

DEPARTMENT OF SURGERY



Hackensack
Meridian
Hackensack
University
Medical Center

SURGERY
2023
YEAR IN REVIEW





MESSAGE FROM THE PRESIDENT AND CHIEF HOSPITAL EXECUTIVE

Continuing to raise the bar on surgical care

At Hackensack Meridian Hackensack University Medical Center, our surgeons are known for delivering compassionate, comprehensive care that restores well-being and quality of life for patients throughout northern New Jersey.

As a result, Hackensack University Medical Center has been ranked #1 in New Jersey by *U.S. News & World Report* for 2023-24. Further, the hospital has earned national rankings in six specialties and High Performing Hospital designations in 18 common procedures and conditions.

Other recognitions include:

- Earned a Five-Star Rating — the highest rating available — from the Centers for Medicare & Medicaid Services’ (CMS) Overall Hospital Quality Star Rating Program; the only hospital in Bergen Passaic, Essex and Hudson counties to earn a Five-Star Rating
- Recipient of the 2024 Patient Safety Excellence Award™ by Healthgrades
- Named to *Newsweek’s* World’s Best Hospitals 2024 list
- Recipient of an “A” Hospital Safety Grade from The Leapfrog Group
- First hospital in New Jersey to earn seven Magnet Designations

As a regional hub for advanced surgical care, we take the trust our patients place in us seriously. The hospital’s new, 530,000-square-foot, nine-story Helena Theurer Pavilion represents our team’s commitment to providing unparalleled surgical and intensive care in a patient-centric environment designed to promote wellness and healing.

But in addition to having access to five-star luxurious amenities in a state-of-the-art facility equipped with all-private rooms, our patients receive their care from some of the region’s most experienced, highest-volume surgeons. And when it comes to delivering the best patient care, experience matters.

Our team’s experience and laser focus on quality are evident in our patient experience scores and outcomes, which are consistent with or exceed national averages. But although both measures are consistently high, our team is continually striving to keep getting better.

As we continue to raise the bar on surgical care in our region, it is our privilege to share our 2023 accomplishments with you.

Sincerely,



Mark D. Sparta, FACHE
 President and Chief Hospital Executive
 Hackensack University Medical Center
 President, Northern Region
 Hackensack Meridian Health

MESSAGE FROM THE CHAIR

A year of achievement and innovation

Across all surgical subspecialties at Hackensack University Medical Center, 2023 has been a year of achievement and innovation. Our team recently celebrated the one-year anniversary of the opening of the Helena Theurer Pavilion — a state-of-the-art surgical and intensive care tower that has equipped our world-class surgeons with the facilities and technology they need to deliver the highest-quality patient outcomes and experience.

The quality and surgical volumes delivered by our teams is nothing less than extraordinary. In 2023, we performed 34,540 operations. Hackensack University Medical Center is a true quaternary care resource for the state of New Jersey!

Within the Department of Surgery, we have created ‘dream teams’ of surgical specialists to generate cutting-edge programs and improve patient access. Our division chiefs and leadership teams stress inclusivity, creativity, teamwork and an unwavering focus on patient outcomes and experience. We have dramatically grown all our surgical divisions with educators who share our patient-centric approach.

In 2023, we fostered the development of a unique culture in surgery for Hackensack University Medical Center ... A never-ending quest to work together to optimize patient experience, deliver nation-leading outcomes and innovate surgery. For our patients this means safer surgeries, shorter hospital stays and faster recoveries.

We are excited to share our accomplishments with you.

Sincerely,



Howard Ross, M.D.
M. Martin Ross Distinguished Chair in Surgery
Surgeon-in-Chief, Hackensack University Medical Center
Hackensack Meridian Health
Professor and Chair of Surgery
Hackensack Meridian School of Medicine



MESSAGE FROM THE CHIEF MEDICAL OFFICER

High-quality, patient-centric care

The surgeons at Hackensack University Medical Center are nationally and internationally recognized for delivering high-quality, patient-centric care in state-of-the-art facilities using innovative and transformative techniques. Both at a macro and micro level, the focus is on delivering consistent care, by an exceptionally skilled interprofessional team, ensuring the best patient/team experience. This optimizes outcomes and achieves clinical excellence.

We are grateful for the role each of our surgeons play in caring for our community. Our highly trained teams and skilled surgeons with leading-edge technology provide patient-specific care in a highly reliable organization. It's our privilege to partner with all our surgeons, and we extend our sincere gratitude to our dedicated team.

Sincerely,



Lisa Tank, M.D., FACP
Senior Vice President and Chief Medical Officer
Hackensack University Medical Center
Chief Medical Officer, North Region
Hackensack Meridian Health

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#1 HOSPITAL IN NEW JERSEY

Hackensack University Medical Center is the #1 adult and children’s hospital in New Jersey according to U.S. News & World Report 2023-2024. The hospital earned 2023-24 U.S. News & World Report rankings in:

- **Neurology & Neurosurgery**
NJ’s only nationally ranked program
- **Pulmonology & Lung Surgery**
The best program in NJ
- **Urology**
NJ’s only nationally ranked program
- **Orthopedics**
Ranked among the Top 50 in the nation
- **Geriatrics**
The best program in NJ
- **Cardiology, Heart & Vascular Surgery**
The best program in NJ



MARKING THE ONE-YEAR ANNIVERSARY OF THE HELENA THEURER PAVILION

Optimized ORs and patient-centric amenities make the Pavilion a regional destination for comprehensive, minimally invasive surgical care

In 2022, surgeons at Hackensack University Medical Center began operating at the Helena Theurer Pavilion — a new, 530,000-square-foot, nine-story surgical and intensive care tower on the hospital’s main campus that is raising the bar on patient care excellence in the New York metropolitan area.

“The Pavilion has provided our surgeons with a state-of-the-art environment in which they can provide the world-class surgical care for which they are known,” said Howard Ross, M.D., colorectal surgeon and Chair of Surgery/ Surgeon-in-Chief at Hackensack University Medical Center. “In terms of patient experience, we have seen our patient satisfaction scores go through the roof, with every measure improving.”

The Pavilion’s 24 operating rooms — which are among the most advanced in the country — include large monitors to display on-demand patient images, vital signs, real-time robotic surgery video and more. Telepresence capabilities allow the hospital’s expert surgeons to educate and train colleagues and students from around the world in the latest surgical approaches.

Operating rooms are also larger and optimized to accommodate the Pavilion’s six robotic surgical systems. The operating rooms are set up in pods surrounded by a sub-sterile core — improving efficiency by allowing team members to move between the operating rooms and the supply area while remaining inside the sterile environment.

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“The Helena Theurer Pavilion provides an environment and support for the surgeon to deliver high-quality, patient-centric care in a state-of-the-art facility in an innovative and transformative manner,” said Lisa Tank, M.D., Chief Medical Officer at Hackensack Meridian Hackensack University Medical Center. “This optimizes outcomes and achieves clinical excellence.”

An Unparalleled Inpatient Experience

Patients who require an inpatient hospital stay after their procedure recover in large private rooms with outstanding views and floor-to-ceiling windows. With dedicated inpatient areas for bariatrics, trauma, transplant and more, patients receive care from nurses who understand the nuances of post-surgical care for each surgical discipline.

“In addition to being a ‘Four Seasons’-type of experience, patients who stay at the Helena Theurer Pavilion receive care from well-trained nurses who have the experience and knowledge required to notice changes in patients and alert their physician,” said Hans Schmidt, M.D., general and bariatric surgeon.

