that patients are provided cheer not only by our volunteers' visits, but also through the festive goodies they bring them. The children are also entertained with volunteers coming in to conduct singalong activities among other things.

All our Rakan IJN patients visitors are heart patients themselves, having gone through the experience of their own heart surgeries. During the pandemic restrictions, our volunteer patient visitors faced challenges in visiting patients and sharing their experiences with them. However, the programme resumed following the uplifting of pandemic restrictions. Our hope is that these visits will continue to benefit the patients needing comfort and allay any anxieties they may have.

Rakan IJN looks forward to further helping enhance the Children's Ward lounge areas, treatment rooms and corridors with fresh and lively murals to give patients a warm and comfortable environment during their hospital stay.

Looking ahead, our Rakan IJN volunteers remain committed to working closely with the hospital so that they can continue to provide assistance in the form of non-clinical and holistic care. The dedication of our volunteers as well as their close collaboration with IJN, is enabling Rakan IJN to remain at the forefront as a hospital volunteer group. Moving forward, we will focus on our mission of making the stay of patients and caregivers at IJN a memorable one.



CLINICAL MILESTONES

IJN is reckoned to be among the best medical centres for cardiovascular and thoracic care in Malaysia and the region. IJN has kept abreast with the latest medical advances, from handling a simple hole in the heart surgery to heart and lungs transplantations. With a strong commitment to be a global heart care centre of excellence, IJN has paved the way by creating many 'firsts' for cardiovascular and thoracic care in the country

1992 - 1996

- Established Radiofrequency Ablation of Pulmonary Atresia (1992)
- Established Balloon Dilation for Valvular Aortic Stenosis (1992)
- First in Malaysia – Closure of PDA Case With Coils (1993)
- Introduced Homograft for Complex Congenital Heart Surgeries (1993)
- Introduced Coil Embolism of Coronary Artery Fistula (1994)
- First in Malaysia – Renal Angioplasty (1995)
- First in Malaysia – Automatic Implantable Cardiac Defibrillator (ICD) (1996)

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1998 - 2000

- First in Malaysia – Transradial Intervention (1998)
- Established Homograft Bank (1998)
- Established Integrated Cardiac Rehabilitation Unit (1998)
- Established Percutaneous Carotid Stenting (1999)
- First in Malaysia – Advanced Non-contact Mapping System Radiofrequency Catheter Ablation (1999)
- First in Malaysia – Endovascular Aortic Aneurysm Repaired (1999)
- Introduced Emboli Protection Device (1999)
- First in Malaysia – Use Biventricular Pacing to treat heart failure (1999)

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2005 - 2007

- **First in ASIA – Implanted 1st Thoratec IVAD – Mechanical Heart System (2005)**
- First in Malaysia – Single Lung Transplant (2005)
- **First in Asia and Australasia – Video Assisted Thoroscopic Ablation of Atrial Fibrillation (2006)**
- First in Malaysia – Heart and Lung Transplant (2007)
- Performed total corrective cardiac surgery on a smallest baby weighing 2.3kg (2007)
- First in Malaysia – Sequential Double Heart Transplant (within 24 hours) (2007)
- First in Malaysia – Implanted Breathing Pacemaker for patients on ventilator (2007)

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- **First in ASEAN – Transcatheter Atrial Septal Defect (ASD) Occlusion**
- First in Malaysia – Heart Transplant
- **First in ASEAN – Transcatheter Amplatzer Duct Occluder (ADO)**
- First in Malaysia – Iliac Stenting
- Percutaneous Transcatheter Closure of ASD And PDA with Amplatzer Duct Occlude
- First in Malaysia – Transradial Coronary Angiogram
- First in Malaysia – Renal Stenting

1997

- Introduced Stentless Aortic Valve Replacement (2001)
- First in Malaysia – Endovascular Aortic Aneurysm Repaired (2001)
- First in Malaysia – Introduced Drug Eluting Stents (2002)
- **First in ASEAN – Myocardial Stem Cell Transplant (2003)**
- First in Malaysia – Endoscopic Harvest of Saphenous Vein and Radial Artery Conduit for Coronary Artery Bypass (2003)
- **First in ASEAN – Coronary Artery Bypass Grafting on an Awake Patient (2004)**
- Introduced Transcatheter Ventricular Septal Defect Occlusion (2004)
- Introduced Periventricular off-pump VSD closure with Amplatzer Device Under Fluroscopy and TEE

