

St. Luke's Medical Center
EXCELLENCE IN PATIENT CARE
Clinical Outcomes 2012

For Patients and Friends

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EXCELLENCE IN PATIENT CARE
CLINICAL OUTCOMES 2012





MESSAGE

PRESIDENT AND CEO

LAST YEAR, we unveiled the new vision of St. Luke's Medical Center, which is to become an internationally-recognized Academic Medical Center by 2020.

This recognition is bestowed only to the best medical centers in the world that offer:

- exceptional care through a top rate tertiary hospital
- top notch medical education
- wide range of excellent residency and fellowship training programs
- cutting edge research and facilities
- dedicated and motivated staff

Among the strongest suits of St. Luke's in its bid for international recognition are its two tertiary hospitals that offer multiple specializations that treat a whole range of diseases. These two facilities form a unified health care system with a consistent standard of care delivered by medical personnel with exceptional expertise. I am happy to announce that both facilities have recently cleared the stringent accreditation standards of the Joint Commission International (JCI), to-date the most respected accrediting organization for healthcare institutions. St. Luke's-Quezon City has already received four consecutive accreditations in the last 10 years, while St. Luke's-Global City has received its very first accreditation since it opened in 2010.

The St. Luke's College of Medicine-William H. Quasha Memorial has garnered a 100 per cent Medical Board Examination passing rate for its first time taker/graduates in the last four years. We also have the most extensive residency and fellowship training program for doctors.





We are also proud of our Research and Biotechnology Division for its excellent research program. Part of its thrust is to document the clinical outcomes of breakthrough trainings offered by our Institutes, Departments, and Centers (IDCs). Aside from its research program, a number of IDCs and individual physicians are also collecting clinical outcomes data, some of which will be featured in this report. However, we can still do a lot to be more committed and vigorous in the institutional collection of the Hospital's Clinical Outcomes in the next few years.

We are presenting in this publication clinical outcomes that have been collected and submitted by IDCs and individual physicians. We will be doing this annually as part of our commitment to inform the public of our medical services and clinical performance to help guide them with their important medical choices.

This publication is an initial documentation of the clinical accomplishments of our doctors and medical personnel in our two tertiary hospitals. In the coming years, we hope to publish more outcomes that do not just reflect the practices of individual doctors but the clinical performance of our IDCs. We are confident that this publication will be an effective push towards that direction.

Lastly, this publication is a show of our commitment to our patients that their needs come first. At St. Luke's our patients are assured they will get the best possible care aimed at giving them the best medical outcomes.

EDGARDO R. CORTEZ, MD



MESSAGE

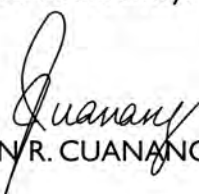
SVP FOR MEDICAL AFFAIRS AND CHIEF MEDICAL OFFICER
CHAIRMAN, ST. LUKE'S COLLEGE OF MEDICINE - WILLIAM H. QUASHA MEMORIAL

OUR BELOVED St. Luke's historic march in the last century to this new millennium has brought our hospital to where and what we are today. It has become one of the best medical centers in the Asia-Pacific Region and undoubtedly the best in our country. And in the next few years, we hope to be among the recognized academic medical institutions in the whole world.

Although our history has been marked by fastidious commitment to excellence, it was only sometime 15 years ago when St. Luke's started to develop the idea of forming the core of a great Medical Institution. We started to pursue more vigorously the triumvirate of service, education, and research, which are the hallmarks of a great medical institution. Today, we find ourselves to be the guardians of that legacy.

Our present lofty position in healthcare has been made possible by the good outcomes our great pool of medical talent have produced over the years. These are the result of the convergence between the talent and skills of our medical personnel and the availability of superior technology, yet unmatched in the country and in some parts of the Asia-Pacific region.

We celebrate and honor these good outcomes in this publication. These are incontrovertible proofs of how much we have achieved over the years. However, we can not rest on these laurels! There is much more to be done! We look at these as challenges to set higher standards for ourselves to ensure that our patients would always receive the finest medical treatment.


JOVEN R. CUANANG, MD





MESSAGE

MEDICAL DIRECTOR, ST. LUKE'S-GLOBAL CITY

THE PUBLICATION of the Clinical Outcomes Report is an auspicious event because it is testimony to all the hard work and diligence of our doctors and other health professionals in ensuring that optimum care is given to patients.

At St. Luke's, we pride ourselves for raising our benchmarks to make sure we conform to the outcomes set by the best hospitals in the world. And indeed, we will see this in some of the outcomes we have included in our publication. The achievements of St. Luke's are comparable, if not better than international outcomes.

As head of St. Luke's-Global City, I am proud to announce that some of the outcomes included in this publication are procedures performed only at St. Luke's-Global City. For instance, robotic surgery using the da Vinci Si Surgical System, currently the most advanced robotics technology in the world, is only done at St. Luke's. So far, we have had over 140 surgeries using this advanced surgical system. We also pride ourselves for being the only hospital in the country with the most number of Transcatheter Aortic Valve Replacement procedures.

At St. Luke's, we set high standards for patient care.

ARTURO S. DE LA PEÑA, MD, FPCS, FACS



MESSAGE

MEDICAL DIRECTOR, ST. LUKE'S-QUEZON CITY

ST. LUKE'S MEDICAL CENTER'S status as one of the best, if not the best hospital in the Philippines has been the collective product of the skills and talents of its physicians, other medical personnel, administration, and associates. However, a large part of its reputation really rests on the good outcomes that its physicians have produced for over a hundred years—patients have achieved what they came for at St. Luke's, which are healing and restoration.

In the past, St. Luke's stature was profoundly shaped by the verbal testimonies of satisfied patients who attested to the proficiency of our doctors and the outstanding treatment they received from the hospital.

In this publication, we wish to present to the public our evidence-based clinical outcomes. Our strong outcomes have helped us earn the reputation of being the leading medical institution in the Philippines.

This publication celebrates this tradition of excellence as it showcases the best we have to offer.



JOSE B. MORAN, MD





MESSAGE

VICE-PRESIDENT, PATIENT EXPERIENCE HEAD, MARKETING GROUP

IT IS WITH PRIDE and gratitude that we present to you the maiden issue of the Clinical Outcomes Report. This is a result of the close coordination and cooperation between our non-clinical care personnel and medical staff in the commitment to make St. Luke's services and achievements known to a wider audience. It is also our way of recognizing the efforts of our physicians and medical personnel who provide excellent healthcare to our patients.

We want this publication to serve as a rich source of information on the clinical achievements of our physicians. However, it also serves as a valuable source of medical information not only for patients but also doctors from other hospitals who can draw useful material on illnesses and concrete data on available treatment modalities at St. Luke's.

More importantly, this compilation will give patients a preview of the state of our clinical services.

We present to you the medical strides we have made over the last few years. We have been working hard to raise the bar of our healthcare delivery and to benchmark our performance with the best international medical institutions throughout these years as part of our collective vision to position St. Luke's as an internationally-recognized Academic Medical Center by 2020.

We, in the non-clinical care team, are happy to be part of the hospital's effort to constantly provide each of our patients a great patient experience by offering them innovative ways of making their encounter with us safe, reassuring, comforting, and pleasing.



MARILEN TRONQUED LAGNITON

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A SPOTLIGHT ON ST. LUKE'S CLINICAL ACHIEVEMENTS

ST. LUKE'S MEDICAL CENTER has steadily built its reputation, over the years, as the foremost hospital in the Philippines. This was made possible through the work, commitment, talent, and expertise of its physicians, assisted by medical personnel, who have vigorously worked to raise the bar of medical practice in the country. St. Luke's physicians have brought with them innovative and pioneering treatment modalities from the various Philippine and international medical institutions they trained under. These physicians have developed and revolutionized their own treatment protocols that have enhanced treatment modalities available at St. Luke's.

St. Luke's physicians have access to industry leading equipment and technologies, many of which are only available in the best hospitals in the developed world. In the Philippines, some of these top-of-the-line diagnostic and treatment technologies can be found only at St. Luke's.

The union between the top-rate skills and dedication of medical personnel and the hospital's industry leading equipment has resulted to superior outcomes in clinical practice. The expertise and availability of world class technologies has permitted Filipino and international patients access to the best diagnostic and treatment modalities in the country, if not the Asia Pacific region.

Patients in the country no longer need to seek treatment abroad because treatments that were once available only in foreign shores have now become available through St. Luke's. This has improved patients' access to the best therapies in the world. This equity of access to the best therapies makes it possible for St. Luke's to make its mission of ensuring "the needs of its patients come first" a reality.





The union between the ability and dedication of medical personnel and the availability of industry leading hospital equipment has resulted to superior outcomes in clinical practice at St. Luke's.





Nurses wheel a patient to the Emergency Room.

The reputation of St. Luke's as the premier medical institution for physical healing and restoration grew mostly through testimonials of satisfied patients. Word-of-mouth testimonies have served as the most potent promotion of St. Luke's services, drawing people from all walks of life to seek medical care in the hospital.

It has not only received recognition from gratified patients but also from prestigious international organizations. The Joint Commission International (JCI), the oldest and the most respected accrediting health care organization, and TEMOS, a Europe-based organization that certifies international hospitals as viable medical tourism destinations, have both recognized St. Luke's for its sterling standards in medical and administrative practice.

These have all cemented St. Luke's reputation as one of the most trusted, if not the most trusted, medical center in the country.

So the Public May Know

This publication is an initial attempt to gather together and present the clinical achievements of individual physicians and Institutes, Departments, or Centers (IDCs) of St. Luke's Medical Center. With its vision to become an internationally recognized academic medical center, St. Luke's works doubly hard to ingrain the culture of research among its physicians, especially research that will show the public the outcomes of their clinical practices. To improve medical standards further, St. Luke's emphasizes the need to benchmark its accomplishments with international standards.

The research and publication of the hospital's outcomes is at once a reflective and transformative process as it aims to contemplate on its accomplishments with the view of continuously upgrading its standards for the sake of its patients.

This book is also part of St. Luke's commitment to the public to provide appropriate and correct information about available treatment options from the medical center to help the public make informed medical choices.

The success of St. Luke's in the area of clinical outcomes is commemorated on these pages. These pages are a testament to the productiveness, diligence, and proficiency of its physicians and medical staff and a testimony to St. Luke's continuous drive to improve patient care.

A Walk through the Publication

Excellence in Patient Care walks readers through the history of St. Luke's from the time it was founded at Calle Magdalena in Trozo, Manila to the time its Global City facility was built. In this part, we see St. Luke's evolution from being a small dispensary clinic to its present stature as an internationally recognized medical institution. What defines its history from its humble beginnings to its eminent standing is the passion of St. Luke's to deliver top rate medical care to people.

“The Clinical Outcomes Report is at once a reflective and transformative process as St. Luke's aims to contemplate on its accomplishments with the view of incessantly improving its practice.”