The Pavilion design team applied lessons learned during the COVID-19 pandemic to make the facility fully pandemic-ready. Although the Pavilion is equipped with 12 negative-pressure rooms, the entire facility can easily be converted to negative pressure in the event of another pandemic. Special cut-outs in the walls allow tubing and cords to exit each patient room, so nurses can safely manage IVs and monitors from the hallway – without the need to put on personal protective equipment, disturb the patient or risk exposure to contagious illnesses.

“We broke ground on the Pavilion in 2019, and by March 2020 we were in the midst of the pandemic,” said Mark Sparta, FACHE, President, Northern Region, and President and Chief Hospital Executive, Hackensack University Medical Center. “We didn’t want to miss the opportunity to make the facility pandemic-capable, and we believe making that investment in the future was the right thing to do.”



As the hospital’s reputation for high-quality, patient-centered care continues to grow, more patients are choosing to receive their surgical care at the Helena Theurer Pavilion.

“Across every division in the Department of Surgery, we have seen increased patient volumes,” said Dr. Ross. “The physical space is amazing – truly a light-filled environment dedicated to healing – and combined with the care our experts provide, the Pavilion is a destination for unparalleled surgical care.”

ABOUT THE HELENA THEURER PAVILION

The Pavilion features all-private patient rooms and the latest technology, with every detail optimized to deliver an outstanding patient experience.

The Pavilion includes:

- 24 operating rooms
- 72 post-anesthesia care unit beds
- 50 Intensive Care Unit (ICU) beds
- 175 medical/surgical beds, including a Musculoskeletal Institute and intermediate care rooms
- 7 da Vinci robotic surgical systems
- 1 da Vinci single-port robot
- 4 orthopedic robots for joint replacement procedures
- 1 intraoperative MRI system
- 1 CT Scanner in the ICU

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Patient rooms include:

- Bedside tablet to control lights, shades, TV and room temperature
- Flat-screen TV with patient-education modules, translation services and video chat capabilities
- Floor-to-ceiling windows with superior views and natural light
- Soundproofing that promotes improved sleep, relaxation and healing
- Plenty of space to accommodate the patient, visitors and members of the care team



GENERAL SURGERY

GENERAL SURGERY TEAM BUILDS ON REPUTATION FOR ROBOTICS EXCELLENCE

Team is now offering single port robotic general surgery for gallbladder removal and hernia repair

The general surgery team at Hackensack University Medical Center is experiencing continued growth, building on past successes to expand its robotic-assisted surgery program.

“In 2019, we implemented 24/7 access to robotic-assisted surgery for complex, high-acuity patients who need emergency care,” said general surgeon Stephen G. Pereira, M.D., FACS, Chief, Division of Robotic Surgery at Hackensack University Medical Center. “As early adopters of this innovative approach, our program served as a model for other hospitals and the concept of emergency robotic surgery is beginning to catch on nationally.”

The hospital was also one of the first in the nation to have a dedicated robotic surgical system for ambulatory surgery, enabling the team to offer same-day elective gallbladder and

hernia procedures. The team has been collecting outcomes data for the 24/7 emergency and ambulatory robotic surgery programs and plans to publish research on the success of these initiatives.

“We are regionally and nationally recognized for outcomes that exceed national standards, including a shorter-than-average length of stay,” said Dr. Pereira. “These outcomes, combined with our robotic surgery innovations, have contributed to our program’s outstanding reputation.”

The team is also expanding its robotic surgery capabilities after receiving IRB approval to perform cholecystectomy procedures and hernia repairs using single port robotic surgical technology.

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Stephen Pereira, M.D.

“Single port robotic surgery is currently FDA approved for urology and ENT procedures, and Hackensack University Medical Center is one of the highest-volume centers in the nation for single port surgery,” said Dr. Pereira. “As a result, we are one of the only centers in the U.S. developing a single port program for general surgery.”

Key advantages to single port surgery include the ability to access difficult-to-reach areas of the body with minimal trauma to surrounding tissues, allowing a potentially reduced risk of complications, shorter recovery time, and overall improved outcomes and cosmetic results for the patient.

Early adoption and innovation in single port robotic general surgery will also allow the team to provide a leading-edge educational experience for the Robotic Surgery Fellowship program participants.

“We were the first in the country to start a Robotic Surgery Fellowship in 2015 to train our general surgeons,” said Dr. Pereira. “We have all the latest technology that enables us to deliver on our mission of providing expert training to the next generation of surgeons.”

PUBLICATIONS AND PRESENTATIONS

Hadjiloucas N, Ferrel E, Rosenstock A, Mazpule G, Pereira S. Robotic Cystjejunostomy. Video Presentation: SAGES 2024

Sherman T, Trigiolis T, Pereira S, Mazpule G, Rosenstock A. Post-COVID 19 Achalasia: A New

Etiology. Poster Presentation: SAGES 2024

Sherman T, Petersen S, Parr D, Pereira S, Mazpule G, Rosenstock A. Malrotation in the Adult: A Challenging Diagnosis. Poster Presentation: SAGES 2024

Trifolis T, Amianda E, Rosenstock A, Pereira S, Mazpule G. Investigating the Efficacy of Robot-Assisted Natural Orifice Intracorporeal Anastomosis and Extraction of Sigmoid Colon. Poster Presentation: SAGES 2024

Bonte A, Rega M, Dale M, Mazpule G, Rosenstock A, Pereira S. Iatrogenic Bile Duct Injury with Loss of

Confluence (Strasberg E4) in Robotic Cholecystectomy with ICG: A Cautionary Tale. Plenary Session

Video Presentation: SAGES 2024

Hernandez S, Omer D, Bonte A, Hadjiloucas N, Weithom D, Napolitano M, Pereira S, Rosenstock A, Mazpule G. Robotic Marsupialization of Retroperitoneal Lymphocele after ALIF Procedure. Video Presentation: SAGES 2024

Hadjiloucas N, Dale M, Pereira S, Mazpule G, Rosenstock A. Robotic Converted to Open Right Inguinal

Hernia Repair for a Large Right Inguinal Hernia. Poster Presentation: SAGES 2024

BARIATRIC SURGERY

A COMPREHENSIVE APPROACH TO OBESITY MEDICINE

Patients have access to a full range of obesity management options through the Center for Weight Loss and Metabolic Health

At Hackensack University Medical Center’s Center for Weight Loss and Metabolic Health, patients can access a full range of obesity management options — including diet and exercise counseling, weight loss medications and weight loss surgery.

“With two-thirds of Americans being either obese or overweight, it’s essential that patients have access to all aspects of obesity care, including oral medications, diet and exercise guidance, injectables and surgery,” said Hans Schmidt, M.D., Director of the Center. “A treatment may be right for one patient, but might not be right for others — and patients need to be able to move between treatment options during their journey to manage this chronic disease.”

Patients with a BMI of 27 or higher are eligible to participate in the Center’s weight management program, which starts

with a complete pre-screening that includes a full medical history, health assessment, sleep apnea screening and a history of previous efforts to lose weight. Patients then meet with a care provider who can help them develop a weight management plan and participate in regular follow-up visits to assess their progress.

“We work collaboratively with other health care professionals, including endocrinologists, sleep medicine specialists, cardiologists, registered dietitians, and exercise specialists to help patients achieve their goals,” said Dr. Schmidt. “Starting on a weight management journey can feel overwhelming — and that’s why our team offers coordinated care and support at every stage.”

And for some patients, surgery is the best option to help them achieve their long-term weight loss goals.

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“GLP-1 agonists are new, effective medications for obesity, although these injections aren’t right for everyone,” said Dr. Schmidt. “Some people can’t take the medication due to side effects, cost, insurance coverage or lack of sufficient weight loss – and in these cases, surgery may be the best option to deliver the results the patient needs.”



