The classic model of academic medicine, equal parts education, research, and clinical care, has evolved over many years to keep pace with human needs and preferences. That change is bound to continue inexorably, especially with the ongoing transformation of the healthcare system.
From the Chair

Over decades of growth and evolution, Northwell Health has acquired many superlatives: New York State’s largest private employer, with more than 61,000 employees; the nation’s 14th-largest not-for-profit healthcare organization; co-host of one of the region’s first new allopathic medical schools in almost 40 years; home to the Feinstein Institute for Medical Research, which is among the top six percent of all National Institutes of Health grantees.

The last ten years, however, have made it clear that quantitative data alone do not capture the essence of our multifaceted, broad-based institution. The health system thus underwent a comprehensive, complex self-assessment that culminated in January 2016 with a new brand and a new name. The sprawling institution’s old name fit when we were primarily North Shore University Hospital and Long Island Jewish Medical Center. Today, though, we’re so much more than that.

The Department of Medicine has long been a leader and an anchor for Northwell’s accomplishments. And like the health system, numbers alone don’t tell the full story of our Department, with its deep roots in tradition and cutting-edge science; highly skilled master clinicians and rising stars; partnerships and alliances that were unimaginable just a few years ago; and iconoclastic millennial learners and devoted teachers with decades of experience and encyclopedic knowledge freely shared. Set in deep relief against the infamous wild ride of our healthcare system’s ongoing evolution, we’re at a once-in-a-lifetime crossroads.

Over the past months, we in the Department of Medicine have taken advantage of the unique opportunity for reflection and re-commitment presented by Northwell’s rebirth. At heart, we are still redefining academic medicine, pursuing in new and refreshing ways all three facets of academic medicine’s mission — education, research, and clinical care. It’s in our continued collaboration in an ongoing “education revolution” in undergraduate medical education and in our nationally ranked residency program and sought-after fellowships. It’s in our determination to strike a balance between the indispensable lessons of our rich scientific tradition and the thrill of turning the classic research paradigm on its head with our innovative partnership with Cold Spring Harbor Laboratory. It’s in our embrace of the newest models for delivering integrated, high-value care, often by the same clinician-researchers who are driving the field forward.

This report is a significant effort to contribute to this re-imagining. Each of the three sections opens with a quantitative overview of our achievements, followed by a wide-ranging qualitative look. We believe that this blend of perspectives opens the door to a truly comprehensive sense of the Department of Medicine, our accomplishments, and our aspirations.

Thomas McGinn, MD, MPH
Chair, Department of Medicine
David Greene Professor of Medicine,
Hofstra Northwell School of Medicine
SVP & Executive Director,
Medicine Service Line,
Northwell Health
IN 2016 – 2017 ACADEMIC YEAR

126 residents  

TOP 5% IN SIZE OUT OF ALMOST 400 INTERNAL MEDICINE PROGRAMS

2ND LARGEST RESIDENCY MATCH IN NYS

48 PERCENT FROM SCHOOLS OUTSIDE NY

19 residents DID ROTATIONS ABROAD OVER THE LAST 3 YEARS

19 SPECIALTIES FIFTEEN STATES REPRESENTED

6,200 ANNUAL MD APPLICANTS

4 DEGREE PROGRAMS: MD, MD/MPH, MD/PHD, PHD

2,400 FACULTY

2016 MATCH: 100% MATCHED

55 RESIDENTS PRESENTED AT NATIONAL MEETINGS

80+ SECOND-THROUGH FOURTH-YEAR STUDENTS VOLUNTEER AT THE STUDENT-RUN FREE CLINIC IN REGO PARK, QUEENS

20 residents HOLD ADVANCED DEGREES

NINETEEN RESIDENTS RECEIVED AWARDS FROM ALPHA OMEGA ALPHA OR GOLD HUMANISM IN MEDICINE

19 residents DID ROTATIONS ABROAD OVER THE LAST 3 YEARS

FIFTEEN STATES REPRESENTED

NORTHWEST HEALTH DEPARTMENT OF MEDICINE
Over the last several years, the Department of Medicine has seen sustained growth and innovation at every point along the medical education continuum, from undergraduate to graduate to continuing medical education to faculty development.

Each year, the Department trains more than 230 medical students, 120 residents, and 110 fellows. All the programs draw applicants nationwide and have become increasingly competitive.

The Department of Medicine is extraordinarily well-equipped to continue this momentum. All the Department’s training and educational programs have been recently streamlined and their pedagogical methods updated. Several Department faculty are leading researchers in medical education, including Karen Friedman, MD, the Department’s Vice Chair for Education.

**The undergraduate experience**
The Hofstra Northwell School of Medicine, which graduated its first class in 2015, is inspiring transformation and intensifying innovation throughout Northwell’s educational enterprise. Residents, fellows, and faculty are all more acutely aware of their role as clinician-educators and are sharpening their teaching skills, facilitated by the Department’s faculty development program and world-class resources from Hofstra University’s many professional degree and certificate programs.

The Department’s clerkship program and fourth-year acting internship are directed by experienced hospitalists and educators. Both programs are successful and sought-after, with the medicine clerkship the highest rated in the School of Medicine. Twenty-one Hofstra Northwell students applied for either a one-year or a three-year medicine residency for the Match occurring in March 2016.
Creative strategies in graduate education

The Department of Medicine is home to one of the largest internal medicine residency programs in the country, graduating 60 trainees each year. The program is deeply committed to evidence-based strategies for physician education, whether classic or cutting-edge. Most didactics are case-based and set in small groups. Team-based learning is the norm in the ambulatory setting. Small groups of trainees regularly practice acute-care scenarios with certified simulation trainers at the Patient Safety Institute. In a month-long international-health rotation, residents staff an African hospital with the guidance and support of world-renowned experts. Residents and faculty collaborated on a new curriculum on healthcare reform, published on the MedEdPORTAL of the Association of American Medical Colleges (AAMC). And to address the growing need for meaningful reportable information on residents, program leadership devised a resident dashboard to pull together several streams of quantitative and qualitative data compiled from faculty, nurses, peers, staff, and patients. Dashboards are distributed to the Clinical Competence Committee and, ultimately, to the resident.