2001 - 2004

2011 - 2015

- Introduced Mitraclip – non surgical repair for leaking mitral valve (2011)
- **First in ASEAN – Implanted Bioresorbable Vascular Scaffolds (2011)**
- The New Occlutech® PDA Occluder: Initial Human Experience (2011)
- Introduced Heartware – a new mechanical heart device (2011)
- **First in Asia – Transcatheter Renal Denervation (2011)**
- **First in Asia – Sutureless Aortic Valve Prosthesis (2012)**
- **First in Asia – Parachute Ventricular Partitioning Device (2013)**
- **First in Asia Pacific – Implanted MICRA Transcatheter Pacing System (2014)**
- **First-in-man (World) – Implanted VenTouch Ventricular Reshaping Device (2014)**
- First in Malaysia – Implanted the latest S-ICD® System (2014)

2021 - 2022

- First in Malaysia – Introduced Intravascular Lithotripsy to treat severe calcify atherosclerosis (2021)
- **First in Asia – Covered Endovascular Reconstruction of Aortic Bifurcation (CERAB) procedure with CO2 angiogram (2021)**
- First in Malaysia – Aneurysm Repair (EVAR) with CO2 angiogram (2021)
- **First in Asia – Introduced Tricvalve Transcatheter Bicaval Valves System (Bioprosthesis) (2021)**
- First in Malaysia – Complex electrophysiology procedure using the Ensite X EP system (2022)
- **First in ASEAN – Introduced POLARx™ Cryoablation System (2022)**
- **First Medical Institution in South East Asia to treat 100 patients with Micra AV (2022)**
- First in Malaysia – Implanted Transcatheter Pulmonary Valve Melody (TPV) to treat obstructed Pulmonary Valve or conduit in patients with Congenital Heart Disease (2022)

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- First in Malaysia – Minimally Invasive Procedure to Repair Congenital Chest Deformity (2008)
- First in Malaysia – Transcatheter Aortic Valve Implantation (TAVI) (2009)
- First in Malaysia – Minimally Invasive Lobectomy for Lung Disease (2009)
- First in Malaysia – Implanted the Watchman for AF patient (2010)
- First in Malaysia – Non irradiating Cardiac Magnetic Resonance System (2010)
- Introduced Heartmate II (2010)

2008 - 2010

- **First in Asia Pacific – Implanted Bio-absorbable Pulmonary Valve Conduit (PVC) (2016)**
- First in Malaysia – Total Aorta Replacement Surgery (2017)
- **First-in-man Trial (Asia Pacific) – Micra Transcatheter Pacing System and to Implant Investigational Attain Stability™ Quad MRI Surescan™ Left Heart Lead (2018)**
- **First in Asia – Peripheral Atrial Disease Procedure with Vascuflex Multi-Loc Device (2018)**
- First in Malaysia – Implanted Dual Chamber Pacemaker System in a Pregnant Patient Using Non-fluoroscopic Imaging (2018)
- First in Malaysia – Arterial Switch Operation on 3-month old baby (Conjoined Twins) (2019)
- **First In Asia – Implanted Micra AV Pacemaker (2020)**

2016 - 2020



AWARDS AND ACCOLADES

IJN has endeavoured to excel in every facet of cardiovascular and thoracic care. Our commitment to excellence has been recognised through the various awards and accolades we received over the 2021-2022 period. We are honoured to have been of service to both our patients and our many stakeholders.

2021 AWARDS

GLOBAL HEALTH & TRAVEL AWARDS 2021

- Cardiology Service Provider of the Year in Asia Pacific
- Heart Transplant Service Provider of the Year in Asia Pacific

These awards highlight IJN's unwavering commitment to delivering exceptional and compassionate cardiovascular-related healthcare. They motivate us to elevate our standards and redefine possibilities in cardiology and heart transplant services so that patient well-being and healthcare make strong strides forward at the global level.

MALAYSIA EXCELLENCE BUSINESS AWARDS (MEBA) 2021

Corporate Social Responsibility of the Year

This significant accolade recognises IJN's profound commitment to societal well-being. It reflects our ethos of impactful community contribution and our dedication to fostering positive societal change. We pledge to continue making tangible impactful contributions to society to create a better and more sustainable future for all.