Hans Schmidt, M.D.

Under an approved investigational protocol, the bariatric surgeons at Hackensack University Medical Center are pioneering the laparoscopic transit bipartition procedure – which combines a sleeve gastrectomy with a partial bypass. Although the procedure is more common in other countries, it hasn’t been widely adopted in the U.S.

“Our team recently presented its findings from its first

series of transit bipartition cases at the 2023 International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) annual meeting in Naples, Italy,” said Dr. Schmidt.

To further advance their efforts to provide comprehensive patient care, the team is also pursuing additional certifications in obesity medicine. General and bariatric surgeon Douglas Ewing, M.D., recently passed the Metabolic and Bariatric Surgery Focused Practice Designation test offered by the American Board of Surgery, as well as becoming Board Certified in obesity medicine by the American Board of Obesity Medicine.

“There is currently no board certification for bariatric surgery, but pursuing these additional certifications demonstrates that our team is committed to offering our patients a full range of treatment options for obesity,” said Dr. Ewing. 🌐

PUBLICATIONS AND PRESENTATIONS

Schmidt HJ, Bonte A, Crisafulli GF, Amianda EA. Initial US experience with sleeve gastrectomy and transit bipartition: Single center prospective feasibility study. Poster presentation: International Federation for Surgery of Obesity and Metabolic Disorders (IFSO), Naples, Italy, August 2023.

Barr RM, Gavigan TS, Amianda EA, Guerrier JB, Ewing DR, Eid SE, Schmidt HJ. Bariatric Surgery is Safe in Septuagenarians at a High Volume MBSAQIP Center. Poster presentation: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Montreal, Canada, March 2023.

Crisafulli GF, Amianda EA, Guerrier JB. Obstruction of proximal jejunum due to anomalous congenital mesenteric band with herniated bowel. Poster presentation: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Montreal, Canada, March 2023.

Sherman TY, Amianda EA, Shi M, Shakiba K, Pereira SG. Early Postoperative Small Bowel Obstruction Secondary to Internal Hernia After Sacrocolpopexy: A Rare Mechanism. Poster

presentation: Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), Montreal, Canada, March 2023.

Meholick AL, Ewing DR. Poster Presentation, “Perforated Gastric Remnant Ulcer after Roux-en-Y Gastric Bypass Successfully Treated with Partial Remnant Gastrectomy: A Case Report.” SAGES, Montreal, QC, Canada. (March 29, 2023).

Iliakova, M, Amianda EA, Eid SR. The impact of transition from high-volume laparoscopic to robotic bariatric surgery on patient outcomes and cost. Poster Presentation: 2023 SAGES Annual Meeting, March 29, 2023; Montreal, Canada.

Eid S, Mazpule G. “Paraesophageal Hernia Repair”. Acute Care Surgery and Trauma, Edited by Stephen Cohn, CRC Press, 2023, p 327-332.

Bonte A, Cassidy R, Kruse M, Meholick A, Eid S. Gastric Reflux in a Patient With Morbid Obesity: Laparoscopic Cholecystectomy, Hiatal Hernia Repair, and Roux-en-Y Gastric Bypass. Video Presentation: SILS MIS Week. Oct 4-7, 2023. Lake Buena Vista, FL.



BREAST SURGERY

ADVANCED TECHNOLOGY ENHANCES BREAST SURGERY OUTCOMES

SAVI SCOUT technology enables breast surgeons to accurately identify and remove tumors and lymph nodes while improving patient comfort and convenience

Hackensack University Medical Center’s breast cancer program is accredited by the National Accreditation Program for Breast Centers (NAPBC) and the National Committee on Cancer (NCOC). The program’s breast surgery team is committed to offering advanced surgical care using the most advanced technology and techniques.

“Our goal is to offer our patients outstanding oncologic results, as well as outstanding cosmetic and surgical results,” said breast surgical oncologist Christopher McGreevy, M.D.

Dr. McGreevy said the team performs a high volume of nipple-sparing mastectomy procedures and has a zero-percent nipple loss rate. For patients who require a lumpectomy, breast surgeons use advanced wireless localization technology called SAVI SCOUT® as an alternative to traditional wire localization.

“SAVI SCOUT uses a tiny reflective clip that can be placed at the site of the tumor prior to surgery. This essentially unpairs the surgery with a required radiology procedure beforehand,” said Dr. McGreevy. “Because the clip can be placed anytime before surgery, it improves comfort and convenience for patients and makes the day of surgery less stressful.”

Surgeons also use hidden-scar techniques in combination with localization technology to deliver superior cosmetic and oncologic results.

“During lumpectomy, we use techniques that hide scars in the inframammary fold, the border of the areola or the axilla,” said Dr. McGreevy. “We also use a cavity shave margin technique that reduces the risk of positive margins and re-excision by 50 percent.”

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Christopher McGreevy, M.D.

Dr. McGreevy said the national rate of re-excision after lumpectomy is 17-18 percent compared to 9 percent at Hackensack University Medical Center — meaning that patients are less likely to need a second procedure due to positive margins.

Similarly, the team is among only a few in the area to offer targeted axillary surgery with SAVI SCOUT localization, enabling them to accurately identify and remove metastatic and sentinel lymph nodes.

“This procedure decreases the risk of false negatives, as well as the risk of needing additional axillary surgery,” said Dr. McGreevy.

The team works closely with plastic surgeons to perform oncoplastic procedures that combine plastic surgery with cancer surgery — such as a lumpectomy with a breast reduction. The entire breast care team also participates in weekly breast tumor board meetings to discuss each new case.

“Patients benefit from a treatment plan that is created with the input of breast surgeons, medical oncologists, radiation oncologists, radiologists, pathologists, nurses and physical therapists,” said Dr. McGreevy. “As a regional hub for complex breast cancer cases, we are also frequently consulted for second opinions.”

BREAST SURGICAL ONCOLOGY BY THE NUMBERS

- 1,174 new patients
- 370 new cancer patients
- 473 breast surgery cases
- 293 breast cancer cases

BREAST SURGERY CLINICAL TRIALS

In addition to participating in medical and radiation oncology clinical trials for breast cancer, the team is also involved in surgical clinical trials, including:

- **Alliance A011202:** Comparison of Axillary Lymph Node Dissection with Axillary Radiation for Patients with Node-Positive Breast Cancer Treated with Chemotherapy. The goal of this trial is to de-escalate the amount of surgery performed in the underarm for node-positive disease.
- **NSABP B51:** Standard or Comprehensive Radiation Therapy in Treating Patients with Early-Stage Breast Cancer Previously Treated with Chemotherapy and Surgery. The goal of this trial is to de-escalate the amount of radiation to the axilla when converting from node-positive to node-negative disease after chemotherapy.
- **COMET:** Comparing an Operation to Monitoring, with or without Endocrine Therapy (COMET) Trial for Low-Risk DCIS. This trial compares standard-of-care surgery against endocrine therapy and monitoring to determine whether active monitoring is a safe and effective option for managing ductal carcinoma in situ (DCIS).

COLORECTAL SURGERY

GROWING COLORECTAL SURGERY PROGRAM CONTINUES TO RAISE THE BAR ON QUALITY

With the addition of three colorectal surgeons and an increase in patient volumes, the team continues to deliver safe, effective and minimally invasive care that exceeds national standards

During the past three years, the colorectal surgery program at Hackensack University Medical Center has grown — adding three surgeons and increasing the volume of surgical procedures performed each year.

“Our program is staffed by experienced, nationally recognized surgeons and an expert surgical support team with a proven track record of excellence — particularly when it comes to robotic and minimally invasive surgery,” said Steven Lee-Kong, M.D., Chief of Colorectal Surgery. “As a result, we have one of the region’s most robust, highest-volume and longstanding robotic colorectal surgery programs.”