A full complement of medicine fellowships

Northwell Health sponsors more than 1,400 post-graduate trainees in all areas of medicine. The Department of Medicine hosts 14 fellowship programs with a total of 111 fellowship positions. The fellowship programs of both tertiary institutions were merged in July of 2010, strengthening the training of each fellowship with varied populations and a greater spectrum of pathology. At Northwell’s Feinstein Institute for Medical Research, trainees have access to many well-funded NIH research projects as well as mentorships with world-renowned leaders in an extremely wide range of basic, clinical, translational, and outcomes research.

Hospitalists serve as the primary educators for internal medicine residents during floor rotations, with more than 85% of house staff teams led by a hospitalist teaching attending. Many of the hospitalists have been formally trained as clinician-educators through a faculty development course based on the methods of the Stanford University Faculty Development Center and a five-part course on evidence-based medicine.
outcomes.” On the other hand, graduate medical education funding is increasingly challenged, and training programs are pressed to account for every dollar. “We have to figure out how to mitigate all these external forces so that we don’t compromise resident education,” she says.

Dr. Friedman struggles with the right way to have the conversation about these changes with her trainees. One thing she does know is that she can’t do it for them. “Residents really have to be encouraged to participate in system-wide changes,” she observes. “Their voices must be heard, so people understand what they’re going through as they try to train and work within these systems that are not user-friendly.”

One of Dr. Friedman’s most exciting changes has been the addition of Healthcare Reform and Advocacy Week, held in February each year. This innovative curriculum includes a mix of pedagogies, from traditional lectures to think-pair-share activities and cutting-edge workshops. The highlight of the week is a structured debate on a hot topic. This year, eight residents debated the regulation of drug pricing, assuming roles ranging from the health commissioner, to a Medicare patient, to a pharmaceutical CEO. This unique curriculum is now available for use by educators across the world and can be accessed on the Association of American Medical Colleges peer-reviewed site, MedEdPORTAL.

The residency program promotes physician advocacy through a partnership with the New York chapter of the American College of Physicians (ACP). Every year, two senior residents participate in a month-long elective in Albany, New York, with the ACP chapter, working to pass New York State legislation. Recently, one of the chief residents was instrumental in passing the New York State Meningococcal Immunization Bill, which became effective in September 2016.

An experienced teacher and mentor, Dr. Friedman has had both teaching and administrative responsibilities for the hundreds of medical students who rotate through the Department of Medicine. Dr. Friedman’s commitment to high-quality training and education goes beyond the nine-to-five. She is currently pursuing the Hofstra University School of Education Master of Science in Health Professions Pedagogy and Leadership, newly launched in 2016.

Dr. Friedman is Associate Professor of Medicine at Hofstra Northwell School of Medicine.

“Championing and challenging learners in a brave new healthcare world

When the position of Vice Chair for Education became vacant in 2015, Department of Medicine leadership cast a wide net to fill it. The rigorous recruitment process drew top candidates from around the country but ultimately confirmed that the best candidate was already with the Department: Karen A. Friedman, MD.

The Vice Chair provides the lifeblood of the Department’s education mission, directing the graduate medical education (GME) programs, including residency training and fellowship programs; providing oversight for medical school clerkships; and driving faculty development. In addition to her role as Vice Chair, Dr. Friedman is the program director for the Northwell Health Internal Medicine Residency Program.

Dr. Friedman is acutely aware that the healthcare world “her” residents face will be radically different from the one she encountered. She is determined to prepare them. “The way we practice medicine has changed dramatically over the last 50 years, particularly since I trained,” she says. “My residents are pressured every day to decrease the length of stay of the patient in the hospital, to get them out early, to prevent readmission, all while improving patient satisfaction scores and clinical
Dr. Syed Ejaz Ahmad

Sir William Osler, one of the founding professors of Johns Hopkins Hospital, is credited with creating the first residency program. Frequently called “Father of Modern Medicine,” he was also first to bring medical students out of the lecture hall to the bedside for clinical training.

A third-generation teacher, Syed E. Ahmad, MD, never doubted his own calling. He has been recognized several times for his teaching skills by Northwell students and faculty.

His idols: his father and William Osler, both master teachers.

Dr. Ahmad is a leader in the education of third- and fourth-year medical students on clinical rotation in the Department of Medicine. He juggles schedules and curricula for rotations at two campuses for 42 students from Hofstra Northwell School of Medicine, 32 from Albert Einstein College of Medicine, and 36 from SUNY Downstate College of Medicine.

Dr. Ahmad facilitates clinical simulation exercises that improve communication and clinical skills among third-year clerks and prepares fourth-year students for the Entrustable Professional Activities (EPA) exam. As part of the medical education team, he facilitates a research protocol evaluating EPAs among incoming interns.

Dr. Ahmad is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.

Dr. Mark Goldin

What is key to a long, happy life in medicine? According to Mark Goldin, MD, Clerkship Director and Assistant Professor of Medicine at Hofstra Northwell School of Medicine, it’s not encyclopedic knowledge, photographic memory, or the ability to function on four hours of sleep.