MALAYSIA INTERNATIONAL HR AWARDS 2021

Employer of Choice (Private Sector)

This recognition highlights our focus on fostering a nurturing workplace culture, emphasising employee satisfaction, growth and development. It strengthens our resolve to continue prioritising our employees' needs and ensuring their success and satisfaction within our organisation.

HR EXCELLENCE AWARDS 2021

Best Soft Skills Programme

This award underscores IJN's dedication to cultivating a workforce proficient in communication, collaboration and interpersonal skills. It reinforces IJN's commitment to our employees and our drive to be at the forefront of HR practices within the healthcare sector.



2022 AWARDS

THE BRANDLAUREATE BEST BRANDS AWARD 2021-2022

Nation's Pride Brand of The Year Award

This award reflects our exceptional contributions and achievements, embodying the spirit and values of our nation. It spurs us to continually exceed expectations and uphold the values that make us a beacon of pride for Malaysia.

GLOBAL HEALTH & TRAVEL AWARDS 2022

- Cardiology Service Provider of the Year in Asia Pacific
- Paediatric Cardiology Service Provider of the Year in Asia Pacific
- Heart Transplant Service Provider of the Year in Asia Pacific
- Emergency Care Service Provider of the Year in Asia Pacific
- Most Innovative Hospital of the Year in Asia Pacific

Our receipt of multiple accolades bears testament to our unwavering dedication to delivering exceptional and innovative healthcare services in various specialties. These accolades reflect the culmination of our tireless efforts to provide world-class cardiology, paediatric cardiology, heart transplant, emergency care, and innovative medical services to our community and beyond.

HOSPITAL MANAGEMENT AWARDS 2022

Combatting COVID-19: Adopting Digital Health Technology with an Integrated Platform for Patients and Staff

This award acknowledges IJN's innovative approach during the COVID-19 pandemic, highlighting our commitment to integrating digital solutions for the benefit of our patients and staff. It is a well-deserved acknowledgement of our efforts to adapt and innovate amidst adversity.

IBR ASEAN AWARDS 2022

Corporate Excellence Award in the Healthcare Sector for Innovations in Cardiovascular and Thoracic Care

This award is a testament to our groundbreaking work in cardiovascular and thoracic care as well as our continuous pursuit of medical excellence, enhancing patient outcomes and well-being. It fuels our dedication to pushing the frontiers of innovation, and we remain steadfast in our commitment to providing cutting-edge and compassionate care.

MALAYSIAN SOCIETY FOR QUALITY IN HEALTH ACCREDITATION EXCELLENCE AWARD 2022

Institutional Quality Assurance

This accolade underlines our commitment to the highest standards in healthcare as we work continually to raise benchmarks in service quality and patient care. Moving forward, we remain steadfast in our mission to positively impact the health and well-being of our community.

MALAYSIA TOP ACHIEVERS 2022

Industry Excellence in Healthcare and Wellness

This prestigious recognition underscores the hard work and dedication of the entire IJN family who are deeply committed to providing exceptional healthcare services. It inspires us to continue setting new industry standards and to push the envelope on innovation to positively impact patient well-being.

As we reflect on these significant achievements, IJN remains committed to pursuing excellence in all that we do. Our journey towards enhancing healthcare services and contributing to the well-being of our community continues with unwavering dedication and a relentless pursuit of innovation and quality. We are steadfast in our mission to set new benchmarks in healthcare and to be a beacon of hope and excellence for all.





DOCTOR'S DIRECTORY



Department of Cardiology



1 DATUK DR. SHAFUL AZMI BIN YAHAYA

Head of Department/Senior Consultant Cardiologist/Clinical Director of Interventional Cardiology

Speciality

- Interventional Cardiology (Complex)
- Peripheral Artery Disease Intervention (lower limb, carotid, renal, subclavian)
- Endovascular Aortic Aneurysm Repair (Abdomen & Thoracic)
- Transcatheter Aortic Valve Implantation (TAVI)