As surgical volumes continue to grow, the colorectal surgery team continues to raise the bar on quality. The Hackensack University Medical Center colorectal surgery team has exceeded national averages across all outcomes measures, including:

- Mortality rate of 1.7 percent compared to the national average of 3 percent
- Readmission rate of 5.6 percent compared to the national average of 7.3 percent
- 30-day unplanned return to OR rate of 3.6 percent compared to the national average of 4.4 percent
- Infection rate of 6.6 percent compared to the national average of 7.70 percent
- Average length of stay of three days compared to the national average of four days

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Steven Lee-Kong, M.D.

“Our length of stay is exemplary, and our infection, readmission, and mortality rates are at or below national averages,” said colorectal surgeon Howard Ross, M.D., Chair of Surgery/Surgeon-in-Chief. “Our experience in robotic and minimally invasive surgery combined with our new, state-of-the-art operating room facilities at the Helena Theurer Pavilion allow us to deliver outstanding patient outcomes.”


In addition to using the most advanced robotic surgical technology, the team is also using near-infrared fluorescence imaging to improve surgical safety and outcomes.

“The fluorescence imaging allows us to see blood flow to the intestine so that we can minimize complications,” said Dr. Lee-Kong. “We can also use fluorescence technology to highlight structures we need to avoid, such as the ureter — which improves surgical safety.”

The team has launched a multidisciplinary Inflammatory Bowel Disease Board for patients with Crohn’s Disease and Ulcerative Colitis, discussing each case to determine the best treatment option. Through an Enhanced Recovery After Surgery (ERAS) protocol, surgeons have streamlined post-operative physician orders, pain management, anti-infection protocols and stoma care.

“We provide comprehensive pre-op education that streamlines post-op care, so we can help our patients recover quickly and safely,” said Dr. Lee-Kong.

The team also uses its expertise to train future researchers and surgeons. College students join the program during the summer to assist the colorectal surgery team with current research efforts, and surgical residents and medical students from Hackensack Meridian School of Medicine routinely rotate through the department to increase their exposure to the surgical specialty.

“We have the expertise required to treat all conditions, and when patients choose us, they will receive expert care from an experienced group that is regionally and nationally recognized for delivering high-quality care,” said Dr. Lee-Kong. 

Classification of complications	Data Year End Report October 1, 2022 - September 30, 2023	
	Hackensack Meridian Health Rates	National Rates
Mortality Rate	1.70%	3.00%
Unplanned Readmission Rate	5.60%	7.30%
30-Day unplanned Return to OR Rate	3.60%	4.40%
Infection Rate	6.60%	7.70%
Length of Stay (surgical days)	3	4

Source: NSQUIP and Vizient



SURGICAL ONCOLOGY

COMPREHENSIVE SURGICAL ONCOLOGY CARE FOR COMPLEX CASES

With expertise in robotic, laparoscopic and open surgical approaches, the team specializes in treating advanced, recurrent or challenging cases and offers access to innovative clinical trials

The surgical oncology team at Hackensack University Medical Center provides comprehensive care for patients who require surgical treatment after a cancer diagnosis, working as part of a multidisciplinary team with medical and radiation oncologists.

“For certain cancers, new immunotherapy treatments are offering patients a better option for long-term survival, without the toxicity and side effects associated with chemotherapy,” said Donald McCain, M.D., Ph.D., FACS, Chief of Surgical Oncology and Vice Chairman of the John Theurer Cancer Center. “But for many patients, surgical care is still required — and we specialize in caring for complex patients who have recurrent disease or a history of prior surgeries.”

To determine the best course of treatment for each patient, physicians discuss each case at a weekly tumor board meeting attended by surgeons, medical oncologists, radiologists, gastroenterologists, radiation oncologists, residents, nurses and more.

“By meeting on a weekly basis, we can ensure that patients receive the highest-quality care — and our team has discussed thousands of cases so far,” said Dr. McCain.

Dr. McCain also noted that the center’s outcomes for hepatectomy, gastrectomy and pancreatectomy exceed national averages in several critical areas.

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“Our mortality rate for each procedure is zero percent, and our hepatectomy length of stay of two days is also below the national average,” said Dr. McCain. “That means our patients do well, have safe and successful surgical encounters and have seamless transfers to receive care from our medical and radiation oncology colleagues.”

The surgical oncology team is also working closely with Martin Gutierrez, M.D., Director of the Drug Discovery/Phase I Program and Co-Chief of Thoracic Oncology at the John Theurer Cancer Center, to explore the development of personalized tumor vaccines for patients who have advanced solid tumors.

“We are conducting a study where we harvest tumor tissue from patients with advanced disease and create a personalized tumor vaccine to generate an immunogenic response,” said Dr. McCain. “Our first patient successfully completed the clinical trial, and we hope to eventually build out our protocol to include patients with other tumor types.”

John Theurer Cancer Center is part of the National Cancer Institute (NCI)-designated Lombardi Comprehensive Cancer Center at Georgetown University, and according to Dr. McCain, that affiliation has provided patients in New Jersey with access to research-based treatment options before they are available to the public.



Marson Davidson, M.D., with Donald McCain, M.D., Chief of Surgical Oncology

“Our team has a high level of dedication to our patients,” said Dr. McCain. “When we receive a referral, we schedule a same-day or next-day consultation, which eliminates long wait times between diagnosis and treatment and helps reduce anxiety.”

Surgical Oncology Outcomes-Pancreatectomy Procedures

Classification of complications	Data Year End Report October 1, 2022 - September 30, 2023	
	Hackensack Meridian Health Rates	National Rates
Mortality Rate	0.00%	1.60%
Unplanned Readmission Rate	13.60%	14.30%
30-Day Unplanned Return to OR Rate	13.60%	3.70%
Infection Rate	36.30%	17.90%
Length of Stay (Surgical Days)	5	6

THORACIC SURGERY

THORACIC SURGERY TEAM EARNS NATIONAL RECOGNITION FOR HIGH-QUALITY CARE

In 2023, the team ranked 24th in the nation for Pulmonary and Lung Surgery, earning a High-Performing Hospital designation for Lung Surgery from U.S. News & World Report and received a 3-Star rating (out of 3) for overall lobectomy outcomes by the Society of Thoracic Surgeons

During his eight-year tenure at Hackensack University Medical Center, Chief of Thoracic Surgery Nabil Rizk, M.D., has assembled a thoracic surgery team that includes Geoffrey Pelz, M.D., Daniel Mansour, M.D., and Michael Spallone, M.D. Together, the group has implemented numerous innovations, process enhancements and efficiencies that have resulted in better, more-streamlined patient care.

In 2023, the team was recognized for its efforts by U.S. News & World Report, ranking 24th in the nation for Pulmonary & Lung Surgery and earning a High-Performing Hospital designation for Lung Surgery. In addition, based on overall patient outcomes, the program was given a rating of 3 stars out of 3 by the Society of Thoracic Surgeons for lobectomy for lung cancer.

“We are continually working on process improvements that optimize outcomes, limit resource utilization, streamline care and minimize the amount of lung tissue removed during our procedures,” said Dr. Rizk. “As a result, 80-90 percent of our patients go home the same day or the day after surgery, and our length-of-stay and other outcomes are significantly better than other leading centers nationwide.”

To achieve these results, Dr. Rizk said his team is constantly focused on the quality measures that promote a safer, faster recovery and help patients improve overall.

“Our retrospective and prospective research helps us validate and advance techniques, so we can deliver uniform outcomes from surgeon to surgeon,” said Dr. Rizk. “No matter which surgeon you see, you will get the same outcomes.”