“More important than particular knowledge of medicine or a specialty field,” he says, “is the approach to acquiring new knowledge and solving problems.”

With his cluster of accomplishments, Dr. Goldin has demonstrated repeatedly the wisdom of his advice, as well as his penchant for variety in all things. During residency, he founded DoNoHarm Apps, a partnership devoted to educating and empowering patients and providers using mobile technology. In 2007, Dr. Goldin produced and scored an independent film, PxDx (Physical Diagnosis), named Best Short Film (Experimental) at the New York International Independent Film and Video Festival.

As Clerkship Director, Dr. Goldin developed a clinical curriculum with high-yield didactics, facilitated small-group case conferences, and simulated patient exercises. In 2016, he guided the clerkship expansion, now operating at three Northwell inpatient sites.

Dr. Goldin’s clinical work and research focus on venous thromboembolism, including involvement with the system-wide Anticoagulation Collaborative.
The high expectations for today’s clinicians call for enhancing their training as clinician-educators and leaders. In addition to using its own resources, the Department of Medicine addresses that demand by tapping into Hofstra’s wide-ranging offerings. A major driver of that partnership is Alice Fornari, EdD, RDN, who holds several positions at Hofstra Northwell School of Medicine (Associate Dean, Educational Skills Development and Professor, Science Education, Occupational Health and Family Medicine) and Northwell Health (Assistant Vice President, Faculty Development).

Dr. Fornari started her career with work as a renal dietitian and has 20 years of experience as a nutrition professor. Once exposed to medical education in 2000, however, she never looked back, pursuing a doctoral degree from Columbia University, Teachers College, in Higher Education, College Teaching, and Academic Leadership.

Now dedicated to medical education, Dr. Fornari worked to align the nascent School of Medicine’s curriculum with learning assessments. She is the founding director of Hofstra’s new Master of Science in Health Professions Pedagogy and Leadership, and co-principal investigator of IMPACcT (Improving Patient Access, Care, and cost through Training), the federally funded effort to re-imagine primary care.

Ankita Sagar, MD, MPH, started young as an advocate. She grew up in India and moved to the U.S. in the fourth grade. “In sixth grade,” she says, “I created a petition to clean up the local playground. Yes, I came to America in fourth grade and by sixth grade I was demanding change!”

Her dedication to policy work and advocacy has never waned. While she was a resident, the Health Policy and Advocacy Elective allowed Dr. Sagar to work in Albany with the New York State Chapter of the American College of Physicians.

“Working on a few bills and budget items was remarkably helpful,” says Dr. Sagar. “I worked on strategies to encourage young physicians to go into primary care and retain them after investing so much in their training.” Last year, she built on her interest in health policy through Northwell’s Physician Administrative Fellowship, a year-long program designed to empower young physicians to take on administrative leadership roles within Northwell while meeting the organization’s mission of providing outstanding patient care.

Dr. Sagar serves as Director of Ambulatory Quality for the Medicine Service Line and is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.
Progress report on a revolution

Since opening its doors in 2011, Hofstra Northwell School of Medicine has earned a reputation as a top school among educators, thought leaders, and prospective students. Fully accredited, the School graduated its charter class of 29 MDs and one PhD in 2015, followed in 2016 by a second class of 58 MDs and one PhD. Today, the School of Medicine is at full capacity with about 400 students. Its mission: nothing less than reinventing the way tomorrow’s physicians are prepared.

The primary strategy of this revolution is integration: basic, clinical, and social sciences are integrated throughout the learning experience over all four years of the curriculum. Students immediately start learning about the role of basic science in the context of clinical cases and utilize this information to understand complex clinical problems — just as they will throughout their professional lives. This integrated experience extends even beyond the classroom, as students train and work as emergency medical technicians during their first nine weeks of medical school.

A multidisciplinary team of experts, innovators, thought leaders, and others collaborated to develop a framework for undergraduate medical education that focuses on learning rather than teaching, understanding rather than rote memorization, reflection, and a deep commitment to patient-centered practice in all things. The resulting curriculum, widely acclaimed as innovative and transformative, builds on the strong clinical and graduate medical education programs of Northwell Health and the robust research and academic programs of Hofstra University and the Feinstein Institute for Medical Research.

A different slant on time

Hofstra Northwell’s innovative course of study extends over four years much like traditional undergraduate medical education — but students and faculty experience the weeks and months in a radically different way.

The First 100 Weeks are organized around Patient-centered Explorations in Active Reasoning, Learning, and Synthesis (PEARLS), a small-group,
problem/case-based learning program. PEARLS cases prompt students to develop their own biomedical, clinical, and social science learning objectives, which they explore independently and then in small groups. PEARLS classroom cases are complemented by weekly patient encounters in multi-disciplinary community practice-based offices during the Initial Clinical Experiences (ICE). The interplay between PEARLS and ICE provides opportunities for the student to explore a clinical case, critically evaluate and understand relevant basic, clinical, and social sciences, and then see these elements applied. Throughout the First 100 Weeks, course integration merges normal (health), abnormal (disease), and intervention (pharmacology and therapeutics) studies across all body systems.

The Second 100 Weeks intensify the clinical focus while remaining true to the pedagogy established in the First 100 Weeks. Scientific and clinical learning are integrated with a series of structured Advanced Clinical Experiences (ACE) in the core disciplines of medicine, surgery, pediatrics, obstetrics/gynecology, neurology, and psychiatry.

The final 48 weeks, the “Preparation for Residency,” comprises three required acting internships in medicine or pediatrics, critical care, and emergency medicine.