- EDGARDO R. CORTEZ, MD
President and CEO





St. Luke's works doubly hard to ingrain the culture of research among its physicians, especially research that will show the public the outcomes of their clinical practices.

St. Luke's Medical Center has Institutes, Departments, and Centers that offer the most comprehensive medical specializations in the country. Highly competent and compassionate physicians and staff work diligently to ensure that each patient would get what they came for at St. Luke's—the best care possible!

In the outcomes part, specific diseases, treatment options, and outcomes are covered to inform the public of treatment options available at St. Luke's. The outcomes or achievements that are included in the report are by no means an exhaustive list of the treatment modalities and accomplishments of the hospital. This being a first time publication, the book only presents a preliminary overview of some of the treatment modalities available at St. Luke's and its achievements.

This initial print will hopefully help engender an even more robust research culture at St. Luke's that would allow the public greater access to better and more extensive information on the clinical achievements of the premiere hospital in the country.



Dispensary of St. Luke the Beloved Physician at Calle Magdalena, Truzo, Manila

2

THE TRADITION OF EXCELLENCE



Reverend Charles Henry Brent

The Early Years

ST. LUKE'S MEDICAL CENTER traces its roots to 1903 when the Retired Reverend Charles Henry Brent of the Episcopal Missions opened a free clinic to treat the underprivileged residents of Trozo, Manila. The clinic was called the Dispensary of St. Luke the Beloved Physician, named after the gospel writer.

As the number of patients increased, the modest clinic became a nine-bed ward by 1905. Unable to keep up with the growing number of patients, the clinic had to be expanded into a 30-bed and eight emergency bed, two-storey wooden hospital. So great was the demand that the hospital capacity was expanded to a 52-bed hospital five years later. During this time, the hospital came to be briefly known as the University Hospital.

Syrian-American Dr. Najib Mitry Saleeby was appointed the first director of St. Luke's. As Director of the Dispensary, Dr. Saleeby introduced novel methods of treating diseases, which he learned from the Bellevue Hospital Medical College, at the time one of the best medical schools in the United States. The skills and training that Dr. Saleeby brought in was made more significant by the dearth of well-trained doctors in the Philippines during that time. The only health care available was provided by traditional healers or *herbolarios* who did not have enough know-how to quell disease outbreaks or to competently treat complex ailments.

It was in the crucial early years when St. Luke's sowed the seeds of the culture of excellence, for which it is now known today. Under Dr. Saleeby's astute leadership, Filipinos were given excellent medical care that was enhanced and complemented by medical research. Treatment and prevention protocols were often based on scientific data. This was important because at that time, there was a huge gap in information on tropical diseases. The research conducted by Dr. Saleeby was used not only to improve treatment modalities, but also to educate the community on the prevention of various diseases.



Dr. Saleeby also showed commitment in education as he spearheaded the establishment of St. Luke's training school for nurses. This school later produced the first three Filipina nurses in the country. As a testament to how well trained St. Luke's nurses were, the Japanese medical director of St. Luke's during World War II commended the St. Luke's trained nurses for their proficiency and high level of training as medical caregivers.

By 1912, the hospital's name was reverted to St. Luke's to set it apart from the University of the Philippines Hospital.

As early as its first decade of existence, St. Luke's had been investing in modern facilities and installing systems adopted in advanced hospitals abroad. In 1928, for instance, St. Luke's acquired the most sophisticated x-ray machine in the country. This was an important precursor to St. Luke's resolute commitment to acquire the latest available technologies and the most modern medical equipment to provide patients with accurate diagnosis and excellent treatment.

One of the indications of St. Luke's drive to superior quality was the rigorous measures that were put in place to ensure sanitation in the hospital. This did not go unnoticed. In 1926, the hospital's dedication to guarantee sanitation was recognized by major newspapers in Manila that declared St. Luke's as the "Cleanest Hospital in the Country." Aside from this, it was also described as "one of the best conducted hospitals in the city."

The crucial first years of St. Luke's was when the seeds of excellence were first sown. This seed has flourished over the years. It has been carried on to this day by the physicians, medical personnel, and associates of St. Luke's.





There was keen effort to ensure that the hospital conformed to standards set forth by Western hospitals, which at that time, were the leaders in medical practice.

Initial Rise to Prominence

By the 1930s, St. Luke's started to reap recognitions for its astute investments in acquiring industry leading medical technologies and enhancing its clinical programs. Popular dailies such as the *Sunday Tribune* hailed St. Luke's as among the best-equipped hospitals in the country. With its sterling reputation, American, Chinese, and Japanese patients started to seek treatment from St. Luke's. Its role also evolved from being a treatment hospital, to a staunch advocate of public health as it vigorously supported government wellness and sanitation programs. It was one of the hospitals in Manila that instituted sanitation, nutrition, and infant wellness programs in response to government's call to support its health program.

In 1934, St. Luke's garnered second honors and from 1935 to 1937, the first prize during the celebration of National Hospital Day. The three year streak was significant because it took the plum from the then better funded government hospitals such as the Philippine General Hospital and the San Juan de Dios Hospital. It also led St. Luke's to win the Hall of Fame award after its three straight-year win. In 1938, the hospital was awarded by the government, "Model Hospital."

For a brief period during World War II, St. Luke's Hospital was renamed by the Japanese as Nippon Byoin or Nippon Hospital. Dr. Takejiro Kamada was appointed the Director of Nippon Byoin by the occupying forces. Dr. Kamada was impressed by the medical personnel of the hospital. When he came back to the Philippines in 1966 to speak before the graduating class of the St. Luke's Hospital Nursing School, he paid tribute to the "far superior" nursing care standards of Filipinos trained by St. Luke's.

Victories and Setbacks

The period after the war was marked by both victories and setbacks. In 1961, the long-planned transfer of St. Luke's to a better site finally materialized. From Calle Magdalena, the hospital moved to the present site of St. Luke's-Quezon City, where a bigger hospital facility was constructed.

However, the achievement was marred by numerous problems, foremost of which was the hospital's precarious financial standing as the Episcopal Church withdrew its financial subsidies to the hospital. The withdrawal of funding made it difficult for St. Luke's to sustain its operation, especially considering that a large percentage of the patients were charity patients.

Things turned around in 1975 when American lawyer and Philippine resident William H. Quasha was elected President and Chairman of the Board. Under Quasha, St. Luke's became an independent, non-stock, non-profit charitable corporation governed by an all-volunteer Board of Trustees. This crucial decision helped turn around the final condition of St. Luke's. The resulting returns allowed St. Luke's to build more rooms and acquire revenue generating equipment. With more stable financial standing, St. Luke's Hospital steadily climbed to become one of Asia's most advanced and well equipped medical institutions.



Top photo: St. Luke's-Quezon City circa 1960s.

Bottom photo: Former St. Luke's Chairman and President William H. Quasha.



St. Luke's remains grounded in the fact that improving the hospital is a never-finished project because standards are continually enhanced and improved.

Benchmarking with the Best in the World

The hospital was renamed St. Luke's Medical Center in 1984. Amidst political and economic turmoil, St. Luke's made strides never before reached in its history. Staying true to tradition, St. Luke's began to acquire state-of-the-art equipment, mostly available in the best hospitals in the world. This was part of the hospital's modernization strategy and its goal to give Filipinos equitable access to the best medical treatments without having to leave the country and spend tremendous amounts of money.

In time, St. Luke's was described as a hospital in a developing country with world class expertise and facilities. This was made possible by consultants who trained in the most prestigious medical centers abroad. These physicians brought in the latest treatment modalities available in the best medical institutions around the world.

In the 1990s, St. Luke's carved its reputation as the destination hospital for specific medical specialties like cardiology, neurosciences, oncology, and others. Throughout this decade, St. Luke's set up various Institutes, Departments, and Centers that treat a wide range of diseases.

The modernization of hospital equipment and supportive management have enticed the best expatriate doctors abroad to return to the Philippines. These physicians contributed to the enhancement of medical practice at St. Luke's and, by extension, to the country as they brought with them innovative, even pioneering, practices from where they came from.

Their access to industry leading equipment has made patient diagnosis and treatment optimal.

In the mid-1990s, St. Luke's Medical Center reached another milestone when it inaugurated the St. Luke's College of Medicine-William H. Quasha Memorial, now considered as one of the top medical schools in the country. The school serves as a training ground for future physicians, not only for St. Luke's but for other hospitals here and abroad. The medical school is complemented by the outstanding residency and fellowship programs of St. Luke's Medical Center.

In the new millennium, St. Luke's embarked on its biggest project, which was to build a world class hospital facility at Bonifacio Global City. Inaugurated in 2010, St. Luke's-Global City was hailed as the country's most modern hospital. In 2012, it landed on the list of 25 most beautiful hospitals in the world by the HealthExecNews.com, an online group that reviews hospitals worldwide. It is also the best equipped hospital in the country with equipment that can only be found in preeminent international hospitals. These machines include the latest in diagnostic and treatment technologies like the 3rd generation robotic da Vinci Si Surgical System, the PET CT Scan, 256-slice CT Scan, among others.



Medical students at the St. Luke's College of Medicine-William H. Quasha Memorial.





Towards the last quarter of 2012, St. Luke's scored two big victories when its Quezon City and Global City facilities were given the coveted Joint Commission International (JCI) Accreditation, an honor bestowed only to the best hospitals in the world that adhere to outstanding management and patient safety standards.

The JCI accreditation in 2012 is the fourth for St. Luke's-Quezon City, which received its first accreditation in 2003. It is the first hospital in the Philippines and the second in Asia to have garnered four consecutive accreditations. It also has the most number of JCI accreditations among all Philippine hospitals.

Barely two years after St. Luke's-Global City was built in 2010, the facility was given its first JCI Accreditation.

St. Luke's also received the TEMOS accreditation in 2010 to become the first Philippine hospital to be recognized by the German-based accrediting organization. It was acknowledged for its high quality medical services for the international community, which includes travellers and expats.

These recognitions from the prestigious international accreditation bodies are proof that the hospital has distinguished itself to be among the world's most reliable health care institutions that puts premium on quality and patient safety in all its clinical and managerial functions. These are also evidence of St. Luke's continuous drive to improve its performance.

The Vision to be an Academic Medical Center

In the next eight years, the hospital will take its culture of excellence a step further as it works towards being internationally recognized as an Academic Medical Center by 2020. The vision will place St. Luke's ahead of local hospitals and on equal footing with the very best medical institutions in the world that are both a service hospital for the public and training school for would-be physicians, residents and fellows who are working to earn their specialization. President and CEO Dr. Edgardo R. Cortez explains,

An Academic Medical Center is a system wherein you have a tertiary hospital that delivers the best excellent care for patients and an academic medical school providing training for future medical doctors. An academic medical center usually has an expansive array of residency and fellowship programs within the hospital to train doctors to be specialists. It also has a strong research arm, wherein the latest discoveries and findings in medical science are made available for the benefit of patients and to improve the health of the community in general.