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Dr. Rizk said two thoracic surgeons are in the OR for each thoracic procedure and work collaboratively to optimize patient care. The entire thoracic surgery team also rounds together and makes consensus-based patient-care decisions — minimizing patient complications and getting to know each patient so the entire team is on the same page.

Each physician works as part of a team and offers a full range of thoracic surgery procedures. They also engage in specialized research and perform complex procedures based on their individual areas of interest. And because each team member trained at different institutions, they bring their unique perspectives and experiences together to benefit their patients.

“We all perform every type of procedure, but I have a special research and clinical interest in esophageal cancer. Drs. Pelz, Mansour and Spallone perform most of the procedures to treat benign esophageal conditions,” said Dr. Rizk. “Dr. Pelz has also been instrumental in bringing in Ion robot-assisted biopsy and navigation technology.”

Ion enables thoracic surgeons and pulmonologists to navigate the lung through a network of narrow and delicate airways to access hard-to-reach nodules. The minimally invasive, robotic-assisted tool can help thoracic surgeons identify lung cancers earlier and more accurately when compared to other biopsy techniques, allowing patients to start effective treatment sooner and obtain better outcomes.

The Ion system combines computed tomography (CT) data and robotic-assisted surgical technology to facilitate and expedite access to these nodules. The entire procedure is performed through bronchoscopy, without the need for any external surgical incisions.

“Our team members and expertise, combined with our technology and research, means we have the mechanisms needed to maintain the highest standards of quality for our patients,” said Dr. Rizk. 🧠



Nabil Rizk, M.D.

PUBLICATIONS AND PRESENTATIONS

Intercoastal artery aneurysm presenting as a spontaneous hemothorax in a patient with neurofibromatosis Harsimran Panesar, Geoffrey Pelz, Daniel Mansour *Journal of Surgical Case Reports*, Volume 2024, Issue 3, March 2024, rjad725, <https://doi.org/10.1093/jscr/rjad725>

The Use of Sterile Water Hydrolysis in VATS Decortication Andrew R. Magdich, M.D., Nabil Rizk, M.D., Geoffrey Pelz, M.D., Michael Spallone, M.D., Daniel Mansour, M.D., Hackensack University Medical Center, General Surgery, Hackensack, New Jersey, Hackensack University Medical Center, Thoracic Surgery, Hackensack, New Jersey

Submitted to *Annals of Thoracic Mastery of Cardiothoracic Surgery*, 4th edition Chapter 30: Pericardial Procedures Nabil Rizk, Michael Spallone, illustrations by Christine Bacha-Rizk





TRANSPLANT

OUTSTANDING OUTCOMES CONTRIBUTE TO 2,000-PERCENT GROWTH IN KIDNEY TRANSPLANT VOLUME

Among the highest-volume kidney transplant programs in the U.S., Hackensack University Medical Center has shorter wait times and exceeds national standards for quality

The organ transplantation program at Hackensack University Medical Center is the fastest-growing program in the U.S., with adult kidney transplant volumes increasing 2,000 percent since 2015.

“Our program has experienced dramatic growth in volume while maintaining high-quality outcomes that consistently exceed national standards,” said Michael J. Goldstein, M.D., FACS, Director of the Division of Organ Transplantation. “We are among the top 5 percent of the largest kidney transplant programs in the U.S.”

Of the four kidney transplantation programs in New Jersey, Hackensack University Medical Center’s program has ranked #1 for shortest waiting time to receive a deceased donor transplant for the past five years. Additionally, the hospital has one of the shortest wait times for kidney transplant in the U.S., with the average wait time of 223 days — nearly half the national average wait time of 412 days, and one-third of the average wait time of other regional programs.

“Our organ offer acceptance rate for deceased donor kidneys is 2-4 times higher than the national average, which reduces wait times for transplantation,” said Dr. Goldstein. “Our mission is to improve and broaden community access to kidney transplantation with shorter waiting times through maximizing utilization of transplantable kidneys.”

Dr. Goldstein said the transplant center prioritizes finding “the right kidney for the right recipient.” This is accomplished by utilizing the entire spectrum of transplantable kidneys, preparing and readying the waiting list, applying innovative immunologic strategies, and advancing machine perfusion technology in a way that maximizes outcomes and lowers the risk of complications.

“We use an organ preservation team to provide machine perfusion for 80-90 percent of deceased donor organs we receive,” said Dr. Goldstein. Applying this technology in the hospital expands the donor pool, improves early kidney function and reduces the hospital stay for patients.

Outcomes That Exceed National Averages

The program’s outcomes are also the best in New Jersey and among the best in the nation. The hospital has 32 percent better-than-expected kidney survival at one month and 21 percent better-than-expected kidney survival at one year when compared to the national average. As a result of the hospital’s aggressive medical and surgical management style, delayed graft function rates are 12-18 percent — significantly lower than the national average of 25 percent.

“When patients have better immediate kidney function, they experience better long term outcomes,” said Dr. Goldstein. “As a result of our surgical techniques, our median length of stay is four days, and 95 percent of our patients are discharged within seven days — which is about half the national average of 13 days.”

Hackensack University Medical Center is also the largest pediatric kidney transplant center in the New York-New Jersey metropolitan area, transplanting 11 children under the age of 18 in 2023.

As a result of the shorter wait times and outstanding outcomes, the hospital is a destination for kidney transplantation in the U.S. — and patients are experiencing faster recoveries and better long-term health and quality of life than ever before.

“We consider all patients for transplant, and we care for some of the oldest and sickest patients in the region,” said Dr. Goldstein. “With access to more information and knowledge than ever before, patients from as far away as San Francisco are choosing our center because we are among the highest-performing, most patient-centric programs in the U.S.”

The transplantation program also works closely with three organizations that match living kidney donors with recipients: NKR, Renewal and Dove. These organizations assist with living donor/recipient matches and facilitate paired kidney exchanges for incompatible donor/recipient pairs.

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Michael J. Goldstein, M.D.

“Living donors who live in other parts of the U.S. can now make remote donations without the need to travel,” said Dr. Goldstein. “Donors can have their workup and procedure done at a participating center, and the organ can be shipped to our hospital.”

According to Dr. Goldstein, patients and referring physicians around the country need to know about the level of transplantation care that Hackensack University Medical Center offers.

“We offer the latest innovations and technology combined with outstanding outcomes and a passion to help as many people as we can,” said Dr. Goldstein. 



TRANSPLANT OUTCOMES BY THE NUMBERS

- 35% transplant growth in 2023
- 44% percent growth in waiting list registrations in 2023
- 32% better-than-expected one-month kidney survival
- 21% better-than-expected one-year kidney survival
- #1 largest volume growth in the U.S.
- #1 in New Jersey for shortest wait times
- #1 in New Jersey for one-year kidney graft survival
- Ranked #10 in the U.S. for size, transplant rate and performance outcomes
- Organ acceptance rates 2-4 times the national average
- Organ acceptance rates of 4 times the national average for hard-to-place kidneys

Additional outcomes

- #13 largest kidney transplant center in the U.S. in 2023
- Shortest waiting time and best kidney survival in NJ, Ranked #10 in the U.S.
- 2-4 times more likely to receive a kidney offer at Hackensack University Medical Center than the average national center, leading to short median waiting time of 145 days

TRAUMA

TRAUMA SURGERY PROGRAM EXPANDS TO MEET GROWING DEMAND

In 2023, the team hired seven new surgeons to provide 24/7 coverage at the hospital’s Level 1 Trauma Center

The critical care surgeons at Hackensack University Medical Center provide 24/7 coverage to injured patients in the region and the state in the hospital’s American College of Surgeons-verified Level 1 Trauma Center.