A uniquely rich setting
As a new medical school launched from a mature academic medical center, Hofstra Northwell provides students with an array of sophisticated support that is unparalleled among many other schools aspiring to innovation. Three state-of-the-art training facilities include the latest operative technologies, human simulation/robotic laboratories, and high-tech research space. Medical students also have the opportunity to train at the Feinstein Institute for Medical Research, Northwell’s world-renowned research arm, and Cold Spring Harbor Laboratory, home of Nobel Laureates and birthplace of countless breakthroughs in biomedicine.

The School of Medicine’s physical plant is carefully designed to reflect and promote its principles of collegiality, professionalism, and innovation. In 2015, the milestone year that included the School’s first class commencement, the main medical education center was substantially expanded, providing faculty, students, and staff with more than 100,000 square feet of classroom and office space. The open-concept, green-building design features a state-of-the-art Structure Lab, a 7,300-square-foot space for integrated study of anatomy, histology, gross and microscopic pathology, radiologic imaging, and physical diagnosis.

The first two graduating classes of this revolutionary educational enterprise have met with resounding success, with 100% of each year’s graduating students matching with prestigious training programs around the country.
Looking through the patient’s lens, thinking through the patient’s day

The launch of Hofstra Northwell School of Medicine created a ripple effect that is reaching far beyond students and faculty, elevating the educational enterprise throughout the Health System. The Department of Medicine is working to cultivate and sustain that momentum with experienced medical educators and cutting-edge evidence-based approaches to learning and teaching.

A rising star in medical education, Lauren Block, MD, MPH, joined Northwell in 2013 to help develop and evaluate the medical school’s innovative curricula. She was already an experienced education researcher: after graduating from Harvard Medical School, Dr. Block served a residency and general medicine fellowship at Johns Hopkins Medicine, followed by a prestigious post-doctoral fellowship with the Johns Hopkins Center to Eliminate Cardiovascular Health Disparities, a collaboration among the Bloomberg School of Public Health, Harvard’s schools of medicine and nursing, and Johns Hopkins Community Physicians. Her research there focused on the effectiveness of online training in sustaining a blood pressure measurement intervention.

Her training and experience have instilled in Dr. Block an instinct for viewing healthcare through the lens of student and patient as well as teacher. At Northwell, she focuses on curriculum development in undergraduate medical education, interprofessional educational programs, the patient-centered medical home, and the move to electronic prescribing.

Soon after arriving at Northwell, Dr. Block collaborated with colleagues across several health professions — internal medicine, pharmacy, psychology, and physician assistants — to win a five-year grant for $1.7 million annually from the Health Resources and Services Administration to support Northwell’s IMPACT (Improving Patient Access, Care, and cost through Training) Primary Care Experience. This national program aims to improve and expand primary care through interprofessional education, clinical collaboration, and career mentoring.

Dr. Block serves as the program’s Medical Student Track Director.

Following up on that success, Northwell became one of only nine institutions chosen to participate in a complementary, cutting-edge national professional development program called PACER — Professionals Accelerating Clinical and Educational Redesign. Each institution assembles teams of faculty from the three primary care disciplines in medicine as well as nursing, behavioral health, and other professional training programs. These teams will form a community of educators to catalyze much-needed transformation in primary care, with a sustainable model of faculty development evolving over time.

“Our strategy is to show that primary care is a team sport,” says Dr. Block. “We’ll be working across disciplines and at every point along the training continuum, in horizontal integration.”

The teams will operate as a clinic-within-a-clinic within Northwell’s certified patient-centered medical home. “It’s the clinical transformation that’s happening everywhere,” she adds, “and it’s absolutely critical that trainees are prepared for it.”

IMPACT will also expand opportunities to study the educational and clinical innovations that the School of Medicine is becoming known for. “It allows us to form a smaller educational lab,” Dr. Block says. For example, in a patient experience module, students shadow patients rather than physicians. “We want students to think about how they can humanize the patient experience,” Dr. Block explains. “From the time the patient arrives until it’s time to go home, students should be asking, ‘What do patients go through?’”

Dr. Block is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.
Our efforts on nephrology careers have fostered national collaborations, and they have put Northwell and the School of Medicine on the map in the field.”

– Hitesh Shah, MD

Proactively bringing the best and brightest into nephrology

Amid a flurry of reports about declining interest in nephrology careers among U.S. medical trainees, Hitesh H. Shah, MD, decided to act. Dr. Shah, who is Director of Northwell Health’s Fellowship Program in Nephrology and Professor of Medicine at Hofstra Northwell School of Medicine, started by collaborating with colleagues on a series of national surveys to understand the decline. Their findings, published in prestigious journals such as the Clinical Journal of the American Society of Nephrology and the American Journal of Kidney Diseases, revealed that the majority of nephrology electives offered to medical residents in the U.S. focus heavily on inpatient experience, often neglecting to expose residents to outpatient clinics, dialysis centers, and kidney transplant programs.

“If people are looking to buy a house, you don’t just show them the outside,” Dr. Shah explains. “You take them inside, so they see the whole picture. It’s the same with a subspecialty like nephrology. Medical school students and residents need to be exposed to what nephrologists do in practice so they can make an informed career choice.”

To enhance the appeal of nephrology careers, Dr. Shah and his colleagues restructured their nephrology elective for all medical trainees. Designed as a four-week rotation, the elective allocates two weeks for inpatient and two weeks for outpatient training. The outpatient component includes rotating through various clinics (for example, renal, transplant, and peritoneal dialysis) and rounding in the hemodialysis unit. Since the elective was first offered in 2010, many residents and students have rotated through.