2 DATUK DR. AIZAI AZAN BIN ABDUL RAHIM

Chief Executive Officer/
Senior Consultant Cardiologist

Speciality

- Interventional Cardiology
- Cardiac Rehabilitation in Primary and Secondary Prevention
- Advanced Adult Heart Failure Management, Heart and Lung Transplant Assessment
- Mechanical Heart Device (LVAD)
- Pulmonary Hypertension

3 DATO' SRI DR. AZHARI BIN ROSMAN

Senior Consultant Cardiologist/
Director of Customer Experience Department

Speciality

- Interventional Cardiology
- Implantation of Cardiac Defibrillator
- Renal Denervation
- Cardiovascular Risk Reduction Clinic

4 DATUK DR. AZLAN BIN HUSSIN

Senior Consultant Cardiologist/
Clinical Director of Interventional Electrophysiology and Implantable Devices

Speciality

- Adult Interventional Electrophysiology and Ablation Procedures
- Paediatric Interventional Electrophysiology and Ablation Procedures
- Grown Up Congenital (GUCH) Interventional Electrophysiology and Ablation Procedures
- Implantable Cardiac Devices for Adult, Children and Grown Up Congenital Heart Disease Procedures

5 DATUK DR. AHMAD KHAIRUDDIN BIN MOHAMED YUSOF

Senior Consultant Cardiologist/Clinical Director of Cardiovascular Imaging

Speciality

- Interventional Cardiology
- Coronary Cardiovascular Imaging
- Myocardial Perfusion Study

6 DATO' DR. AZMEE BIN MOHD GHAZI

Consultant Cardiologist/Clinical Director of Heart Failure and Heart Transplant

Speciality

- Interventional Cardiology
- Advanced Adult Heart Failure Management, Heart and Lung Transplant Assessment
- Mechanical Heart Device (LVAD)
- Pulmonary Hypertension

7 DR. EMILY TAN LAY KOON

Senior Consultant Cardiologist/
Clinical Director of Women's Health

Speciality

- Interventional Cardiology
- Cardiac Magnetic Resonance Imaging
- CT Coronary Angiography
- Cardiovascular Disease in Women
- Cardiac Prevention and Rehabilitation

8 DATO' DR. AMIN ARIFF BIN NURUDDIN

Senior Consultant Cardiologist

Speciality

- Interventional Cardiology
- PTMC
- Catheter-based Valve Repair with MitraClip and TriClip

9 DR. SURINDER KAUR KHELAE A/P ATMA SINGH

Senior Consultant Cardiologist

Speciality

- Catheter Ablation of Simple and Complex Arrhythmias
- Atrial Fibrillation Ablation
- Ventricular Tachycardia Ablation
- Permanent Pacemakers
- Implantable Defibrillators
- Cardiac Resynchronization Therapy
- LAA Occluders

10 DATUK DR. KUMARA GURUPARAN A/L GANESAN

Consultant Cardiologist

Speciality

- Interventional Cardiology (Complex)
- Peripheral Artery & Venous Disease Intervention (lower limb, carotid, renal, subclavian)
- Endovascular Aortic Aneurysm Repair – EVAR/TEVAR
- Transcatheter Aortic Valve Implantation (TAVI)
- Renal Denervation for Resistant Hypertension
- Transcatheter Ablation of Septal Hypertrophy (TASH)

11 DR. TEOH CHEE KIANG

Consultant Cardiologist

Speciality

- Interventional Cardiology
- Advanced Adult Heart Failure Management, Heart and Lung Transplant Assessment
- Mechanical Heart Device (LVAD)
- Heart Failure Service
- Pulmonary Hypertension



Department of Cardiology



12 DR. BENI ISMAN BIN RUSANI**Consultant Cardiologist****Speciality**

- Interventional Cardiology
- Cardiac Imaging
- Echocardiography
- Cardiac CT Coronary Angiography

13 DR. RAFIDAH BINTI ABU BAKAR**Consultant Cardiologist****Speciality**

- Adult Cardiology
- Cardiovascular Magnetic Resonance
- Echocardiography

14 DR. HAFIDZ BIN ABD HADI**Consultant Cardiologist****Speciality**

- Interventional Cardiology
- Echocardiography
- Cardiac Imaging - CT Coronary

15 DR. ASLANNIF BIN ROSLAN**Consultant Cardiologist****Speciality**

- Interventional Cardiology
- Adult Cardiology for Heart Disease in Pregnancy
- Echocardiography
- Assessment of Adult Congenital Heart Disease