“The Level 1 Trauma Center designation recognizes our hospital’s ability to provide the full spectrum of trauma care – from the prehospital phase through rehabilitation. It also recognizes our commitment to quality improvement, research and improving our regional trauma system” said Division Chief of Trauma Surgery and Critical Care Stephanie Bonne, M.D.

To meet the hospital’s growing need for expert trauma care, the team now includes 10 physicians and 15 advanced practice providers who care for more than 4,000 injured patients each year.

“As trauma surgeons, we work collaboratively with cardiac surgeons, orthopedic surgeons, neurosurgeons, pediatric surgeons, anesthesiologists, emergency medicine specialists and obstetricians to provide comprehensive, multidisciplinary surgical critical care,” said Dr. Bonne. “We also work closely with our EMT teams, as well as our air medical transport teams to coordinate trauma care.”

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2023 TRAUMA VOLUME

Measure	Volume
Trauma Admissions	2,695
Trauma Full Activations	381
Trauma Partial Activations	2,676
Trauma Geriatric Activations	770

The clinical care of injured patients has seen significant growth and improvement. Our national quality rankings, as measured by the American College of Surgeons Trauma Quality Improvement Project, have been consistently improving over the past year and are among the best in the nation. Most notably, the hospital’s risk adjusted mortality rate (6.1%) and major hospital events rate (2.1%), specifically in the elderly population, are well below the national averages (7.9%, 5.8%).

The Intensive Care Unit (ICU) in the hospital’s new Helena Theurer Pavilion is optimized to meet patients’ critical care needs. The 50-bed Surgical Intensive Care Unit Floor is staffed by a specially trained, dedicated and multidisciplinary team of critical care experts, and all patient rooms are equipped with the latest technology – including a monitor tablet outside each patient room that provides information for team members, in-room team workstations and patient lift systems. A dedicated CT scanner on the ICU floor further contributes to enhanced safety, efficiency and patient outcomes.

After discharge from the hospital or ICU, the trauma surgery team offers a trauma follow-up clinic for patients who receive trauma care at Hackensack University Medical Center, as well as those who are referred from other area hospitals. The team has spearheaded efforts for Hackensack University Medical Center to be a site for three ongoing, industry-sponsored clinical trials, as well as national studies related to long-term follow-up of trauma patients.

“Our team has given national talks on trauma care topics, and we also participate in community injury prevention events – including Stop the Bleed training, tabling events and seminars,” said Dr. Bonne. “This outreach is critical to helping members of our community stay safe – because although we are capable of providing the highest level of trauma care, we want to do our part to prevent accidents and injuries whenever possible.”



Stephanie Bonne, M.D.

Championing Women in Surgery

Dr. Bonne is also nationally recognized for supporting women in surgery and serves as the Association of Women Surgeons ACS Women in Surgery Committee (WiSC) Liaison, and chairs the American College of Surgeons Committee on Intimate Partner Violence. As a medical school associate professor and trauma surgeon, and division chief, Dr. Bonne is leading by example – encouraging female medical students, residents, fellows and colleagues at Hackensack University Medical Center and across the country to break down barriers in pursuit of their goals. And closer to home, the success of those efforts is even more apparent: Six out of 10 trauma surgeons at Hackensack University Medical Center are women.

“Even in 2024, women continue to be underrepresented in the surgical specialties,” said Dr. Bonne. “Through mentorship and support, we hope to encourage more women to pursue surgery – because it is possible to excel at a surgical career and have a family.”

PUBLICATIONS

Zhai M, Bono K, Zhang W, **Bonne S**, Gordon E, Zerbo E, Quijote H, Glass N. Drug and Alcohol Use in Trauma Patients Before and During the COVID-19 Pandemic. *J Surg Res.* 2023 Mar;283:999-1004.

Hohenleitner J, Saporito R, Hirsch M, Ravikumar V, Taruvai V, Tufarello A, Livingston DH, **Bonne S**. Straight Leg Raise Cannot Replace CT in the Detection of Clinically Significant Spinal Column Fractures. *J Surg Res.* In press.

Broderick C, Slocum J, Visenio M, Jelke D, Albanese J, Voights M, Fantus R, Erikson E, Lombardo S, Bonne S, Vemnahos G, Kaufman E, Mackersie R, Stey A. Characterizing Re-Triage Guidelines: A Scoping Review of States’ Rules and Regulations. *Surgery.* In press, accepted October 2023.

Malholtra R, Horng H, Bonne S, Sifri Z, Glass N. Evaluating Antibiotic Therapy for Ventilator-Associated Pneumonia Caused by Gram Negative Bacilli. *Surgery Open Science,* 2023, 16, pp. 64–67.

Bonne S. Invited commentary: “Social Care is Medical Care” *JAMA Surg,* Published online July 05, 2023. In press.

Goldstein C, Quian W, Deisher D, Juthani B, Gorman E, Hawkins S, Sheikh F, Bonne S, Livingston D, Sifri Z, Glass N. A Tracheostomy Weaning Protocol Facilitates Liberation from Mechanical Ventilation and Reduces Hospital Stay. *Am J Surg.* In press.

Choron R, Molavi I, **Bonne S.** “Quality Trauma Care Doesn’t End at the Hospital’s Lobby.” Invited Commentary. *JAMA Surg,* 2023 Oct 4:e234873. Epub ahead of print.

Hohenleitner J, Barron K, Bostonian T, Demyan L, Bonne, S. Educational Quality of YouTube Videos for Patients Undergoing Elective Procedures. *J Surg Res* 2023, 292, pp. 206–213.

Baker N, Van Hook C, Ricks T, St, Vil C, Lassiter T, **Bonne S.** Protect & Provide: Perceptions of Manhood and Masculinities Among Disabled Violently Injured Black Men in a Hospital-based Violence Intervention Program. *Am J Men’s Health.* In press.

Nguyen P, Nahmias J, Aryan N, Cripps M, Samuels J, Carmichael H, McIntyre R, Urban S, Ballow S, Dirks R, Spalding M, LaRicca A, Farrell M, Stein D, Truitt M, Verner H, Mentzer C, Mack T, Ball C, Mukherjee K, Mladenov G, Haase D, Abdou H, Schroepfel T, Rodriguez J, Bala M, Keric N, Crigger M, Dhillon N, Ley E, Egodage T, Williamson J, Cardenas T, Eugene V, Patel K, Costello K, Bonne S, Elgammal F, Dorlac W, Pederson C, Burlaw C, Werner N, Haan J, Lightwine K, Semon G, Spoor K, Velopulos C, Harmon L, Grigorian A. Observation-First versus Angioembolization-First Approach in Stable Patients with Blunt Liver Trauma: A WTA Multicenter Study. *JTACS* In press.

Baker N, Van Hook C, Lassiter T, **Bonne S.** What’s Missing? Violently Injured Back Men’s Narratives around Adverse Childhood Experiences (ACEs). *J Child Abuse and Neglect.* In press.

Nguyen P, Nahmias J, Aryan N, Cripps M, Samuels J, Carmichael H, McIntyre R, Urban S, Ballow S, Dirks R, Spalding M, LaRicca A, Farrell M, Stein D, Truitt M, Verner H, Mentzer C, Mack T, Ball C, Mukherjee K, Mladenov G, Haase D, Abdou H, Schroepfel T, Rodriguez J, Bala M, Keric N, Crigger M, Dhillon N, Ley E, Egodage T, Williamson J, Cardenas T, Eugene V, Patel K, Costello K, Bonne S, Elgammal F, Dorlac W, Pederson C, Burlaw C, Werner N, Haan J, Lightwine K, Semon G, Spoor K, Velopulos C, Harmon L, Grigorian A. Main Versus Segmental Hepatic Artery Angioembolization in Patients with Liver Trauma: A WTA Multicenter Study. *JAMA Surgery,* In press..