These changes have already made a difference. Several residents and students who experienced the restructured elective have entered the fellowship program. Northwell’s nephrology fellowship program, with eight fellows, integrates novel teaching and learning methods and tools that either complement or supplement traditional pedagogies, some developed by Northwell nephrology faculty. For example, during the “Case-Based Debates” interactive competition, brief information on a challenging case is presented to two teams of fellows. They take turns selecting diagnostic tests from a master slide until one team determines the correct diagnosis. Each ordered test has positive or negative points based on its diagnostic value. The higher-scoring team wins the game. Dr. Shah and his colleagues have also published articles on several innovative educational tools and strategies to enhance teaching and learning in nephrology.

Dr. Shah’s innovative work in medical education has earned him a seat on several prestigious committees of the American Society of Nephrology (ASN). He is currently serving on the ASN Workforce and Training Program Directors Executive Committees and is a member of the Blue Ribbon Panel on Career Development in Nephrology.
It’s about as far as you can go from Long Island’s glossy north shore: Kisoro District Hospital (KDH) in southwestern Uganda, a largely rural area north of Rwanda and east of the Congo. Each year, a select group of residents travels to Kisoro to run clinics and serve one-month rotations on the KDH medical wards as part of the Global Health elective. An intense, often life-changing experience, this innovative elective goes above and beyond the “drop-in” approach of many aid programs. Instead, it emphasizes understanding and appreciating resource-poor healthcare systems, the cultural and socioeconomic determinants of health, and concomitant human rights issues. Before the residents go, they explore these aspects of global health in an intensive one-month course with specially trained faculty from Doctors for Global Health, Montefiore Health System, and Albert Einstein College of Medicine.

The KDH program serves a high-needs population. The average Kisoro family subsists on a per capita income of $2 a day; women commonly have eight children; and Kisoro has just one doctor for every 40,000 people. KDH is understaffed at every level. For example, though funded for six physicians, just three young doctors are responsible for more than 150 inpatient beds and clinics with 150 – 200 patient visits a day; nursing is staffed at 60% of its funded level; and the lab, though funded for four technicians, has only two.

The program’s hospital and community outreach projects, which have grown exponentially over the past 10 years, address a wide range of needs, many unique to the setting:

• Psychiatry services to address Uganda’s enormous burden of untreated depression, schizophrenia, and post-traumatic stress disorder
• The Cardiac Referral Project, with a focus on rheumatic heart disease, which claims the lives of more than 250,000 Africans each year
• The Village Health Worker Program, which aims to lower Kisoro’s significant child and maternal mortality rates by bringing primary and preventive care to remote communities through trained lay people (mostly farmers)
• The Malnutrition Program’s highly praised inpatient unit and community-based program, which rehabilitate approximately 600 children annually
• The Chronic Disease in the Community (CDCom) Project, which cares for nearly 300 villagers at home, saving them the arduous, costly trip to KDH
• The Follow-up Project, which has trained staff who travel to remote villagers needing continuous care but have stopped attending clinic
• The Transport-Plus Insurance Program, a social enterprise designed to improve access to care with steeply discounted transportation to and from KDH

“It always seems impossible until it’s done.”

— Nelson Mandela
Research

279 projects

$1.35 MILLION PCORI GRANT TO STUDY TELEHEALTH PROGRAMS AS SELF-MANAGEMENT TOOLS FOR PATIENTS WITH CHRONIC DISEASE

$24 MILLION+ IN AWARD FUNDING

$1.2 MILLION IN NEW YORK STATE CAREER DEVELOPMENT CENTER GRANTS

TOTAL AWARD OF $1,740,141 FOR INTERPROFESSIONAL PRIMARY CARE TRAINING PROGRAM

$1.5 MILLION PCORI GRANT FOR THE DEVELOPMENT OF A TELEHEALTH SYSTEM FOR PULMONARY REHABILITATION FOR PATIENTS WITH COPD

$120 MILLION INVESTMENT FOR CANCER TO BUILD CLINICAL AND RESEARCH INFRASTRUCTURE

$1.7 MILLION IN TRAINING CLINICAL AND TRANSLATIONAL RESEARCHERS

$10 MILLION TO SCREEN PATIENTS FOR SUBSTANCE ABUSE

100+ CLINICAL TRIALS

$5 MILLION NATIONAL COMMUNITY ONCOLOGY RESEARCH PROGRAM (NCORP) GRANT

60 RESEARCH INVESTIGATORS
Long Island “neighbors” join forces to accelerate hope for cancer patients

Two long-time neighbors on Long Island’s bucolic North Shore recently launched an innovative partnership to speed the advance of novel cancer diagnostics and therapeutics. Now established as one of the largest cancer care providers in the Northeast, Northwell Health is aligning its growing network of clinical services with the world-class cancer research of Cold Spring Harbor Laboratory (CSHL), home to eight Nobel laureates and source of countless world-changing discoveries.

As one of the first research institutes to join the nation’s war on cancer in the early 1970s, CSHL made seminal discoveries that helped diagnose and treat cancer patients, including discovery of the first human cancer gene in 1982. Since 1987, CSHL has operated the only National Cancer Institute (NCI)-designated Cancer Center on Long Island. With an annual operating budget of $145 million, CSHL hosts more than 35 independent laboratories and faculty focused on basic and applied cancer research.

Through the Monter Cancer Institute and the Feinstein Institute for Medical Research, Northwell has supported cancer research in the region for more than 30 years as a founding awardee of the Community Clinical Oncology Program (CCOP). More than 10,000 cancer patients participate in clinical research. Northwell is one of only 46 U.S. providers selected in 2014 by the NCI to participate in its prestigious National Community Oncology Research Program (NCORP). With this recent grant of almost $5 million, Northwell is one of only three awardees in New York State and the only one on Long Island.