St. Luke's already has the ingredients to make its vision a reality:

- It is staffed by board-certified doctors from across different specialties, who provide compassionate and expert care using the latest treatment modalities and equipment;
- Its doctors produce good clinical outcomes or achievements;
- It has a strong training program for physicians and specialists; and
- It has a good medical research program.

St. Luke's intends to bring all these elements together to help it leap frog to international recognition as an Academic Medical Center where patients from all over the world can seek treatment and wellness.

"The vision to be an internationally-recognized Academic Medical Center will place St. Luke's at par with the best medical institutions in the world."

- EDGARDO R. CORTEZ, MD
President and CEO



TOTAL HEALTHCARE APPROACH

ST. LUKE'S MEDICAL CENTER boasts of a wide array of healthcare services to its patients.

Its Institutes, Departments, and Centers (IDCs) cover every possible healthcare needs of patients who come to the hospital for healing, recuperation, and wellness. These IDCs act as hubs for the treatment of diseases from the most common, to rare, complex ones that demand highly specialized care. They offer the most comprehensive medical diagnostic and treatment modalities and specializations.

INSTITUTES

The Institutes of St. Luke's Medical Center are large healthcare units that comprise more specialized units called Departments and Centers. Institutes are made up of various specializations that are either disease-specific such as the Cancer Institute and the Institute of Digestive and Liver Diseases; medical specialization—such as Orthopedics and Sports Medicine, Pathology, Radiology, Surgery, Pulmonary Medicine, Neurosciences, and Pediatrics and Child Health; or Organ System-specific such as Heart, Urology, and Eye.

INSTITUTES

Cancer Institute
Heart Institute
Institute of Digestive and Liver Diseases
Institute of Orthopedics and Sports Medicine
Institute of Pathology
Institute of Pediatrics and Child Health
Institute of Pulmonary Medicine
Institute of Radiology
Institute of Surgery
Institute of Urology
International Eye Institute
International Institute for Neurosciences

These Institutes are at the forefront of delivering a wide array of health services to address conditions that fall under the purview of these medical specializations.

DEPARTMENTS

St. Luke's Departments are smaller units compared to Institutes. These Departments specialize in Medicine, Nuclear Medicine, Obstetrics and Gynecology, Surgery, Ear, Nose, Throat-Head and Neck Surgery, Anesthesiology, Rehabilitation Medicine and Radiation Oncology.

DEPARTMENTS

Department of Anesthesiology
Department of Dermatology
Department of ENT-HNS
Department of Medicine
Department of Nuclear Medicine
Department of Obstetrics and Gynecology
Department of Radiation Oncology
Department of Rehabilitation Medicine

CENTERS

The multiple services of the Centers of St. Luke's are dedicated to:

- specific diseases (e.g. Center for Congenital Heart Disease, Renal Diseases, Brain Tumor, Cardiac Arrhythmia and Atrial Fibrillation, etc.), organs that are affected by disease (e.g. Breast)
- medical procedures (e.g. Blood and Marrow Transplant, Wound Care, Aesthetic Surgery, Joint Replacement Surgery, Pain Management, Vision Laser Center, etc.)
- medical specialty (e.g. Geriatric, Weight Management)

Centers serve as one-stop diagnostic, therapeutic and treatment facilities for a broad spectrum of health concerns.

CENTERS

Aesthetic Surgery Center
Blood and Marrow Transplant Center
Breast Center
Cardiac Arrhythmia and Atrial Fibrillation
Center for Advanced Reproductive Medicine and Infertility
Center for Congenital Heart Disease
Center for Diabetes, Thyroid, and Endocrine Disorders
Center for Joint Replacement Surgery
Center for Occupational Health and Environmental Safety Services
Center for Renal Diseases
Complex Wound Care Center
Comprehensive Brain Tumor Center
Comprehensive Pelvic Floor Center
Comprehensive Sleep Disorders Center
Geriatric Center
Liver Disease and Transplant Center
Memory Center
Movement Disorders Center
Neurodevelopmental Center
Pain Management Center
Positron Emission Tomography Center
Rheumatology, Allergology and Immunology Center
Stone and Prostate Treatment Center
Stroke Center
Varicose Vein Center
Vision Laser Center
Voice, Swallowing and Sinus Center
Weight Management Center



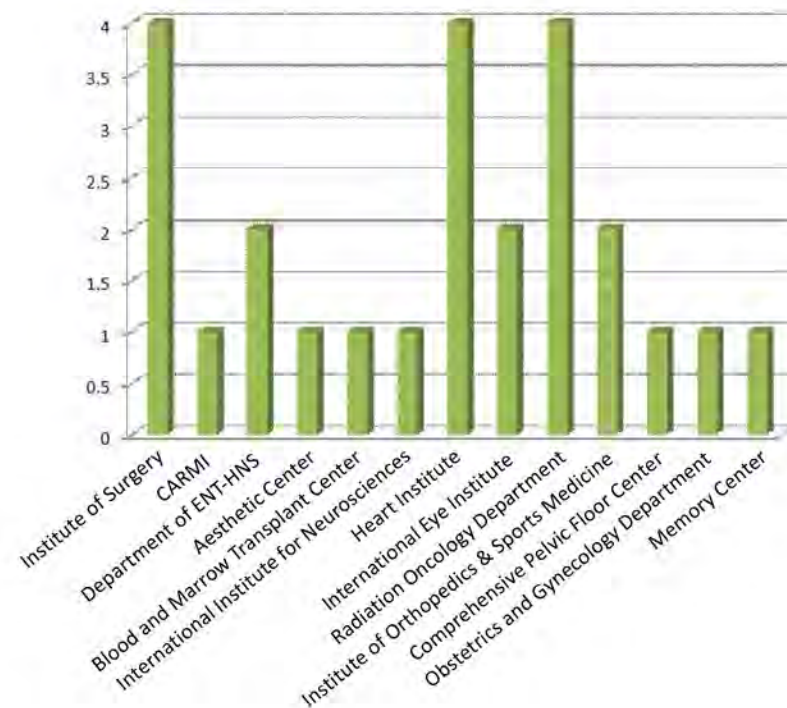
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CLINICAL OUTCOMES

IN THIS SECTION, we look at a cross section of the Clinical Outcomes of St. Luke's over the past decade or so. Being the first attempt to publish such, only a few outcomes of the hospital are reported here. Twenty three (23) clinical outcomes are featured in this annual report. We hope to come up with a more comprehensive report that will include the manifold medical services St. Luke's has to offer and the results of the treatment protocols given to patients in the coming years.

The outcomes are categorized by Institutes, Departments, and Centers. Individual doctors who submitted their own outcomes are placed under the IDC they belong to.

Number of Submissions



INSTITUTE OF SURGERY

THE INSTITUTE OF SURGERY is a hub for different types of surgical procedures, from the most routine to the most demanding and complex ones.

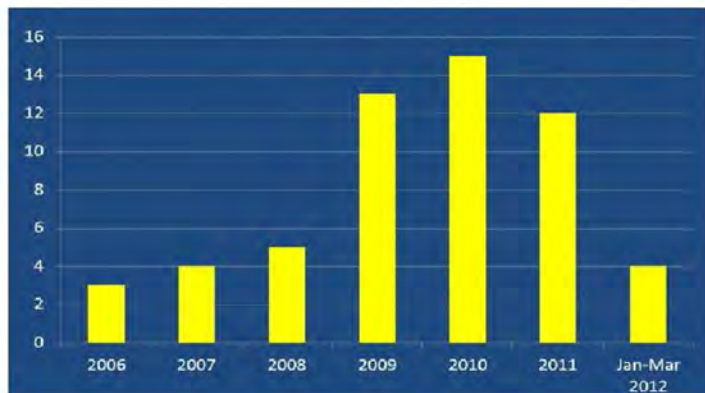
Surgical modalities include: 1) open surgery that makes use of large open incisions on the skin and muscles; 2) laparoscopic surgery that makes use of minimally invasive techniques involving small surgical incisions on the skin and muscles of patients where long, thin instruments are used to manually access diseased organs and a camera or endoscope to view the organ being operated on; and 3) robotic surgery, a form of laparoscopic surgery that makes use of the most advanced robotic surgical equipment available in the world, the da Vinci Si Surgical System.

Laparoscopic and robotic surgeries can now be performed for heart, colon, rectal, gastroenterologic, gynecologic, orthopedic, otorhinolaryngologic, thoracic, urologic, and vascular surgeries.





Menandro V. Sioson, MD is the head of the Institute of Surgery, St. Luke's - Quezon City.



Number of Laparoscopic Inguinal Hernia Repair Patients, 2006 to First Quarter 2012.

LAPAROSCOPIC INGUINAL HERNIA REPAIR: A MINIMALLY INVASIVE PROCEDURE TO REPAIR WEAK POINTS OR TEARS IN THE LOWER ABDOMEN OR GROIN

Jeffrey J.P. Domino, MD and Menandro V. Sioson, MD

INGUINAL HERNIA REPAIR is a common surgical procedure to repair a weak point or tear in the lower abdomen or groin where soft tissue like the intestines may protrude. This needs immediate repair because it could lead to life threatening complications when left untreated.

Traditionally done through open surgery, the latest developments in medical technology have made it possible for the procedure to be performed using laparoscopy, a minimally invasive procedure that makes use of very small incisions on the skin and muscles to access the diseased organ.

An increasing number of patients are now opting for this minimally invasive procedure because of its benefits such as shorter recovery periods, lesser probability for infection, and minimal bleeding, among others.

The Outcomes

- At St. Luke's, none of the laparoscopic inguinal hernia repair surgery had been converted to open surgery over the last five years. All inguinal hernial repairs were successfully completed laparoscopically.
- Patients experienced very low pain from the procedure.
- On the average, laparoscopic inguinal hernia repair patients only stayed in the hospital for two days, better than the four day hospital stay reported in international medical institutions.

LAPAROSCOPIC REMOVAL OF GALL STONE: NOW THE GOLD STANDARD

Jeffrey J.P. Domino, MD

LAPAROSCOPIC CHOLECYSTECTOMY is the gold standard in removing the gall bladder and gallstones. Small keyhole incisions are made on the abdomen, where a laparoscope or tiny video camera and surgical instruments are used to access and remove gall bladder and stones.

The number of patients who have undergone the procedure at St. Luke's has constantly risen over the last five years, surpassing the open surgical procedure to remove gallstones. Open surgery involves long incisions on the skin and muscles to get into patients' gallbladder where gallstones commonly form.

The Outcomes

- Complications have been reported to be very minimal during the course of surgery. With this, there was no need to convert the procedure to open surgery, which is usually the course taken when complications arise.
- Few patients have complained of pain. Those who reported pain mostly reported very minimal pain.
- Patients who underwent the laparoscopic surgery to remove gall stones stayed in the hospital for an average of 2.1 days, better than the international benchmark of four days.
- After the procedure, patients were able to return to their normal activities a week after the procedure.