16 DR. KOH HUI BENG**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Heart Failure & Advanced Heart Failure Services
- Right and Left Heart Catheterisation
- Endomyocardial Biopsy
- Mechanical Circulatory Support, Ventricular Assist Device & Heart
- Mechanical Transplant Services

17 DR. AHMAD FARHAN BIN ABDUL HAMID**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Echocardiography

18 DR. ROHITH STANISLAUS**Cardiologist****Speciality**

- Internal Medicine & Cardiology
- Electrophysiology

19 DR. THUM CHAN HO**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Cardiovascular Risk Reduction Clinic

20 DR. SURAYA HANI BINTI KAMSANI**Cardiologist****Speciality**

- Implantation of Pacemakers, Implantable Defibrillators
- Cardiac resynchronisation therapy via implantation of biventricular devices

21 DR. TEY YEE SIN**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Transcatheter Aortic Valve Implantation (TAVI)

22 DR. TEH KHAI CHIH**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology

23 DR. AFIF BIN ASHARI**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Cardiovascular Magnetic Resonance

24 DR. GANAPATHI A/L PALANIAPPAN**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology

25 DR. AFRAH YOUSIF ADAM HAROON**Cardiologist****Speciality**

- General Cardiovascular & Interventional Cardiology

26 DR. ABDUL ARIFF BIN SHAPARUDIN**Cardiologist****Speciality**

- General Cardiology & Interventional Cardiology
- Acute Cardiac Care



Paediatric and Congenital Heart Centre



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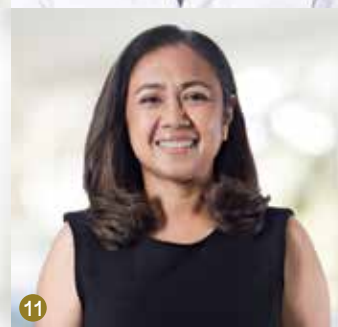
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1 DR. MARHISHAM BIN CHE MOOD

Head of PCHC/Consultant Paediatric
Cardiologist/Clinical Director
of Congenital & Structural
Intervention

Speciality

- General Paediatric Cardiology
- Interventional Paediatric Cardiology
- Complex Congenital Cardiac Intervention
- Paediatric Arrhythmia & Pacemaker Implantation

2 DR. HASRI BIN SAMION

Senior Consultant Paediatric
Cardiologist/Chief Clinical Officer/
Clinical Director of Paediatric
Electrophysiology & Pacing

Speciality

- General Paediatric Cardiology
- Interventional Paediatric Cardiology
- Complex Congenital Cardiac Intervention
- Paediatric Arrhythmia & Pacemaker Implantation

3 DATUK DR. MAZENI BIN ALWI

Senior Consultant Paediatric
Cardiologist

Speciality

- General Paediatric Cardiology
- Interventional Paediatric Cardiology
- Complex Congenital Cardiac Intervention

4 DR. HAIFA BINTI ABDUL LATIF

Senior Consultant Paediatric
Cardiologist/Clinical Director of
Congenital & Structural Imaging

Speciality

- General Paediatric Cardiology
- Paediatric Cardiac Imaging (Echocardiography, TEE, 3D Echocardiography, Paediatric CT scan)
- Foetal Echocardiography

5 DR. GEETHA KANDAVELLO

Senior Consultant Paediatric
Cardiologist/Clinical Director of Adult
Congenital Heart Diseases

Speciality

- General Paediatric Cardiology
- Paediatric Cardiac Intervention
- Adult Congenital Heart Disease (ACHD) / Grown Up Congenital Heart
- Pulmonary Hypertension
- Heart Disease in Pregnancy
- Paediatric Cardiac Intervention

6 DR. KHAIRUL FAIZAH BINTI MOHD KHALID

Senior Consultant Paediatric
Cardiologist (Intensive Care)/Clinical
Director of Paediatric Intensive Care

Speciality

- Paediatric Cardiac Intensive Care

7 DR. LEONG MING CHERN

Consultant Paediatric Cardiologist/
Deputy Head of PCHC

Speciality

- General Paediatric Cardiology
- Adult Congenital Heart Disease (ACHD)/ Grown Up Congenital Heart (GUCH)
- Pulmonary Hypertension
- Heart Disease in Pregnancy
- Congenital Cardiac MRI
- Paediatric Cardiac Intervention