The new alliance positions the two powerhouses to break out of their silos and move the field forward. CSHL has unparalleled expertise and experience in basic cancer research, and Northwell has more than 200 academic oncologists and clinicians in more than 25 subspecialties. This alliance means that Northwell can not only address each patient’s medical and surgical needs, but also deliver new cancer therapeutics while staying current with rapidly evolving programming for genomic medicine.

Department of Medicine Chair Thomas G. McGinn, MD, MPH (pictured at left), played a key role in the partnership’s development and now guides its implementation, led by George Raptis, MD, MBA (pictured at right), Acting Executive Director of the Cancer Institute and a nationally recognized oncologist.

“It’s a natural partnership. Northwell is developing a tumor procurement program, making available to CSHL tissue and corresponding patient information. We’re building teams across the two organizations that will develop experimental therapeutics.”

– George Raptis, MD, MBA

Cancer is increasingly subspecialized,” Dr. McGinn notes. “Rather than seeking out and destroying ‘defective’ cells, it’s become ‘precision medicine,’ identifying and hitting signal transduction pathways.” Dr. Raptis adds, “In a way, it’s backtracking the battle, going back to genomics.”

Northwell is providing leadership for the partnership’s early clinical work. “We’re thrilled that Robert G. Maki, MD, PhD, is joining us to lead that work,” Dr. Raptis says. An award-winning researcher in pediatric hematology-oncology, Dr. Maki has led the search for a cure for sarcoma.

The unique partnership of CSHL and Northwell is already moving CSHL’s promising preclinical research into trials available to cancer patients at a much earlier stage. The first such study evaluates the safety of a therapeutic candidate for HER2-positive breast cancer, building on the discoveries of a multi-institution team led by CSHL’s Nicholas Tonks, PhD.

Ultimately, breaking down silos and building transformative relationships among research scientists, clinical translational researchers, and cancer clinicians promises to shift the landscape of cancer diagnosis and therapeutics.
Uncovering root causes of poor dialysis outcomes

While comparing dialysis outcomes across nations is difficult at best, it’s clear that U.S. dialysis patients have significantly poorer outcomes than those in other countries. Anna Mathew, MD, MPH, has been working to unearth the root causes of this intractable pattern by studying patients with chronic kidney disease (CKD) and end-stage renal disease on dialysis.

A recipient of the Department of Medicine’s 2014 Spielman Award for Excellence in Research, Dr. Mathew focuses her research on hospital readmissions of dialysis patients, as well as the optimal frequency of dialysis. She was the recipient of a New York State Department of Health Empire Clinical Research Investigator Program award for her proposal to study the risk factors of potentially avoidable hospital readmissions for patients with end-stage renal disease. Her findings will guide the design and testing of evidence-based clinical interventions to reduce the frequency of costly, avoidable readmissions. Dr. Mathew has also conducted quantitative investigations on the underlying causes of the high risk of hip fracture associated with patients on dialysis, as well as on associations with improved outcomes in kidney transplant patients with IgA nephropathy. Dr. Mathew is currently collaborating with Northwell pulmonologists and applying her statistical modeling expertise to a study funded by the Cystic Fibrosis (CF) Foundation. The study seeks to identify predictors of specific outcomes, such as intubation and lung transplant, in a database of advanced-stage CF patients. She is also working on quantitative studies on how the frequency of hemodialysis affects mortality in patients with end-stage renal disease.

In addition to her medical degree, Dr. Mathew holds a Master’s of Public Health from Harvard School of Public Health, with a focus on quantitative methods. She is currently conducting a systematic review and meta-analysis, with the goal of identifying the potential impact of different dialysis prescriptions on hospitalizations and mortality. She also is conducting focus groups to guide the development of her multipronged intervention for end-stage renal disease.

Dr. Mathew is Associate Professor of Medicine at Hofstra Northwell School of Medicine.
Taking the guesswork out of decision-making

Michael A. Diefenbach, PhD, is transforming the way physicians and other healthcare providers look at patient decision-making. A behavioral scientist with a degree in health and social psychology, Dr. Diefenbach focuses his research on how patients make treatment decisions for distressing and uncertain medical conditions.

Dr. Diefenbach’s unique research portfolio builds on his investigations of basic psychological mechanisms of decision-making. Guided by a self-regulation theoretical framework, he translates psychological phenomena into applied patient-focused interventions, with the goal of enhancing decision-making, and ultimately, quality of life for patients. These interventions take the form of in-person, web-based, and smartphone programs focusing on the patient as well as the partner/caregiver.

In his early work, Dr. Diefenbach noted that many patients have very idiosyncratic beliefs about diseases. At the Fox Chase Cancer Center in Philadelphia, he zeroed in on how patients make decisions about prostate cancer. “At first, we focused on informing patients, giving them the information they needed and correcting misconceptions,” he says. “Later on, developments in the larger field confirmed what I saw: Patients don’t necessarily make rational decisions — not bad decisions, just not necessarily rational.”

Since then, Dr. Diefenbach has had federal support for his research and has both in-person and web-based programs. His Prostate-Interactive Education System (PIES) was one of the first web-based comprehensive, interactive information resources for newly diagnosed prostate cancer patients. He guided the development of three additional programs: Healing Choices for Prostate Cancer and Healing Choices for Breast Cancer, as well as a web-based resource for prostate cancer survivors (PROGRESS). More recently, Dr. Diefenbach developed mobile applications, supported by the U.S. Department of Defense and the National Cancer Institute, that use the smartphone to support a slow-breathing exercise to control vasomotor symptoms experienced by men on androgen deprivation therapy (“2Breathe”), as well as a cancer screening information tool (“HealthOwl”).