Jeffrey J.P. Domino, MD is an Advanced Laparoscopic and Robotic Surgeon.





Lead surgeon Menandro V. Siozon, MD with his team.

WHIPPLE'S PROCEDURE: AN EFFECTIVE SURGICAL PROCEDURE TO REMOVE TUMORS IN THE PANCREAS

Menandro V. Siozon, MD

WHIPPLE'S PROCEDURE is performed to remove tumors or cancers in the head of the pancreas (an organ in the abdomen that produces hormones such as insulin) and organs adjacent to the pancreas such as the distal common bile duct, duodenum or the small intestine.

The Outcomes

The Whipple's Procedure Team at St. Luke's has performed 310 Whipple's procedures so far. This surpasses the number of Whipple's procedures performed in the Southeast Asian region.

- In a span of 20 years, the over-all survival rate of patients is 24 per cent in the first five years after the surgery. This is better than the 20 per cent survival rate reported by other international institutions over the same period of time.
- The special surgical technique developed by the surgical team led by Menandro Siozon, MD has prevented the formation of fistula or anastomotic/pancreatic leak in most patients. This is a potentially fatal condition because pancreatic enzymes can eat into adjacent organs. Only two per cent of patients were reported to have developed fistula or abnormal connection between an organ, or intestine to anterior abdominal wall and another structure due to surgery. The outcome at St. Luke's is much better than the 5.6 per cent international benchmark for the formation of fistula or anastomotic/pancreatic leak.
- There is also a lower incidence of complications among patients such as accumulation of pus in wounds or opening of wounds (12 per cent at St. Luke's vs. the international benchmark of 20.09 per cent), delayed gastric emptying (6 per cent at St. Luke's vs. the international benchmark of 15.3 per cent international benchmark), sepsis or severe blood infection (2 per cent at St. Luke's vs. the 8.8 per cent international benchmark), and death (5.58 per cent at St. Luke's vs. the 8.8 per cent international rate).

ROBOTIC SURGERY, THE WAVE OF THE FUTURE

Narciso S. Navarro, Jr., MD

ROBOTIC SURGERY is a precise form of laparoscopic surgery. Like laparoscopy, it only uses small incisions where a camera that produces clear 3-D images and surgical instruments are inserted to get a better view of and operate on diseased internal organs. Unlike laparoscopic surgery, the instruments, are not manually held by the surgeon, instead they are attached to robotic arms. A surgeon remotely controls the robot through a console machine.

Robotic surgery has definite advantages over traditional laparoscopy as the instruments can perform wristed movements in small tight spaces inside the body allowing it to move around with ease and to operate on hard to reach organs such as pelvic organs (prostate, ovaries and uterus, thyroid, colon, esophagus, etc).

St. Luke's Medical Center currently uses the most advanced robotic surgical technology available in the world, the 3rd generation daVinci Si Surgical System. Only St. Luke's-Global City has the technology in the country to date.

It is used for various surgical procedures at St. Luke's, namely: gynecologic (removal of the uterus, ovary, ovarian cyst, fibroids or myoma, and cysts; repair of prolapsed vaginal vault or a vagina that has fallen out of its proper position; and reattachment of the fallopian tube), urologic (removal of the prostate, kidney, and blockages in the urinary system), and general (removal of thyroid and appendix; surgery of colorectal cancer and gastroesophageal reflux disease) surgical procedures.



Narciso S. Navarro, Jr., MD is the head of the Institute of Surgery, St. Luke's-Global City.





The Robotic Surgery Operating Room

With robotic surgery, patients may be spared from losing their organ, the close-up 3-D images the surgical system generates allows the surgeon to remove diseased tissues and to spare healthy tissues and organs.

The Outcomes

As of 9 January 2013, 148 robotic surgical procedures have been performed at St. Luke's-Global City.

- Prostatectomy has been the most commonly performed procedure, followed by hysterectomy and myomectomy.
- Of the 148 cases, 142 cases were successfully carried out. Seven cases were either aborted or converted to open surgical procedure due to various reasons.
- All patients who underwent the procedure are alive and well.
- Patients have been spared from losing their organ during the course of the operation because the fine and precise movements of the robotic hands and the superior 3-D images the camera procedures allows the surgeon to focus on removing diseased tissues, avoid nerves, while sparing adjacent healthy tissues. For instance, a patient was able to keep her uterus despite having multiple myomas removed. In open surgeries, this would have been more difficult to do. Patients who undergo radical prostatectomy also maintain their erection and urinary continence or ability to hold back urine.
- Robotic surgery results to minimal scarring because only small incisions are made on the skin. There is minimal blood loss because the robot can cauterize tissues and blood vessels thus preventing bleeding. There is lesser experience of pain as well. More importantly, patients recover and go back to their normal activities faster than those who have open surgeries.

HEART INSTITUTE

ST. LUKE'S HEART INSTITUTE is one of the leading heart facilities in the country. Top adult and pediatric cardiologists and cardiovascular surgeons, who trained in the most prestigious heart institutions here and abroad, provide the latest diagnostic and therapeutic modalities in the management of cardiovascular diseases.

They are backed by a paramedical staff of nurses, physical therapists and technicians who are acknowledged to be the cream of the crop in their respective fields.

The Heart Institute offers the latest diagnostic and therapeutic modalities in the treatment of a wide range of cardiovascular diseases. It invests in the acquisition of cutting edge technologies to allow patients access to the latest and most suitable diagnostic and treatment modalities for different cardiovascular problems. Rehabilitation facilities are also available to facilitate the speedy recovery of patients.

The ability and skills of the physicians, coupled with the availability of the most-up-to-date technologies and facilities have brought about superior results for cardiovascular disease patients. These have also allowed the Institute to make history in Philippine cardiovascular medicine. Over the last three decades, its physicians have performed pioneering surgeries in the country such as Endovascular Aneurysm Repair (EVAR), Coronary Artery Bypass Graft (CABG), and Transcatheter Aortic Valve Replacement (TAVR), among others. It has also achieved outcomes that are comparable to the outcomes of the most reputable international coronary care facilities.



Jose Nicholas M. Cruz, MD is the head of the Heart Institute, St. Luke's-Global City.





The first TAVR procedure in the Philippines was performed by Fabio Enrique B. Posas, MD at St. Luke's-Global City on this patient in February 2012.

TRANSCATHETER AORTIC VALVE REPLACEMENT (TAVR): A NOVEL PROCEDURE TO TREAT AORTIC STENOSIS

Fabio Enrique B. Posas, MD

AORTIC STENOSIS is a disease of the heart valves in which the opening of the aortic valve is narrowed. This makes it difficult for the heart to pump blood to the brain, lungs, kidneys, stomach, and intestines. This could cause death in its severest form.

The standard treatment for severe aortic stenosis is usually open heart surgery and valve replacement. However, this may not be the best option for elderly patients who may have complex, multiple medical problems and may be prone to complications following open heart valve replacement procedures.

Transcatheter Aortic Valve Replacement (TAVR), a minimally invasive technique available at St. Luke's-Global City, is designed to replace diseased aortic valves. The procedure does not require open chest surgery. There is also no need to hook up the patient to a heart-lung machine. It may even be performed with light sedation or without general anesthesia. The procedure is carried out most often using a small incision or puncture at the femoral arteries in the groin. A catheter or long tube is inserted into the arteries and advanced up to the aortic valve. The catheter is then guided and positioned to the aortic valve using x-ray and ultrasound. The artificial valve is then deployed to the area of the heart where the diseased valve is.

The Outcomes

St. Luke's TAVR team's outcomes have been exceptional and comparable to the outcomes reported at the best centers in the world thus far.

- Since the procedure was first performed, 17 patients have already undergone successful TAVR at St. Luke's-Global City. The defective valves were all successfully replaced with a bioprosthetic or mechanical device. In the United States, 92.1 per cent of the cases performed in US-hospitals were successful.
- There was no recorded death within 30 days after the procedure at St. Luke's. In the United States, 7.8 per cent of patients died within the given period.
- At St. Luke's, only 5.8 per cent of the patients experienced life-threatening bleeding, while 15.6 per cent of patients in the US experienced this.
- Eighty two (82) per cent of patients were alive on follow up and with markedly improved function and quality of life. Importantly, all patients have shown improvement in cardiac function.
- Three patients died between 40 days and 120 days after the procedure of non-cardiac causes. Their deaths are attributable to underlying medical problems unrelated to valvular disease.

* All US data are from Genereux, Philippe, et al. 2012. "Clinical Outcomes after Transcatheter Aortic Valve Replacement Using Valve Academic Research Consortium Definitions: A Weighted Meta-Analysis of 3,519 Patients from 16 Studies." Journal of the American College of Cardiology. Available at <http://content.onlinejacc.org/article.aspx?articleid=1208649>



A patient undergoes an echocardiogram procedure.





Danilo S. Kuizon, MD is the head of the Heart Institute, St. Luke's-Quezon City.

CLINICAL SUCCESS RATE OF CARDIOVASCULAR INTERVENTIONS AT THE HEART INSTITUTE, ST. LUKE'S-QUEZON CITY

Danilo S. Kuizon

CORONARY ARTERY DISEASE (CAD) is caused by plaque build-up around the walls of the arteries resulting to the narrowing of the arteries, cutting off blood and oxygen supply. It could cause pain at the least and a heart attack and death at the worst.

Angiography

Now considered the gold standard in diagnosing heart problems, angiography involves the insertion of a catheter into the artery and taking x-ray images to look for obstructions, narrowing, and bulges that can burst (aneurysm) in the artery.

- A total of 99.1 per cent of the angiograms were successfully done at St. Luke's-Quezon City, which means the procedure was completed with no major complications being observed two weeks after the procedure.

Angioplasty or Percutaneous Coronary Intervention (PCI)

When medications no longer work to address blockages or hardening in the artery, patients can undergo angioplasty or percutaneous coronary intervention (PCI), an alternative to open heart surgery. A small balloon is delivered to the area of the blockage through a catheter. Once the balloon reaches the blockage, it is inflated to open the artery and allow blood to course freely. A stent or wire mesh is then installed to keep the artery open and to prevent the artery from being blocked again.

- A total of 99.4 per cent of the Angioplasty procedures have been successfully completed.

Coronary Artery Bypass Graft (CABG)

The Coronary Artery Bypass Graft is recommended for patients who have not complied with the criteria for angioplasty. This is usually recommended for patients with severe coronary heart disease involving multiple blocked arteries. This is an open chest surgical procedure where a healthy artery is connected or grafted to the blocked coronary artery, to restore blood flow.

- A total of 99.3 per cent of the CABG procedures have been successfully completed.

Heart Valve Surgery

Heart valve surgery involves the repair or replacement of one or more heart valves. This is usually an open heart surgical procedure, but can also be done through minimally invasive techniques. Valve repair involves the removal of calcium build up, the repair of holes or tears in the valves, strengthening weak or stretched valves, etc. Sometimes valves are replaced using mechanical or biological valves.