8 DR. ALI IBRAHIM ELARABI

Consultant Paediatric Cardiologist

Speciality

- General Paediatric Cardiology
- Interventional Paediatric Cardiology

9 DR. SOO KOK WAI

Consultant Paediatric
Cardiologist (Intensive Care)

Speciality

- Paediatric Cardiac Intensive Care
- Adult Congenital Heart Disease Intensive Care

10 DR. BOEKHREN KARYOSTYKO BORHANUDDIN

Paediatric Cardiologist

Speciality

- General Paediatric Cardiology
- Paediatric Cardiac Imaging (Echocardiography, TEE, 3D Echocardiography, Paediatric CT scan, Paediatric Functional Echocardiography)
- 3D Printing Heart Model

11 DR. JOYCE DARSHINEE SIRISANI

Paediatric Cardiologist

Speciality

- Paediatric Cardiac Intensive Care



Department of Cardiothoracic and Vascular Surgery



1 PROF DATO' DR. ALWI BIN MOHAMED YUNUS

Head of Cardiothoracic & Vascular Surgery/Senior Consultant Cardiothoracic Surgeon/Director of Health Informatics

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Video Assisted Thoracoscopic Surgery (VATS)
- Endoscopic Thoracic Sympathectomy (ETS for Hyperhidrosis)

2 PROF DATO' SERI DR. JEFFREY JESWANT DILLON

Senior Consultant Cardiothoracic Surgeon/Director of Cardiovascular Sports and Fitness

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Video Assisted Thoracoscopic Surgery (VATS)
- Endoscopic Thoracic Sympathectomy (ETS for Hyperhidrosis)
- Minimally Invasive Repair for Pectus Excavatum
- Transcatheter Aortic Valve Implantation (TAVI)
- Surgery for Atrial Fibrillation
- Sutureless Aortic Valve Replacement
- Redo Cardiac Surgery

3 PROF DATO' SERI DR. MOHD AZHARI BIN YAKUB

Senior Consultant Cardiothoracic Surgeon

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Paediatric and Congenital Cardiac Surgery

4 DATO' DR. MOHD NAZERI BIN NORDIN

Senior Consultant Cardiothoracic Surgeon/Clinical Director Heart & Lung Transplantation and Mechanical Heart Programme

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Heart and Lung Transplantation
- Mechanical Circulatory Support
- Extracorporeal Membrane Oxygenation (ECMO)

5 PROF DATO' DR. MOHAMED EZANI BIN MD TAIB

Senior Consultant Cardiothoracic Surgeon/Director and Head, Special & Expansion Project

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Video Assisted Thoracoscopic Surgery (VATS)
- Endoscopic Thoracic Sympathectomy (ETS for Hyperhidrosis)
- Minimally Invasive Coronary Artery Bypass Surgery
- Minimally Invasive Valve Surgery
- Heart and Lung Transplantation
- Mechanical Circulatory Support
- Extracorporeal Membrane Oxygenation (ECMO)

6 DR. SIVAKUMAR A/L SIVALINGAM

Senior Consultant Cardiothoracic Surgeon (Paediatric)/Deputy Head of Cardiothoracic & Vascular Surgery/Clinical Director Paediatric Surgery

Speciality

- Complex Paediatric Cardiac Surgery
- Paediatric Valve Repair
- Adult Congenital Heart Surgery
- Surgery in Low Birth Weight Babies

7 DR. ABDUL RAIS BIN SANUSI

Senior Consultant Cardiothoracic Surgeon

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Heart and Lung Transplantation

8 DR. PANEER SELVAM A/L KRISHNA MOORTHY

Senior Consultant Cardiothoracic Surgeon

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery
- Heart and Lung Transplantation
- Aortic Arch and Descending Thoracic Aortic Surger

9 DR. HEW CHEE CHIN

Senior Consultant Cardiothoracic Surgeon (Paediatric)

Speciality

- Complex Paediatric Cardiac Surgery
- Paediatric Valve Repair
- Adult Congenital Heart Surgery
- Surgery in Low Birth Weight Babies