Since joining the Department of Medicine as Director of Behavioral Research, Dr. Diefenbach has continued to break new ground with Healium, a novel prostate treatment decision tool. Funded by a Research Scholar Grant from the American Cancer Society, he has been developing a unique visual interface that brings to life the treatment choices faced by prostate cancer patients. He notes that the standard approach is providing patients with volumes of information, presenting all the pros and cons, and then asking patients what’s important to them. But many people are overwhelmed by an excess number of options, and either have no idea what they want or list incompatible options. “They might say, ‘Of course I don’t want to be impotent, of course I don’t want to have urinary problems, and of course I want the cancer out,’” he says.

How will they measure success? “We are not interested in what kind of treatment, if any, patients undergo,” says Dr. Diefenbach. “We measure success by whether patients think the decision-making process was easier for them, they are happy with their decision, and feel like it was less distressing with the tool than without it.”

“We take a different approach, one that we think is much more patient-centered: We ask patients first what they want, inform them accordingly, and then confirm their preferences. Decision-making is an iterative process, and our software design mimics and supports this process.”

– Michael Diefenbach, PhD
And in the end: Planning to lessen the burden for patients and loved ones

Planning for the end of life improves the quality of care for patients and also eases the experience for loved ones. Nonetheless, many patients have not had end-of-life discussions with their clinicians and family members, and many providers are hesitant to engage in these conversations. As a result, patients may undergo invasive therapies, which are often unable to reverse the progression of these diseases and can be traumatic for all involved.

As pulmonary and critical care physician Negin Hajizadeh, MD, MPH, noted, this scenario could be avoided if providers, families, and patients had the information and tools they needed to make informed, evidence-based decisions. Dr. Hajizadeh’s research, funded by the National Institute on Aging and the Cystic Fibrosis Foundation, focuses on using decision-analytic modeling to promote shared decision-making with patients who are critically ill. This process involves using decision aids to communicate prognostic information and educate patients about their disease and treatment options.

With this information in hand, providers, patients, and their families are better positioned to make informed advance care plans. She also works to inform healthcare policy so that care for critically ill patients produces outcomes that align with their preferences and expectations.

Dr. Hajizadeh is in the process of testing and refining InformedTogether, a web-based decision aid for shared advance-directive planning for COPD patients and their healthcare providers. The decision aid uses mathematical modeling to provide prognostic estimates for intubation versus no intubation. Over a period of more than five years of development, it has been revised to reflect usability testing outcomes.

In 2010, Dr. Hajizadeh received a K12 award from the Agency for Healthcare Research and Quality Mentored Clinical Scientists Comparative Effectiveness Development Program, supplemented in 2011 by an award from the Society for Medical Decision Making.

In addition to her medical degree, Dr. Hajizadeh earned a Master’s of Public Health from Yale School of Public Health and completed a biomedical Informatics Research Fellowship at Yale School of Medicine, which was funded by the National Library of Medicine. She serves as Associate Professor of Medicine at Hofstra Northwell School of Medicine.

Dr. Hajizadeh is pivoting her clinical research interests to study whether home-based pulmonary rehabilitation improves quality of life and decreases hospitalization in Hispanic patients with moderate-to-severe COPD. She recently received a $1.5 million grant from the Patient-Centered Outcomes Research Institute to support this work.
The Willumstad Endowed Health Innovation Fund

Thanks to the generosity of Robert B. Willumstad, founding Chair of the Department of Medicine Leadership Circle, the Department’s early-career physician-scientists now have access to funding targeted for innovative, technologically based research.

Through the Willumstad Endowed Health Innovation Fund, these physician-scientists can pursue careers in research while continuing to use their skills as clinicians to treat patients.

The important research supported by the Willumstad Fund will further the Department of Medicine’s efforts to enhance outcomes, safety, wellness, efficiencies, and the patient experience through health information and other technology.

Dr. Peter Gregersen

When Peter K. Gregersen, MD, was a medical resident in the late 1970s, he cared for a patient with lupus. The patient died, motivating Dr. Gregersen to do something about the paucity of knowledge about autoimmune diseases available at the time. Soon after, he started a rheumatology fellowship, just when the fields of modern molecular biology and genetics were exploding.

Since then, Dr. Gregersen has devoted more than 20 years to understanding the molecular genetics of rheumatoid arthritis, cloning the first human leukocyte antigen gene complex for the disease and identifying more than 50 genes associated with other autoimmune disorders, several of which are potential targets for novel therapeutics.

Dr. Gregersen directs Northwell Health’s Robert S. Boas Center for Genomics and Human Genetics within the Feinstein Institute for Medical Research. He facilitates international collaborations aimed at achieving a comprehensive genetic description for autoimmune diseases. In 2013, he shared Sweden’s Crafoord Prize in Polyarthritis with colleagues from Columbia University and Stockholm’s Karolinska Institute for his genetic research into rheumatoid arthritis.

Dr. Gregersen is Professor of Molecular Medicine at Hofstra Northwell School of Medicine.
Today, Dr. Barrientos and her team at Northwell continue to work on promising agents and combinations of new agents to improve patients’ outcomes. Dr. Barrientos serves as principal investigator on several phase 1 through 3 clinical trials and is a co-author of papers in multiple high-profile publications. She actively participates in multi-institutional clinical trials with the Chronic Lymphocytic Leukemia Research Consortium and the Alliance for Clinical Trials in Oncology Foundation.

Dr. Barrientos has received an ASH-AMFDP award from a partnership between the American Society of Hematology and the Harold Amos Medical Faculty Development Program of the Robert Wood Johnson Foundation. She is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.