- Some 98.3 per cent of the heart valve surgery procedures have been successfully completed.



St. Luke's cardiac surgeons on a heart patient.



SHOCKWAVE TREATMENT FOR DECREASES IN BLOOD AND OXYGEN SUPPLY TO THE HEART

Maria Teresita L. Palamine, MD, Edward-Bengie L. Magsombol, MD, Homobono B. Calleja, MD, Sue Ann R. Locnen, MD, and Rodney M. Jimenez, MD

CHRONIC STABLE ANGINA is caused by a decrease in blood and oxygen supply to the heart caused by the accumulation of plaque like fat or cholesterol on the inner lining of arteries. Sometimes, this is caused by the chronic elevation of blood pressure.

The condition is usually treated with medications, Coronary Artery Bypass Graft or through Angioplasty. However, in some instances, these gold standard procedures do not work for certain patients, especially when the procedures cannot access certain parts of the heart. In cases like this, Extracorporeal Shockwave Myocardial Revascularization (ESMR) is recommended.

Using low intensity shockwaves, the shockwaves are sent directly to muscles of the heart where the blocked arteries are. The shockwaves stimulate the growth of new small blood vessels thereby improving blood and oxygen supply to the heart improving chest pain.

The Outcomes

- From January 2010 to December 2011, 53 patients underwent the procedure. Majority of these patients have already undergone CABG, PCI, or both treatments.
- All treatments were successful, with patients tolerating the procedure well. They also did not experience any major complications.
- Patients report of being relieved from chest pains. They also experienced improvements in their quality of life.



Rodney M. Jimenez, MD is one of the few ESMR experts in the country.

INTERNATIONAL INSTITUTE FOR NEUROSCIENCES

THE INTERNATIONAL INSTITUTE FOR NEUROSCIENCES is a center for excellence in the fields of neurology, neurosurgery, and psychiatry in the Philippines. Highly trained and highly skilled experts in adult and pediatric neurology, neurosurgery, and psychiatry trained in leading institutions here and abroad comprise the medical staff of the Institute.

The Institute has among the country's most advanced and comprehensive diagnostic and treatment facilities for neurological and psychiatric disorders in the country.

Specialty centers and units at the Institute offer patients the best possible evaluation, diagnosis, treatment and management of specific neurological diseases that affect the brain, spinal cord, peripheral nerves or muscles.

The Institute offers various specializations and services:

- Acute Stroke Unit
- Clinical Neurophysiology Laboratory
- Comprehensive Brain Tumor Center
- Comprehensive Epilepsy Program
- Comprehensive Sleep Disorders Center
- Memory Center
- Mood Clinic
- Movement Disorders Center
- Neuro-Ophthalmology Services
- Neurodevelopmental Center
- Neurosurgery
- Psychiatry and Behavioral Services

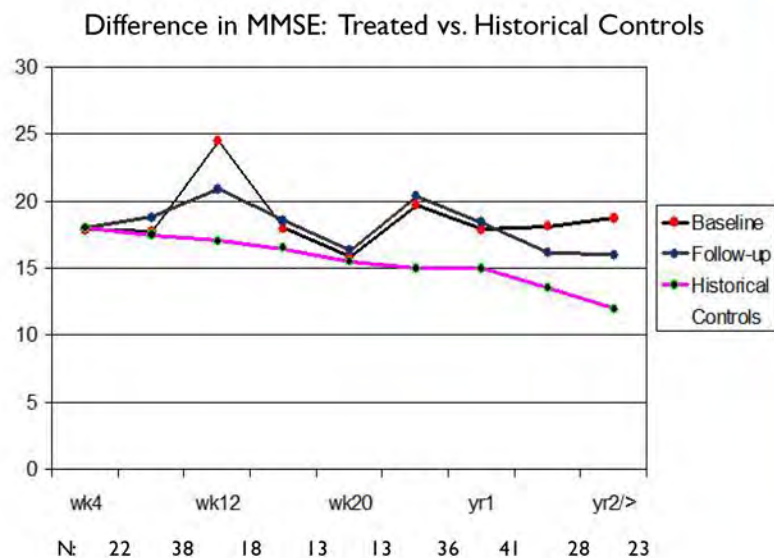


Hans Ludwig F. Damian, MD is the head of the International Institute for Neurosciences, St. Luke's-Quezon City.





Jacqueline C. Dominguez, MD is the head of the Memory Center, St. Luke's-Global City and Quezon City.



MANAGING ALZHEIMER'S DISEASE

Jacqueline C. Dominguez, MD

ALZHEIMER'S DISEASE (AD) is a progressive disease of the brain commonly seen in the aging population. It is the most common form of dementia. It impairs a person's cognitive abilities such as memory, reasoning abilities, decision-making capacity, orientation, and language. It also changes people's behaviors and brings about decline in carrying out daily function at home, at work, and in social functions.

Accurate diagnosis is critical in managing the symptoms that come with the disease. At the Memory Center of the International Institute for Neurosciences, a team of neurologists, psychologists, and nurses administer diagnostic tests to determine whether a patient has AD or not. Those found to have the condition are given standard drug therapy and made to go through the cognitive behavioral therapy-memory enhancement program. The approach is personalized depending on the needs of the patient.

The Outcomes

Thirty nine (39) patients were followed closely over a span of two years to monitor their response to treatment protocols and to track the progression of the disease. Using the Mini-Mental State Examination-Philippines (MMSE-P), patients who have been diagnosed with mild AD were tested to assess their memory and cognitive function to establish a baseline with which to compare the progress of their condition in the next two years.

- On the first year of observation, patients who received treatment from the Memory Center exhibited improvements in their MMSE-P scores.
- While patients' MMSE-P scores slightly declined on the second year, their scores were still better compared to patients who did not receive treatment. This shows that treatment at the Memory Center delays the progression of AD among patients.

INTERNATIONAL EYE INSTITUTE

THE INTERNATIONAL EYE INSTITUTE (IEI) is composed of a highly trained pool of doctors, nurses and ancillary staff members who are ready to cater to patients' every need.

The IEI is divided into several subspecialty services which address the different eye concerns of patients. The Cataract and Refraction Service offers different surgical options and lens choices for individuals who will be undergoing cataract removal or laser refractive surgery. The Glaucoma Service, geared with the latest equipment, helps manage and control the intraocular pressures of people with glaucoma. The Plastic and Orbital Service helps individuals with varying traumatic conditions and medical concerns. The Pediatric Ophthalmology and Strabismus subspecialty screens and manages complex child diseases.

Hand in hand with the International Institute for Neurosciences, the Neuro-Ophthalmology Service can help diagnose and monitor certain neurologic disease entities using state-of-the-art equipment found in the center.

The IEI also prides itself in being able to address most, if not all patient concerns adequately, confidently and with utmost concern for patient safety and satisfaction.

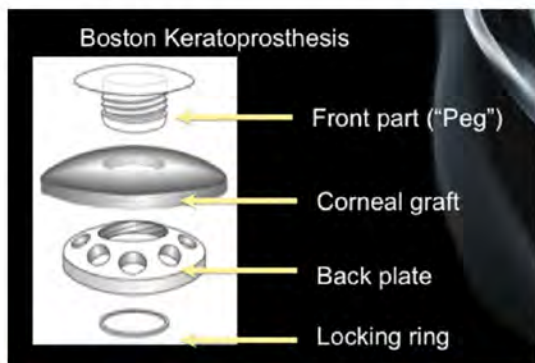


Noel G. Chua, MD is the head of the International Eye Institute, St. Luke's-Global City.





Ophthalmologist Ma. Dominga B. Padilla, MD and team members after a Boston Kpro Procedure.



One day before Kpro surgery



Same eye six days after Kpro surgery

ARTIFICIAL CORNEA TRANSPLANT GIVES HOPE TO "BLIND" PATIENTS

Ma.Dominga B. Padilla, MD

CORNEAL TRANSPLANTATION is the most common type of tissue transplantation. Some eyes however are too damaged to allow traditional corneal transplants to offer any reasonable chance of long term success. For patients who cannot undergo corneal transplantation, Boston Keratoprosthesis Type I (Kpro) is recommended to restore and maintain useful vision.

The Boston Kpro Type I is a sort of "artificial cornea" made from a special plastic. Modern Kpro surgery involves imbedding the mushroom shaped Kpro in a fresh human corneal tissue sourced from the eye bank and transplanting the entire assembled complex on to the recipient eye.

The Outcomes

- A total of nine Boston type I Kpro surgeries were performed in eight eyes as of October 2012. None of the eyes had a pre-operative distance vision of 20/20 to 20/200. All patients were only able to count fingers or worse, with most just being able to see shadows and light.
- Patients did not experience any complications during the surgery.
- After the surgery, 88 per cent of the eyes (7) had a vision of 20/20 to 20/200 at 6 months post-operatively.
- Two people who had a follow up after more than one year had a vision of 20/50 and 20/30. This is a marked improvement because they could only discern shadows and light prior to the surgery.
- Of the nine implanted keratoprosthesis, eight or 88.9 per cent were retained. One had to be removed because of a fungal corneal infection. The patient had poorly controlled diabetes, was not compliant to post-operative instructions, and was regularly exposed to high risk environment that made him prone to infections.
- Two patients developed retroprosthetic membranes after the operation but this was addressed using laser treatment.
- The post-operative visual outcome and retention rate at St. Luke's is very good and comparable to those reported in international and North American studies.

RESTORING CLEAR EYESIGHT VIA LASIK SURGERY

Winston V.L. Villar, MD

LASIK SURGERY has been the answer for many patients who want permanent vision correction. Lasik, which stands for “laser-assisted in situ keratomileusis,” uses ophthalmic lasers to treat refractive errors.

At St. Luke’s, expert refractive surgeons use the Visumax Femtosecond Laser System and the Mel80 Excimer laser by Karl Zeiss to perform the bladeless, all laser procedure in less than 30 minutes. With the fully computerized machines, highly skilled surgeons, and team approach patients are assured of the speed and accuracy of the procedures and the reduction of the risk of errors. This makes the Lasik procedure safer and more effective.

The Outcomes

- Core refractive surgeons of St. Luke’s Vision Laser Center achieved good clinical outcomes in Lasik Surgery for myopia and astigmatism.
- In a study conducted three months after surgery, 100 per cent of patients had a 20/40 vision or better; 79 per cent of these patients had 20/20 vision.
- The outcomes of Lasik Surgery at St. Luke’s are better than the outcomes at an eye facility in a famous Singapore hospital which published a paper with the most number of Lasik patients. In this Southeast Asian facility, only 72.8 per cent of patients achieved 20/20 vision while only >90 saw 20/40 or better three months after Lasik surgery.



Winston V.L. Villar, MD is the head of the Vision Laser Center, St. Luke’s-Quezon City.





Charity Charisse Viado-Gorospe, MD is the head of the Cancer Institute, St. Luke's-Global City.