10 DATO' DR. AHMAD BIN SALLEHUDDIN

Senior Consultant Paediatric Cardiac Surgeon

Speciality

- Complex Paediatric Cardiac Surgery
- Paediatric Valve Repair
- Adult Congenital Heart Surgery
- Surgery in Low Birth Weight Babies

11 DR. SHARUL AKMAL BIN SAAT

Consultant Cardiothoracic Surgeon

Speciality

- Coronary Artery Bypass Surgery
- Valve Repair and Replacement Surgery
- Aortic Root Surgery
- Redo Cardiac Surgery
- Thoracic Surgery

12 DR. KHAIRUL ANUAR BIN ABDUL AZIZ

Consultant Cardiothoracic Surgeon (Paediatric)

Speciality

- Complex Paediatric Cardiac Surgery
- Paediatric Valve Repair
- Adult Congenital Heart Surgery
- Surgery in Low Birth Weight Babies
- Congenital Tracheal Surgery

13 DR. ISMAZIZI BIN ZAHARUDIN

Consultant Vascular/Endovascular Surgeon

Speciality

- Endovascular/Open Repair Thoracic and Abdominal Aortic Aneurysm (AAA)
- Endovascular Surgery for Aortic Dissection
- Limb Salvaging Procedures for Lower Limb Wound/Ulcer to Prevent Leg Amputation
- Endovascular/Open Bypass Surgery for Critical Limb Ischemia
- Arteriovenous Fistula (AVF) Creation
- Endovenous Mechanical Thrombectomy for Deep Vein Thrombosis
- Lymphatic Bypass Procedures for Lymphedema



Department of Anaesthesiology and Intensive Care



1 DATO' DR. SUHAINI BIN KADIMAN

Head of Anaesthesiology &
Intensive Care/Senior Consultant
Anesthesiologist/ Director of Clinical
Research

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Perioperative Transesophageal Echocardiography
- Organ protection in cardiac surgery
- Heart Lung Transplantation
- Mechanical Circulatory Support
- Clinical Research

2 DATO' DR. SUNETA BINTI SULAIMAN

Deputy Head of Anaesthesia &
Intensive Care/Consultant Intensivist/
Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Adult Cardiothoracic & Vascular Intensive Care
- Mechanical Circulatory Support

3 DATO' DR. MOHAMED HASSAN BIN HAJI MOHAMED ARIFF

Senior Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Heart Lung Transplantation
- Mechanical Circulatory Support

4 DATO' DR. N. THIRU KUMAR A/L A. NAMASIWAYAM

Senior Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Heart Lung Transplantation
- Mechanical Circulatory Support

5 DR. MOHD. SHARIF BIN MOHD. SHAFFIE

Senior Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Cardiac Perfusion Services
- Heart Lung Transplantation

6 DR. AZHARI BIN HAMID

Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Paediatric ECMO

7 DR. NATESAN RAJA

Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Grown-up Congenital Heart

8 DR. ROZAINI BINTI HASSAN

Consultant Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Perioperative Transesophageal Echocardiography
- Acute Pain Services

9 DR. KHAIRUNNADIAH BINTI KAMARUZAMAN

Anaesthesiologist

Speciality

- Adult Cardiothoracic & Vascular Anaesthesia
- Paediatric Cardiothoracic Anaesthesia
- Heart Lung Transplantation
- Mechanical Circulatory Support



Respiratory



DR. ASHARI BIN YUNUS

Consultant Pulmonologist

Speciality

- General Respiratory – Bronchial Asthma, Chronic Obstructive Pulmonary Disease (COPD)
- Interstitial Lung Disease (ILD)
- Pulmonary Fibrosis
- Pulmonary Hypertension
- Sleep Disorders
- Lung Cancer



Endocrine



DR. NOR AZMI BIN KAMARUDDIN

Consultant Endocrinologist

Speciality

- Diabetes & Pre-Diabetes Management
- Obesity & Weight Management
- Adrenal, Pancreatic, Pituitary & Thyroid Diseases
- Bone Metabolism (Osteoporosis), Calcium & Electrolyte Disorders
- Reproductive Endocrinology



Nephrology



**DATUK DR. GHAZALI
BIN AHMAD**

Consultant Nephrologist/Director of Integrated Disease Management

Speciality

- Clinical Nephrology
- Diabetic Nephropathy
- End Stage Renal Failure
- Acute Kidney Injury
- Management for Post Renal Transplant
- Glomerulonephritis