PRESENTATIONS

Bonne S. “Gender bias and issues in Surgery.” Parkland Medical Center - Dallas Surgical Grand Rounds, April 2023.

Bonne S. “Gun Violence as a Public Health Issue.” University of Alabama - Birmingham Surgical Grand Rounds, February 2023.

Bass B, Stein S, **Bonne S.** “So you want to be a chair” Table Moderator, “American College of Surgeons Women in Surgery Committee Career Development Workshop, April 2023.

Bonne S. Briggs A, Dicker R. “Trauma Informed Care” Spotlight panel discussion, American College of Surgeons Committee on Trauma annual meeting, March 2023.

Bonne S. “Social Determinants of Health.” Rutgers Robert Wood Johnson Medical School Global Surgery Student Alliance. March 2023.

Bonne S. “Navigating a Surgical Career and Family Planning.” Association of Women Surgeons, Rutgers Robert Wood Johnson Medical School Chapter. March 2023.

Bonne S. “Leaky Pipeline: Barriers to Academic Advancement for Women in Surgery.” Baylor-Scott-White Medical Center Grand Rounds and Moore Invited Lectureship for Women in Surgery, April 2023.

Murphy P, Coleman J, DeMoya M, **Bonne S.** “Defining the Acute Care Surgeon: FTE’s, compensation and Career Trajectory.” Lunch session, American Association for the Surgery of Trauma Annual Meeting, September 2023.

Bonne S. “Gun Violence Prevention: It’s everyone’s lane.” Keynote address, American Association of Pediatrics New Jersey School Health Conference, October 2023.

Bonne S. Mentor, ACS-YFA Speed Mentoring. American College of Surgeons Clinical Congress Young Fellows Association. October 2023.

Bonne S. Liao, L. “Mental Health Screening and Screening for Trauma Informed Care” Spotlight panel discussion, American College of Surgeons Committee on Trauma annual meeting, October 2023.

Bonne S. “Indications for CT Angiogram of the Neck: Current Data and Practice”. Hackensack Jersey

Shore Medical Center Annual Trauma Symposium November 2023.

Bonne S. “Gun Violence Prevention: It’s everyone’s lane.” Rutgers New Jersey Medical School Preventive Health Grand Rounds, December 2023.

Tsui G, Hsu A, Patel K, Musa L, Ribeiro V, Kunac A, Livingston D, Chaudhry H, Lim J, Sheikh F, **Bonne S**, Glass N. *Do we Really need IV Contrast? Limiting Contrast Enhanced CT Scans in a Patient at a Level 1 Trauma Center During an IV Contrast Shortage.* Podium Presentation, Western Trauma Association, March 2023.

Garcia S, Entrup P, Trimble C, Deaneer M, Hall O, Thomas A, **Bonne S**, Crandall M. *Years of lives lost in the United States due to Firearms in 2018-2020.* Presentation at Southwestern Surgical Congress, April 2023, Ojai, CA.

Aryan N, Grigorian A, Tay E, Samuels J, Carmichael H, McIntyre Jr. R, Urban S, Ballow S, Dirks R, Spalding M.C., LaRicca A, Farrell M, Stein D, Truitt M, Grossman Verner H, Mentzer C, Mack T.J., Ball C, Mukherjee K, Mladenov G, Haase D, Abdou H, Schroepfel T, Rodriguez J, Bala M, Keric N, Crigger N, Dhillon N, Ley E, Egodage T, Williamson J, Cardenas T, Eugene V, Patel K, Costello K, **Bonne S**, Elgammal F, Dorlac W, Pederson C, Burlaw C, Werner N, Haan J, Lightwine K, Semon G, Spoor K, Velopulos C, Harmon L, Nahmias J. *High-grade Liver Injuries With Contrast Extravasation Managed Initially With Angiography Versus Observation: A Multicenter Study.* Poster presentation, American Association for the Surgery of Trauma September 2023.

Nguyen P, Nahmias J, Aryan N, Cripps M, Samuels J, Carmichael H, McIntyre R, Urban S, Ballow S, Dirks R, Spalding M, LaRicca A, Farrell M, Stein D, Truitt M, Verner H, Mentzer C, Mack T, Ball C, Mukherjee K, Mladenov G, Haase D, Abdou H, Schroepfel T, Rodriguez J, Bala M, Keric N, Crigger M, Dhillon N, Ley E, Egodage T, Williamson J, Cardenas T, Eugene V, Patel K, Costello K, **Bonne S**, Elgammal F, Dorlac W, Pederson C, Burlaw C, Werner N, Haan J, Lightwine K, Semon G, Spoor K, Velopulos C, Harmon L, Grigorian A. *Observation-First versus Angioembolization-First Approach in Stable Patients with Blunt Liver Trauma: A WTA Multicenter Study.* Western Trauma Association 53rd Annual Meeting, Snowmass, CO. February 2024.

Nguyen P, Nahmias J, Aryan N, Cripps M, Samuels J, Carmichael H, McIntyre R, Urban S, Ballow S, Dirks R, Spalding M, LaRicca A, Farrell M, Stein D, Truitt M, Verner H, Mentzer C, Mack T, Ball C, Mukherjee K, Mladenov G, Haase D, Abdou H, Schroepfel T, Rodriguez J, Bala M, Keric N, Crigger M, Dhillon N, Ley E, Egodage T, Williamson J, Cardenas T, Eugene V, Patel K, Costello K, **Bonne S**, Elgammal F, Dorlac W, Pederson C, Burlaw C, Werner N, Haan J, Lightwine K, Semon G, Spoor K, Velopulos C, Harmon L, Grigorian A. *Main Versus Segmental Hepatic Artery Angioembolization in Patients with Liver Trauma: A WTA Multicenter Study.* Accepted 95th Annual Meeting of the Pacific Coast Surgical Association, Rancho Mirage, CA. February 9, 2024.



WOUND CARE

IMPROVING QUALITY OF LIFE AND OUTCOMES FOR PATIENTS WITH SLOW-HEALING WOUNDS

The Center for Advanced Wound Care takes a collaborative approach to wound care, using evidence-based protocols that harness the body's immune system

For patients who have slow- or non-healing wounds, the wound care team at Hackensack University Medical Center provides evidence-based care tailored to their unique needs.

“We take a personalized, guideline-directed approach to wound healing that includes making sure the wound is properly cleansed, performing debridement to remove necrotic tissue, reshaping wound edges, and selecting proper dressings based on the wound’s behavior,” said Roman Zinder, M.D., Chief of the Center for Advanced Wound Care at Hackensack University Medical Center.

As a result of this personalized care, the team is able to deliver outstanding outcomes, including a 2023 comprehensive healing rate of 74.7 percent.

“Approximately 20 percent of patients don’t comply with wound care recommendations or are too sick with other medical issues to heal effectively. As a result, the maximum comprehensive healing rate centers can typically achieve is 80 percent,” said Dr. Zinder. “Our healing rate is very close to the maximum for all patients, and for healthier and compliant patients, our healing rate was 98 percent in 2023.”

As further evidence of the Advanced Wound Center’s leading-edge care, Dr. Zinder presented a poster at the Spring 2023 Symposium on Advanced Wound Care (SAWC), a national meeting that was held in National Harbor, Maryland. The poster presentation was titled, “The Use of an Iodophor Foam Dressing in the Treatment of Complex or Difficult to Heal Wounds.”