CANCER INSTITUTE

THE CANCER INSTITUTE offers a comprehensive multidisciplinary approach in managing and treating cancer. It has clinical services for Developmental Oncology, Medical Oncology, Radiation Oncology, Surgical Oncology, and Multispecialty Groups.

A team of internationally and locally trained specialists work together to offer patients the most appropriate treatment options that best address their condition. They are aided by the latest cancer technologies used to accurately diagnose and extensively treat cancer.

The Institute acquired the PET CT Scanner, the most advanced imaging technology that combines the technology of a PET Scan and a CT Scan successively in one session. The technology produces accurate pictures of the dimension and location of the cancer. Currently, only St. Luke's has this technology in the country.

The Department of Radiation Oncology under the Cancer Institute has a comprehensive array of therapeutic and radiologic oncology equipment such as the Linear Accelerator, High Dose Rate Brachytherapy, Stereotactic Radiosurgery for both the brain and body, Stereotactic Radiotherapy, 3-D Conformal Radiation Therapy, Intensity Modulated Radiation Therapy (IMRT), and Radiotherapy Simulator. A team of highly skilled radiation specialists composed of radiation oncologists, medical physicists, and radiologic technologists work hand-in-hand to increase the patient's chances of cure.

The Cancer Institute also offers support programs and services that include cancer screening and education, chemotherapy, diagnosis and curative programs, and palliative and supportive treatment. For cancer out-patients, St. Luke's established the Cancer Ambulatory Care Unit, which offers outpatient consultation, chemotherapy, other minor surgical procedures, blood transfusion, and bone marrow aspiration, among others.

RADIATION THERAPY OF ARTERIOVENOUS MALFORMATIONS (AVMs)

Miriam Joy C. Calaguas, MD

ARTERIOVENOUS MALFORMATION (AVM) is an anomaly in the circulatory system characterized by an abnormal connection between arteries and veins, bypassing the capillaries. AVMs found in the central nervous system or the brain and spinal cord have persistent and lethal effects on the body such as haemorrhaging or death.

Normally treated with surgery, it can also be treated using focused radiation therapy or radiosurgery. Radiosurgery delivers precisely-targeted radiation at much higher doses in only a single or few treatments. The maximum dose is delivered to the target while minimizing effects on surrounding healthy tissue.

The Outcomes

- From 2003 to 2009, 62 patients with AVM underwent Linac-based Stereotactic Radiosurgery (SRS). Radiation beams were delivered directly to the site of the abnormal artery-vein connection.
- Seventy seven (77) per cent of patients with medium sized AVMs, 65 per cent of patients with large sized AVMs, and 25 per cent of patients with very large AVMs had their AVMs eradicated through radiosurgery.
- On the average, 69.7 per cent of the patients who had radiosurgery were successfully treated.
- Thirty three (33) patients were followed-up 21 to 82 months (almost two to seven years) after radiosurgery. All 33 patients were able to live active, functional lives after the procedure.
- Of the 33, only two developed complications after the SRS. One patient experienced temporary weakness of the upper extremity, but which was successfully medicated. Another patient experienced slight paralysis, which improved with rehabilitation therapy.
- The outcomes at St. Luke's are comparable to the outcomes reported in international journals.



Miriam Joy C. Calaguas, MD is the head of the Department of Radiation Oncology, St. Luke's-Quezon City and Global City.





Miriam C. Calaguas, MD briefs a patient before the EBRT procedure starts.

EXTERNAL BEAM RADIATION THERAPY FOR PANCREATIC CANCER

Miriam Joy C. Calaguas, MD

PANCREATIC CANCER is a malignant tumor in the pancreas, an organ responsible for the production of hormones like insulin. This type of cancer is the eighth most common cause of cancer mortality worldwide, but is also one of the most difficult to diagnose especially in its early stages. Thus, it is usually discovered in its advanced stages.

Chemotherapy and External Beam Radiation Therapy (EBRT) are often given in conjunction with surgery to increase the chances of a patient's survival.

At St. Luke's, two External Beam Radiation Therapy techniques are used: conventional radiation therapy, which makes use of two dimensional beams and intensity modulated radiation therapy (IMRT), which breaks radiation beams into beamlets allowing the beam to conform to the shape of the tumor. The latter minimizes the effect to surrounding normal tissues, thus limiting side effects.

The Outcomes

- The median survival rate for those who did not receive radiation treatment was six months, while those who received EBRT treatment survived up to 8.5 months.
- The median survival rate of St. Luke's patients who received the treatment is comparable to the outcomes of international hospitals on pancreatic cancer:
 - In a study by the Mayo Clinic, median survival rates of 6.3 months and 10.4 months were reported depending on the dose of radiation and chemotherapy medication.
 - The Gastrointestinal Study Group (GITSG 9273) reported median survival rates of 5.3 months, 8.4 months, and 11.4 months, depending on the dose of radiation and chemotherapy.
 - GITSG 1985 reported median survival rate of 8.5 months and 7.6 months.
 - Eastern Cooperative Oncology Group (ECOG) E4201 reported median survival rate of 9.2 months and 11.1 months.

RADIATION TREATMENT FOR TUMORS THAT START IN THE GLIAL CELLS OF THE BRAIN

Miriam Joy C. Calaguas, MD

GLIOMAS are tumors that start in the glial cells of the central nervous system, which includes the brain and the spinal cord. Gliomas are rarely curable due to their aggressive nature. They also recur frequently.

While there is no standard of care for recurrent glioma, it is usually treated through surgery, chemotherapy and re-irradiation.

The Outcomes

- Fifteen (15) patients with recurrent glioma underwent re-irradiation through Intensity Modulated Radiation Therapy (IMRT) and chemotherapy.
- The median over-all survival after the re-irradiation procedure was 22.5 months, with patients surviving anywhere from five to seven years.
- The median over-all survival of patients from diagnosis was 45 months, with patients surviving from nine to 144 months.
- The survival of patients without recurrence of the disease at six and 12 months from re-irradiation was 72.7 per cent and 54.5 per cent, respectively.
- Majority of the patients were able to perform normal activities and work without special care after the procedure.



Miriam C. Calaguas, MD examines the CT Scan images of a patient's brain.





Dr. Calaguas heads a conference with her team.

TOTAL BODY IRRADIATION FOR BONE MARROW TRANSPLANTATION

Miriam Joy C. Calaguas, MD

TOTAL BODY IRRADIATION (TBI) involves irradiation of the entire body, done usually prior to bone marrow transplantation. TBI suppresses marrow function and immune function to facilitate the success of the transplantation procedure. It is also done to eradicate cancer.

The Outcomes

- Patients with acute lymphocytic leukemia (cancer of the blood and bone marrow specifically affecting the lymphocytes) or myelogenous leukemia (cancer of the blood and bone marrow affecting a group of white blood cells called the myeloid cells) underwent TBI prior to bone marrow transplantation.
- The total body irradiation at St. Luke's was well tolerated by the patients. The patients did not experience severe immediate side effects during the course of TBI, except for minor gastrointestinal (e.g. nausea and vomiting) and skin toxicity (e.g. itching, redness of the skin, darkening of an area of the skin) and fatigue. All side effects were properly addressed by medication.
- All patients completed the TBI and were able to proceed to bone marrow transplantation.

INSTITUTE OF ORTHOPEDICS AND SPORTS MEDICINE

THE INSTITUTE OF ORTHOPEDICS AND SPORTS MEDICINE offers a complete range of diagnostic and therapeutic services for muscular and bone diseases. Its specialists can treat disorders of the muscles, tendons, ligaments, and joints. The expertise is complemented by industry leading equipment used to perform a complete line of screening tests to make an accurate diagnosis of musculoskeletal disorders. These diagnostic services include:

- Orthopedic Assessment
- Radiographic X-ray Studies
- Computed Tomography Scan
- Magnetic Resonance Imaging
- Total Body Bone Scan



Orthopedic surgeon Anthony Laput, MD supervises a patient undergoing rehabilitation.



Moreover, it offers various treatment modalities from surgery to rehabilitation services and fitness plans to improve the quality of life and the functional capacity of patients. The Institute's therapeutic programs include:

- Sports-related Injury Management
- Spine Surgery
- Pediatric Orthopedic Surgery
- Correction of Limb and Foot Deformities
- Hand and Microsurgery
- Tumor Surgery
- Orthopedic Infection Management
- Total Joint Replacement Surgery

The Institute has also established the Sports Medicine and Rehabilitation Section, as well as the Sports Medicine and Fitness Center which help athletes enhance their physical function for athletic competitions.

A valuable unit of the Institute of Orthopedics and Sports Medicine is the Bone Bank, which retrieves, processes, stores and distributes bones for clinical use. It adheres to the quality assurance criteria recommended by the American Association of Tissue Banks and the Asia-Pacific Association of Surgical Tissue Banking.

TOTAL HIP REPLACEMENT SURGERY

Antonio N. Tanchuling, Jr., MD

CHRONIC HIP DISABILITY can be caused by a host of different factors such as osteoarthritis that commonly occurs in individuals aged 50 and above, rheumatoid arthritis, and post-traumatic arthritis following an injury or fracture.

Usually, hip replacement surgery is recommended when the patient experiences the following:

- Hip pain limits everyday activities like walking or bending
- Continuous hip pain even while resting
- Stiffness in the hip that limit the ability to move or lift the leg
- Minimal relief from pain despite taking anti-inflammatory drugs
- Harmful or unpleasant side effects from hip medications
- Other treatments such as physical therapy do little to relieve hip pain.

Total hip replacement requires open surgery to replace damaged parts of the hip joint with artificial joint implants.

The Outcomes

Thirty seven (37) patients underwent total hip surgery from January to October 2012. All procedures were successfully completed without major incidences:

- Post infection rate is zero.
- No reports of common sciatic nerve palsy resulting from damages to the sciatic nerve after the operation
- No reports of periprosthetic fracture and dislocation and venous thromboembolism (formation of blood clot in a vein in the lower leg or thigh).



Antonio N. Tanchuling, Jr., MD heads the Institute of Orthopedics and Sports Medicine at St. Luke's-Quezon City.



Pre-operative X-ray



Post-operative X-ray





Antonio N. Tanchuling, Jr., MD supervises the rehabilitation of an orthopedic patient.



Pre-operative X-ray

Post-operative X-ray

TOTAL KNEE REPLACEMENT SURGERY

Antonio N. Tanchuling, Jr., MD

CHRONIC KNEE DISABILITY causes pain or difficulties because of inflammation, deformity, etc. Like hip disability, it can be caused by osteoarthritis, rheumatoid arthritis, or post-traumatic arthritis.

The following conditions normally require knee replacement surgery:

- Severe knee pain which limits everyday activities, like walking, going up and down the stairs, and sitting on and getting out of chairs
- Chronic knee inflammation and swelling that show no signs of improvement with rest or medications
- Knee deformity
- Knee stiffness
- Failure to obtain pain relief from non-steroidal, anti-inflammatory drugs
- Inability to tolerate, or complications from pain medications
- Failure to substantially improve the knee condition with other treatments such as steroid injections, physical therapy or other surgeries.