Department of Observation and Emergency



1



2

**1 DR. FARINA BINTI MOHD
SALLEH**

Consultant Emergency Physician/
Director of Quality

Speciality

- Resuscitation & Advanced Life Support
- Emergency Airway Management
- Point-of-care Ultrasound
- Initial Trauma Management

**2 DR. AHMAD SUHAILAN
BIN MOHAMED**

Consultant Emergency Physician

Speciality

- Resuscitation & Advanced Life Support
- Emergency Airway Management
- Point-of-care Ultrasound
- Initial Trauma Management



Imaging Centre



**1 DR. SULAIMAN
BIN TAMANANG**

Senior Consultant Radiologist

- Clinical Radiology & Nuclear Medicine

**3 DR. NING AJLEAA
BINTI NGAH**

Radiologist

- Clinical Radiology

**2 DR. MOHAMED FAIRUDZ
BIN FAISAL**

Radiologist

- Clinical Radiology

2022



Penggantian injap jantung tanpa pembedahan



Merupakan prosedur yang inovatif dan selamat, prosedur ini dapat menggantikan injap jantung yang rosak tanpa pembedahan. Prosedur ini dilakukan dengan menggunakan kateter yang dimasukkan melalui pembuluh darah. Prosedur ini dilakukan di Hospital Kuala Lumpur (HKL) dan Hospital Kuala Lumpur (HKL).

Prosedur ini dilakukan dengan menggunakan kateter yang dimasukkan melalui pembuluh darah. Prosedur ini dilakukan di Hospital Kuala Lumpur (HKL) dan Hospital Kuala Lumpur (HKL).

慢性肾病患者

慢性肾病患者，平均寿命比正常人短。在马来西亚，慢性肾病患者的人数正在增加。慢性肾病患者，平均寿命比正常人短。在马来西亚，慢性肾病患者的人数正在增加。

严控盐分！

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低蛋白饮食减缓肾衰竭

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Novartis Malaysia, UN aim to provide better care for ASCVD patients

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Novartis Malaysia, UN aim to provide better care for ASCVD patients. Novartis Malaysia, UN aim to provide better care for ASCVD patients.

WM

MEMULIHKAN INJAP ROSAK

Dokter yang mengkaji terapi TAVI tanpa perlu pembedahan jantung besar

社融：依據個別情況 助萬人轉至合適機構

【吉隆坡18日訊】馬來西亞社會服務局（Pernasek）最近推出社會服務計劃（Program Sosial Selayang / Program Sosial Selayang / Program Sosial Selayang），旨在協助有需要人士轉介至合適機構。



國家心臟中心疾病新療法 無需開胸換肺動脈瓣

【吉隆坡18日訊】國家心臟中心（NCC）最近推出疾病新療法，無需開胸換肺動脈瓣。國家心臟中心（NCC）最近推出疾病新療法，無需開胸換肺動脈瓣。

藥Medoly特導管輔助換瓣

國家心臟中心最近推出疾病新療法，無需開胸換肺動脈瓣。國家心臟中心（NCC）最近推出疾病新療法，無需開胸換肺動脈瓣。

華僑入式作減風險

國家心臟中心最近推出疾病新療法，無需開胸換肺動脈瓣。國家心臟中心（NCC）最近推出疾病新療法，無需開胸換肺動脈瓣。

2天後出院 光復ICU

國家心臟中心最近推出疾病新療法，無需開胸換肺動脈瓣。國家心臟中心（NCC）最近推出疾病新療法，無需開胸換肺動脈瓣。

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國家心臟中心疾病新療法 無需開胸換肺動脈瓣

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Kota

Ribuan WNI Setiap Tahunnya Berobat Jantung Ke IJN Malaysia

EKONOMI

Direksi Bank Jatim Bakal Digugat Asosiasi Pemegang Sah

PERFORMANCE REPORT 2021-2022

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– The National Heart Institute of Malaysia



@ijnmalaysiaofficial



National Heart Institute

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Kuala Lumpur 50400, Malaysia

Phone : +603 2617 8200

Email : heart@ijn.com.my

➤ ***www.ijn.com.my***