The wound care team also works collaboratively with plastic surgeons, podiatrists and general surgeons to provide comprehensive care for patients. As part of that process, Dr. Zinder and his team use strategies to harness and support the body’s immune system through the healing process.

“Wounds heal much faster in young, healthy people and can be very slow to heal in older people with conditions such as diabetes,” said Dr. Zinder. “Working as a team, we start by making the wound ‘acute’ again to reorient the immune system and jump-start the healing process.”

Hackensack University Medical Center also offers Hyperbaric Oxygen Therapy (HBOT) – a medical treatment in which the patient breathes 100 percent oxygen (as opposed to 21 percent oxygen in normal air) while inside a clear acrylic treatment chamber. The oxygen in the chamber is also delivered under at least twice as much pressure as oxygen at sea level. Research has shown that by increasing the oxygen content level in blood and compromised tissue, HBOT provides the ideal environment to promote the growth of new blood vessels and skin – a cornerstone of wound healing.

“HBOT may be covered by insurance for patients who meet specific criteria, such as having diabetic foot wounds, chronic bone infections, radiation tissue damage, surgical wounds, necrotizing infections, crush injuries, gas gangrene and more,” said Dr. Zinder.



Roman Zinder, M.D.

Most importantly, Dr. Zinder wants referring physicians to know that wound healing starts with appropriate and early intervention.

“If a referring physician has a patient with a chronic or poorly healing wound, referring them to our center early can put them on the right treatment path for healing – reducing the risk of complications and improving quality of life,” said Dr. Zinder. ⚙️



SURGICAL RESIDENCY

SURGICAL RESIDENCY PROGRAM PREPARES TO GRADUATE FIRST CLASS

As the number of applicants continues to grow, each of the program’s five graduating surgical residents matched to competitive fellowships in vascular surgery, plastic surgery and breast surgery

In 2019, Hackensack University Medical Center recruited its first class of five residents for its Surgical Residency Program — and in June 2024, that inaugural class will graduate and launch their careers as board-eligible surgeons.

“Every graduate of our first cohort has matched to a competitive fellowship program,” said Surgical Residency Program Director Burton Surick, M.D., FACS, who was recruited by the hospital to start the residency program in 2018 and has served in his role since the program’s inception. “Three graduates will pursue fellowship training in Vascular Surgery, one will pursue a fellowship in Plastic Surgery, and another was accepted for a fellowship in Breast Surgery.”

And since the first class entered the Accreditation Council for Graduate Medical Education (ACGME)-accredited program, the five-year program has grown its reputation for delivering a robust, high-quality educational experience.

“In the program’s initial year, we received 300 applications for five positions,” said Dr. Surick. “This year, we received 1,300 applications for five positions.”

Surgical residents at Hackensack University Medical Center benefit from the hospital’s large surgical volume and receive exceptional surgical training and experience — including hands-on and simulation opportunities with laparoscopic and multiport robotic surgical systems.

And according to Dr. Surick, the Surgical Residency Program’s affiliation with the Hackensack Meridian School of Medicine (HMSOM) provides medical students with an option to further their education in New Jersey — as well as a unique option to enter the residency program after their third year of medical school.

“In our next cohort, we will have two graduates from HMSOM who are entering residency after their third year of medical school,” said Dr. Surick.



Natasha Becker, M.D., and Burton Surick, M.D., FACS

Surgical residents also participate in extensive, award-winning research, publish articles, abstracts, and present videos and papers at regional and national meetings. One of the program’s residents won a Merit Award from the American Society of Clinical Oncology (ASCO). A team of residents won first place in a statewide resident competition hosted by the New Jersey Surgical Society, and another team of residents won a robotic surgery competition held at the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) organization’s 2023 annual meeting.

“We offer an outstanding program for surgical residents that includes structured didactics, state-of-the-art simulation training, innovative research opportunities, board preparation and individualized mentorship,” said Dr. Surick. “But in addition to providing a comprehensive clinical, operative and simulation experience, we also train future surgeons to become leaders in providing compassionate, high-quality surgical care that serves as a foundation for fellowship, private practice or an academic career.”

MINIMALLY INVASIVE FELLOWSHIP

FELLOWSHIP PROGRAM OFFERS ROBUST EXPERIENCE IN MINIMALLY INVASIVE AND BARIATRIC SURGERY

Fellows in one-year program receive personalized mentorship from leading experts at a high-volume center

The Minimally Invasive/Bariatric Surgery Fellowship at Hackensack University Medical Center is one of the oldest programs of its kind in the U.S. The one-year fellowship, which was started in 1998, is in its 27th year and has trained more than 50 surgeons — many of whom are practicing at major medical centers and routinely presenting at national conferences.

“Since the 1990s, Hackensack University Medical Center has been at the forefront of laparoscopic and robotic technology — and as an early-adopter, we have the expertise that allows us to provide a robust fellowship experience,” said Douglas Ewing, M.D., Minimally Invasive/Bariatric Surgery Fellowship Director.

According to Dr. Ewing, one of the best things about Hackensack University Medical Center’s program is the number of faculty.

“Seven different surgeons participate in our fellowship program,” said Dr. Ewing, who graduated from the fellowship program in 2004 and hired several of the current faculty members. “Similar fellowships at other centers may have one or two faculty members.”

More faculty means more surgical volume and operative experience, which means fellows can see different styles, techniques and approaches and apply these techniques in their own practice. Fellows also participate in long-term research projects.

Dr. Ewing said the program received full re-accreditation by the Fellowship Council in 2023 and matched its #1 choice for the 2024-2025 academic year. Outgoing fellows received job offers from institutions in Dallas, Texas, and Miami, Florida.



Douglas Ewing, M.D.

“We truly offer one of the most amazing minimally invasive bariatric surgery fellowship experiences,” said Dr. Ewing. “Our fellows choose our program because they have their pick of cases at a high-volume center, and they have access to personalized mentorship from a large number of expert faculty members.”



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Hackensack University
Medical Center

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ABOUT HACKENSACK MERIDIAN HACKENSACK UNIVERSITY MEDICAL CENTER

Hackensack University Medical Center, an 803-bed nonprofit teaching and research hospital, was Bergen County's first hospital founded in 1888. It is also the first hospital in New Jersey and third in the nation to become a Magnet[®]-recognized hospital for nursing excellence, receiving its seventh consecutive designation from the American Nurses Credentialing Center in 2024. Named to *Newsweek's* World's Best Hospitals 2024 list, Hackensack University Medical Center is also the recipient of the 2023 Patient Safety Excellence Award[™] by Healthgrades as well as an "A" Hospital Safety Grade from The Leapfrog Group. This award-winning care is provided on a campus that is home to facilities such as the Heart & Vascular Hospital; and the Sarkis and Siran Gabrellian Women's and Children's Pavilion, which houses the Donna A. Sanzari Women's Hospital and the Joseph M. Sanzari Children's Hospital, ranked #1 in the state and top 20 in the Mid-Atlantic Region in the *U.S. News & World Report's* 2023-24 Best Children's Hospital Report.

Hackensack University Medical Center is listed on the Green Guide's list of Top 10 Green Hospitals in the U.S. The hospital's comprehensive clinical research portfolio includes studies focused on precision medicine, translational medicine, immunotherapy, cell therapy, and vaccine development. In 2023, the hospital completed the largest healthcare expansion project ever approved by the state: construction of the Helena Theurer Pavilion, a 530,000-sq.-ft., nine-story building housing 24 state-of-the-art operating rooms with intraoperative MRI capability, 50 ICU beds, and 175 medical/surgical beds including a 50 room Musculoskeletal Institute.

To learn more, visit HackensackMeridianHealth.org.