The Outcomes

From January to October 2012, 43 patients underwent total knee replacement surgery, with all surgeries being successful.

- Patients who went through the procedure recovered and returned to normal function faster.
- There were no reports of infections or other complications such as periprosthetic fracture (which happens around joint replacement prostheses), thromboembolism (blood clot that forms in a vein in the lower leg or thigh that can travel through the bloodstream and lead to fatal consequences), infection, and common peroneal nerve palsy.

Total Knee Replacement Surgery corrects the knee's damaged and worn out surface to relieve pain, correct the deformity, and allow patients to resume normal activities by replacing worn out surfaces of the knees with metal implants.

DEPARTMENT OF ENT-HNS

THE DEPARTMENT OF EAR, NOSE, THROAT-HEAD AND NECK SURGERY (ENT-HNS) handles all medical problems concerning the ear, nose (including sinus), head, and neck. Its team of experts provide medical and surgical treatment of problems of the nose, including the sinuses. Its surgical specialists perform maxillofacial and neck surgery and facial plastic and reconstructive surgery. Other medical experts perform hearing evaluation and broncoesophagology. The Department is regarded at par with Asia's best ENT-HNS centers.



ENT doctor Natividad A. Almazan-Aguilar examines a patient.





William L. Lim, MD heads the Department of Ear, Nose, Throat - Head and Neck Surgery (ENT-HNS) at St. Luke's-Global City.

Transoral laser microsurgery is one of the newer options for the treatment of early stage glottic laryngeal cancer. It is virtually scar-free and it preserves the speaking ability of patients, unlike other available procedures.

TRANSORAL LASER MICROSURGERY FOR PATIENTS WITH EARLY STAGE CANCER OF THE VOICE BOX

William L. Lim, MD

ACCORDING TO MEDICAL LITERATURE, glottic laryngeal cancer accounts for approximately 65 to 70 per cent of laryngeal cancers. It occurs on the true vocal cord or fold of the larynx or voice box. It can cause changes in voice quality or hoarseness that is usually prolonged and progressive. It could affect breathing especially when it has already grown in size.

Early glottic laryngeal cancer is categorized either as T1 or T2 glottic laryngeal cancer. T1 glottic laryngeal cancer is confined in the vocal cords while T2 glottic laryngeal cancer affects the vocal cord along with structures above it.

Transoral laser microsurgery is one of the newer options to treat this type of cancer. The operation is performed through the mouth of the patient. A laryngoscope, a machine with a camera and an operating microscope is inserted into the mouth of the patient to visualize the laryngeal tumor, while a carbon dioxide laser is used to excise the tumor.

It is one of the safest and most reliable procedures to treat early laryngeal cancers.

The Outcomes

Twenty six (26) patients underwent transoral laser microsurgery for early glottic laryngeal cancer from 2000-2012.

- 16 patients who underwent transoral laser surgery from 2000 to 2007 included in this study have survived and are disease free to this day. This means that there is a 100 per cent five year survival rate for transoral laser surgery patients.
- Only two out of 26 patients were required to undergo radiation therapy after the operation.
- In terms of percentage, 93.75 per cent of the procedures were successful, which means there was no recurrence of cancer. Only one patient (6.25 per cent) experienced a recurrence of laryngeal cancer.
- The results of the surgery are comparable to outcomes reported in international journals, which report of zero to nine per cent recurrence of cancer after transoral laser microsurgery.



MINIMAL COMPLICATIONS AND FASTER ENDOSCOPIC SINUS SURGERY FOR CHRONIC SINUSITIS

Joseph Anthony M. Arañas, MD and Ray U. Casile, MD

FUNCTIONAL ENDOSCOPIC SINUS SURGERY (FESS) is a minimally invasive surgical procedure to treat inflammatory and infectious sinus problems. This is commonly recommended to patients with chronic and recurrent sinusitis and nasal polyps and tumors that no longer respond to medication. It seeks to remove diseased tissues but also clears the nasal passages of mucus and other materials to restore normal breathing.

The Outcomes

A total of 76 patients underwent functional endoscopic sinus surgery from July 2011 to June 2012.

- The quality of life of patients improved with the surgery.
- The surgeons have minimized complications such as mucosal injury, which usually leads to nasal bleeding.
- An indication of the successful reduction of complications is the minimal use of packing (gauze or cotton) to prevent post-operative bleeding. The lesser the number of packing used, the greater the indication that little or no injury has resulted from the procedure. The number of packing used has gone down from 80 per cent in 2011 to 60 per cent in 2012.
- FES surgeries were completed within one to two hours.



Ray U. Casile, MD (left), head of ENT-HNS at St. Luke's-Quezon City and Joseph Anthony M. Arañas, MD (right) perform an endoscopic examination of a patient's sinus.

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY puts prime importance to women's reproductive health, most especially pregnant women and the baby inside their womb. The services of the Department include:

- Determining vital information about the unborn baby (e.g. ageing and presentation, estimated weight, body and breathing movements, amniotic fluid volume, gender, etc.)
- Detecting abnormalities in the unborn baby
- Confirming pregnancy at a very early stage and ruling out ectopic pregnancy
- Performing 3D and 4D scans on the fetus and detecting reproductive anomalies
- Diagnosing gynecologic conditions in both sexually and non-sexually active women
- Detecting pathology and abnormalities in the women's uterus and ovaries
- Performing transvaginal ultrasound procedures to detect abnormalities in the uterine endometrium and fallopian tubes.





Theresa M. Vergara, MD prepares for an Obstetrics procedure.

INCIDENCE OF INFECTIONS ON SURGICAL WOUNDS OF DEPARTMENT OF OBSTETRICS AND GYNECOLOGY PATIENTS

Theresa M. Vergara, MD

SURGICAL SITE INFECTION occurs on the body part that was operated on. It could be infection on the skin surrounding the surgical wound or in more serious cases, it could involve tissues under the skin, the internal organs, or implants.

These could result from poorly sanitized surgical equipment, inadequately cleaned hands of medical personnel, pre-existing medical conditions such as diabetes or obesity, touching of surgical wounds and dressing, failure to administer antibiotics prior to the surgery, and a host of other reasons.

The Outcomes

Infection rates of caesarean, exploratory laparotomy, and total abdominal hysterectomy surgeries at St. Luke's-Global City's Department of Obstetrics and Gynecology were measured from January to October 2012.

- Approximately 99.5 per cent of the patients did not develop any infections after their surgery. Only .05 per cent acquired surgical site infections, with all infections being minor (non-emergency infection, no acute inflammation, or urgent or emergency but is still considered clean).
- The incidences of surgical site infection in patients of St. Luke's-Global City's Department of Obstetrics and Gynecology is much lower compared to reported infection rates in the United States National Nosocomial Infection Surveillance System Hospitals, which reports a 6.4 per cent Contaminated (swollen but no pus) and 7.1 per cent Dirty (swollen and pus-filled) rates of infection in US hospitals.

COMPREHENSIVE PELVIC FLOOR CENTER

THE COMPREHENSIVE PELVIC FLOOR CENTER is the first comprehensive center of its kind in the country that brings together all the disciplines handling dysfunctions and disorders of organs in the pelvis such as the reproductive organs, bladder, anal and rectal organs, and other organs in and around the area. The Center is staffed by highly trained and skilled urologists, colorectal surgeons, and gynecologists who collaborate in managing patients' cases. Patients needs are taken care of by specialists under one center, making their experience one of convenience and accessibility.



Josefino C. Castillo, MD is a urologist at the Comprehensive Pelvic Floor Center. He also heads the Institute of Urology, St. Luke's-Global City.





Jennifer Marie B. Jose, MD is the first Filipino to make it to the Surgeon's Locator List of the makers of the da Vinci Surgical System. This makes her the first surgeon to be recognized by the creators of the robotic surgical system as a proficient and qualified robotic surgeon in the country.

ROBOTIC SURGERY FOR GYNECOLOGIC PROBLEMS*

Jennifer Marie B. Jose, MD

OVER THE YEARS, robotically-assisted surgery has continued to grow in the area of minimally invasive gynecologic surgery. The da Vinci Si Surgical System is an apt surgical technology for gynecologic procedures given the small, tight space where the female reproductive organs are located. The high definition 3-D visuals gives the surgeon unparalleled view of the organ being operated on. The system improves the surgeons' ability to identify normal and diseased tissues and to avoid blood vessels and nerves while performing surgical procedures.

Robotic surgery has been used at St. Luke's-Global City for vaginal vault repair for vaginas that have fallen out of their proper position, re-attachment of fallopian tubes, and the surgical removal of the uterus, ovaries, myomas, cysts, and lymph nodes for biopsy.

* Individual data of author

The Outcomes

- Gynecologic Robotic Surgery reduces blood loss, infections, complications, and the experience of pain. Robotic surgical patients recover and return to normal activities faster as well.
- Robotic surgery has been used for sacrocolpopexy or vaginal vault repair. The average operating time is one to 1 ½ hours, much better than the reported three hour procedures reported in international journals. Of the six patients who had robotic sacrocolpopexy, the surgery of one patient was converted to open abdominal surgery because of elevated CO₂ in her blood right after anesthesia was administered. There is minimal blood loss, pegged at less than 25 ml. This is less than the normal amount of blood loss of 25 to 100 ml when conventional open surgery is performed. More importantly, patients had a subjective and objective cure rate of 97 to 100 per cent, comparable to international standards.
- An advantage of robotic surgery for women with myomas in the uterus is the greater possibility of preserving their child bearing capacity. With the superior view the technology offers surgeons, uterine rupture is avoided. Seven cases were handled. The average size of the myoma was 7.5 cms. Operating time was two to 2.5 hours, while the average length of hospital stay was two days. Only one case required blood transfusion.
- Fifteen (15) hysterectomy cases were performed. The average time for the operation was a little over one hour or 73 minutes. However, a few cases lasted up to five hours, depending on the complexity of the patient's medical condition. The average blood loss was 100 to 150 ml. Patients stayed in the hospital, on the average, for two days.
- Robotic Surgery definitely offers women many potential benefits over traditional open surgery.



The Gynecologic Robotic Team. (Front row) Elizabeth Joan Esguerra-Ocampo, MD, Rebecca Singson, MD, and Jennifer Marie Jose, MD (Back row) Camille Ann Abaya, MD and Marie Victoria Cruz-Javier, MD (Not in the Photo) Leo Francis Aquilizan, MD.





CENTER FOR ADVANCED REPRODUCTIVE MEDICINE AND INFERTILITY (CARMI)

CARMI OFFERS FULLY integrated comprehensive fertility services. It is dedicated to help couples or individuals realize their dream of having a baby. Highly-trained specialists, compassionate nurses, and experienced scientists provide personalized, quality care to CARMI patients. They are assisted by urologists, acupuncturists, geneticists, and weight management specialists in ensuring that couples realize their aspiration to have a baby.

It has state-of-the-art facilities that are among the most advanced in Asia. It has a sophisticated laboratory that can carry out necessary fertility diagnostic tests. It offers assisted reproductive services such as in-vitro fertilization, gamete intrafallopian transfer, in-vitro maturation, surgical sperm retrieval, intracytoplasmic sperm injection, and embryo/gamete conservation.

CARMI has achieved numerous firsts in fertility medicine in the country:

- The only local fully Filipino IVF facility, from initial conceptualization and design to the details of its operations.
- The first local IVF facility to achieve the “clean-room,” Class C status, a standard used by the ISO to determine the cleanliness of air circulating in rooms including sterile facilities. It meets stringent European standards for controlling the presence of small toxic particulate matter in the air that affects culture.
- The first to offer certain state-of-the-art diagnostic tests such as the Anti-Mullerian Hormone (AMH) testing for ovarian reserve and sperm DNA Fragmentation Test (Halo Test).
- The first to offer and conduct state-of-the-art procedures such as laser assisted hatching (LAH) and micro-dissection testicular sperm extraction (harvesting of sperms via minor surgery).
- The first to offer in-house acupuncture services as an adjunct treatment for infertility.
- The first IVF facility to break the 200-case barrier in its first year.
- The first IVF facility to integrate multiple disciplines (reproductive endocrinology & infertility, urology/male infertility, OB-GYN ultrasound, immunology, genetics, complementary medicine/acupuncture, psychology, and anesthesiology) under one roof.



CARMI: TAKING THE LEAD IN ADVANCED FERTILITY TREATMENT

Virgilio M. Novero, Jr., MD

CARMI was conceptualized to fill the gap in having competent yet reasonably priced assisted reproductive technology services in the Philippines.

The medical team is composed of eight reproductive endocrinology and infertility specialists, five urologists with special training in male infertility, three anesthesiologists, five OB-GYN sonologists, three acupuncturists, two reproductive immunologists, one geneticist, and one weight management specialist.

It offers semen analysis, egg retrieval, embryo transfer, cryopreservation of gametes/embryos, laser assisted hatching, among others. Additional tests and procedures in the form of gynecologic, genetic, immunologic, urologic, and weight management tests and services are also available to determine other causes of infertility.

Since it opened in October 2011, the Center for Advanced Reproductive Medicine and Infertility (CARMI) of St. Luke's-Global City has achieved feats no other local In-Vitro Fertilization (IVF) laboratory has achieved and only a few overseas IVF facilities accomplished.

The Outcomes

- CARMI has handled over 200 fresh IVF cases in its first year of operation, managing to achieve pregnancy rates that are comparable to the performance of international IVF facilities. Pregnancy rates of its patients average between 42 and 47 per cent.
- Clinical pregnancy rate is 43 per cent, higher than the world average of 31 per cent and higher than many national averages of developed countries known for their creditable IVF services.
- The number of couples availing artificial insemination (AI) or intrauterine insemination (IUI) has rapidly grown over the last two years. CARMI now performs 500 insemination procedures a year. It has a world-class pregnancy rate cycle of 11 per cent.



Virgilio M. Novero, Jr., MD (center left), head of CARMI sits with Paul Devroey, MD, director of the Center for Reproductive Medicine at the Vrije Universiteit Brussel in Belgium. With them are CARMI Team members (standing l-r): Angela Sison-Aguilar, MD, Rebecca B. Singson, MD (former head of the Department of Obstetrics and Gynecology, not part of CARMI but was one of the doctors who initiated the establishment of an IVF Center at St. Luke's-Global City), Debbie Dy Meguizo, MD, Maria Jesusa Banal-Silao, MD, Danilo Jose Milla, MD, Eileen M. Manalo, MD, Ma. Concepcion Ilao-Oreta, MD, and Ma. Asuncion Fernandez, MD

STEM CELL CENTER

THE STEM CELL CENTER is a comprehensive facility that handles blood and bone marrow diseases such as aplastic anemia, acute leukemia, relapsed lymphoma, multiple myeloma, and many other illnesses of the blood and immune system. Well trained haematologists and oncologists work collaboratively to offer stem cell therapies to treat these disorders in adults and children. Its highly trained physicians conduct services such as hematopoietic stem cell transplant for various diseases. Acute out-patient care is likewise provided whenever possible.





Francisco Vicente F. Lopez, MD is the head of the Stem Cell Center, St. Luke's-Global City.

STEM CELL TRANSPLANT: A PROMISING CURE FOR BLOOD DISEASES*

Francisco Vicente F. Lopez, MD

STEM CELL TRANSPLANTATION for blood diseases (also called peripheral blood stem cell transplantation) has become a standard of care in many international hospitals for patients with blood diseases such as Acute Myelogenous or Lymphoblastic Leukemia, Aplastic Anemia, Multiple Myeloma, and Hodgkin's Lymphoma, among others. Usually treated with chemotherapy and radiation therapy, these deplete and destroy stem cells found in the bone marrow compromising a person's ability to fight off infections, carry oxygen throughout the body, and form blood clots.

Two types of transplants are available at St. Luke's:

- Autologous transplants where patients receive their own stem cells.
- Allogenic transplants where patients receive stem cells from immediate family members or unrelated donors after human leukocyte-associated (HLA) matching.

Stem cell transplantation helps replenish a patient's stem cells that have been damaged by high doses of chemotherapy and/or radiation therapy, thus allowing the body to recuperate. More importantly, it eradicates the residual defective or malignant stem cells found in the patient's bone marrow.

* Individual data of author

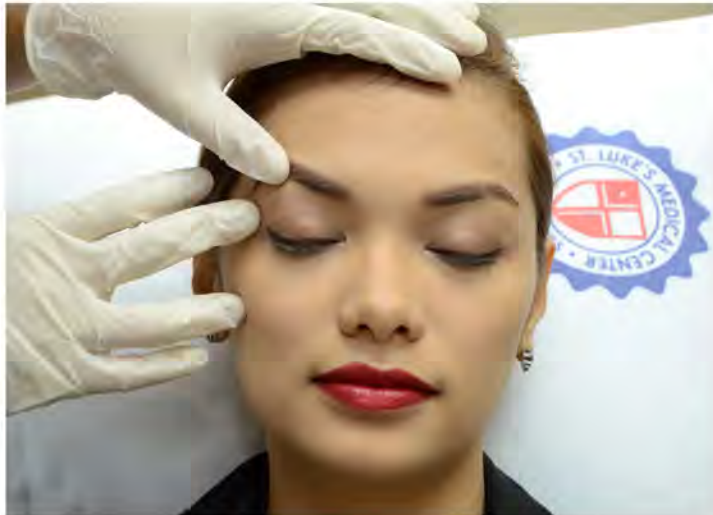
The Outcomes

Eleven (11) patients have undergone stem cell transplant for blood diseases at St. Luke's-Global City from October 2010 to September 2012.

- Stem cell transplantation has been found to be most effective for leukemia patients who are in their first complete remission or when the signs and symptoms of cancer have disappeared after chemotherapy. Survival rate of patients climb up to as high as 79 per cent if the procedure is done on the patient's complete first remission compared to around 20 to 30 per cent survival rate for patients who are not in remission.
- Over-all survival rate of the patients as of December 2012 is 64 per cent, which is well within the expected rate of survival based on available data.
- Isolating the data of the survival rate of patients with acute leukemia who had stem cell transplant on their first complete remission, the survival rate reaches a high of 79 per cent.
- Some patients do not survive because of complications such as severe forms of graft versus host disease when donor's stem cells attack the recipient's body, septic shock or severe blood infection, or recurrence of the disease.

Stem cell transplantation for blood diseases called peripheral blood stem cell transplantation (PBSCT) has become a standard of care in many international hospitals for patients with blood diseases. The procedure helps replenish a patient's stem cells that have been damaged by high doses of chemotherapy and/or radiation therapy; thus, allowing the body to recuperate. More importantly, it eradicates the residual defective or malignant stem cells found in the patient's bone marrow.





AESTHETIC SURGERY CENTER

THE ST. LUKE'S AESTHETIC SURGERY CENTER is staffed by highly skilled, Philippine Board of Plastic Surgery-certified surgeons who work hand-in-hand with other Board-certified related specialists in providing the highest quality aesthetic procedures to patients. It ensures that patients are handled in an environment of safety and discretion. The Center has a comprehensive array of procedures delivered by the following units:

- Facial Enhancement and Rejuvenation
- Body Contouring
- Minimally Invasive Procedures
- Endoscopic Aesthetic Procedures
- Hair Restoration
- Clinical Services
- Facelift
- Rhinoplasty
- Blepharoplasty
- Breast Augmentation
- Breast Reduction
- Butt Enhancement
- Liposuction
- Abdominoplasty
- Other Services

CARBON DIOXIDE LASER-ASSISTED EYELID SURGERY

Victor B. Lopez, MD

EYELID SURGERY OR BLEPHAROPLASTY is the most frequently performed of all facial cosmetic surgeries. It requires the greatest skills, precision, and judgment on the part of the surgeon as it seeks to remove loose and prolapsing fat, skin, and sometimes even muscle from the upper and lower eyelids.

Carbon dioxide laser blepharoplasty creates a clean and precise incision far more superior than incisions using conventional surgical tools. It cauterizes blood vessels as it incises tissues, thus limiting tissue swelling and bleeding. Hence, it shortens "downtime" to almost half of the regular blepharoplasty surgery.

At St. Luke's-Global City, the Lumenis AcuPulse Carbon Dioxide Laser system is used for the surgery.



Victor B. Lopez, MD is the head of the Aesthetic Surgery Center, St. Luke's-Global City.





before surgery



after surgery



before surgery



after surgery

The Outcomes

A total of 132 patients underwent carbon dioxide laser-assisted blepharoplasty under local anesthesia at St. Luke's-Global City from January 6, 2011 to November 15, 2012. Patients range from 16 years old to 86 years old. A total of 43 patients underwent both upper and lower blepharoplasty, 43 patients had upper eyelid blepharoplasty, and 46 had lower eyelid blepharoplasty alone. Male patients in this series opted for the lower eyelid procedure alone.

- Average operation time for both upper and lower blepharoplasty was 53 minutes, upper lid blepharoplasty was 25 minutes, while lower eyelid blepharoplasty was 16 minutes.
- Patients tolerated the procedure well with only minimal discomfort in some patients, commonly observed during the administration of local anesthesia.
- Bleeding was minimal with only mild periorbital postoperative swelling and bruising experienced by 95 per cent of the patients.
- Patients who have had this type of facial surgery say they feel more alert because they look alert. They also feel good about themselves, with a number describing themselves as being rejuvenated, rekindled, and revitalized. They report gaining confidence as well.



At St. Luke's, the needs of our patients come first.



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