The power of mentorship

A hallmark of the Department of Medicine’s approach to academic medicine is the critical role of collaboration and mentoring, which can exponentially accelerate the research process. Dr. Barrientos and her colleagues in the Department’s CLL Research and Treatment Center, Kanti R. Rai, MD, and Nicholas Chiorazzi, MD, are a vivid example of the power of mentorship.

It was Dr. Rai who urged Dr. Barrientos to consider joining Northwell Health’s CLL team to realize her dream of becoming a clinician-researcher. An internationally renowned leukemia researcher and hematologist, Dr. Rai was recognized in 2014 by the American Society of Hematology (ASH) for his 50-year career combining landmark clinical leukemia research, steadfast commitment to education and mentoring, and exceptional patient care. He received ASH’s highest honor, the 2014 Wallace H. Coulter Award for Lifetime Achievement in Hematology, and in 2012, he received the David Karnofsky Award from the American Society of Clinical Oncology.

At the Feinstein Institute for Medical Research, where Dr. Rai serves as Director and Investigator for the CLL Research and Treatment Program, he collaborates with Nicholas Chiorazzi, MD, Head of the Karches Center for Chronic Lymphotic Leukemia Research, to uncover minor molecular differences in genes among CLL patients. Dr. Chiorazzi’s research team has made several important contributions to the CLL literature, documenting findings that have had a major impact on how CLL patients are diagnosed and treated.

The work of these two leaders in the field is complemented by the clinical trials program established by Dr. Barrientos — set up with their support and guidance. Trials of two drugs have already made a difference to their CLL patients. Even patients who had not responded to long-established therapies went into immediate remission, with no toxic side effects. Both mentors have made sure Dr. Barrientos has the resources she needs to continue her groundbreaking research.
Reducing the burden of VTEs through world-class research and clinical care

Every year, almost a million Americans have potentially life-threatening blood clots, or venous thromboembolisms (VTEs). Not only are blood clots a dangerous medical problem, they also impose enormous economic and health burdens in almost every clinical setting.

Alex C. Spyropoulos, MD, is leading the Department of Medicine’s multifaceted strategy to take on this intractable challenge. As the first medical director of Northwell Health’s Anticoagulation and Clinical Thrombosis Service, he has built an innovative program that is transforming anticoagulation therapy. His strategy encompasses both traditional anticoagulants, like warfarin, and novel oral anticoagulants.

The service brings state-of-the-art evidence to clinicians working on the frontlines with routine patients, as well as higher-risk patients and those in high-risk situations, such as surgery. For example, treatment options now include perioperative heparin “bridging” for patients on chronic anticoagulation, medical inpatient thromboprophylaxis, and protocols for the use of anticoagulants for heparin-induced thrombocytopenia, a complication of heparin therapy. The service also emphasizes transitions across care settings, offering guidance to clinicians as patients move out of the hospital to other Northwell facilities.

Dr. Spyropoulos has an international reputation for his research on blood clots. He has served as principal investigator or member of the scientific committee, steering committee, or data safety monitoring board for multiple international, multicenter outcome and clinical studies in thrombosis. With his far-reaching experience, it’s no surprise that he is building a top-tier research enterprise at Northwell. Under Dr. Spyropoulos’ watch, investigators are working on a wide range of research initiatives in the field, supported by government agencies and pharmaceutical companies.

One study, called the BRIDGE trial, for which Dr. Spyropoulos served as co-investigator, recently concluded — to great acclaim. The trial is a major study on perioperative bridging supported by the National Heart, Lung, and Blood Institute of the National Institutes of Health. The results of this novel, groundbreaking clinical trial indicate that for patients with atrial fibrillation who need to temporarily interrupt their warfarin therapy perioperatively, bridging anticoagulant therapy with heparin offers no advantage in preventing thrombosis. In fact, it can lead to a nearly threefold increased risk of major bleeding.

As that large, complex study ended in 2015, Dr. Spyropoulos launched a new phase for another study, MARINER. This is a phase 3 global, multicenter study that is assessing the value of extended thromboprophylaxis through the use of rivaroxaban among high-risk patients following discharge from the hospital. A co-chair of the study’s executive committee, he was also instrumental in developing the study protocol. The study uses the IMPROVE VTE risk assessment model developed by his team in 2010 to select the high-risk cohort from the hospitalized group, who were prescribed rivaroxaban while in the hospital. This trial marks the first test for this strategy, and involves more than 8,000 patients at nearly 1,000 medical centers in 37 countries.

Dr. Spyropoulos is Professor of Medicine at Hofstra Northwell School of Medicine.

“Alex’s landmark BRIDGE study changed the way we manage patients’ anticoagulation perioperatively.”

— Thomas McGinn, MD, MPH
Reimagining primary care

Medical educators have long known that primary care physicians are crucial to improving patient outcomes. Yet the number of trainees entering primary care careers is declining, and it is becoming increasingly difficult to attract rising physicians to the field.

Through a $1.7 million grant from the Health Resources and Services Administration (HRSA), the Hofstra Northwell School of Medicine and the Department of Medicine have launched the IMPACcT (Improving Patient Access, Care, and cost through Training) Primary Care Experience. This unique interprofessional program aims to grow the primary care workforce and advance best practices with a focus on patient-centered care, quality improvement, and population health.

“Our goal is to develop innovative ways to train primary care internists using an integrated team model,” says Joseph Conigliaro, MD, MPH (pictured at right), Professor of Medicine at the School of Medicine, Chief of the Division of General Internal Medicine, and Program Director for IMPACcT. Dr. Conigliaro works in close collaboration with co-directors Alice Fornari, EdD, RDN, Lauren Block, MD, MPH, and Nancy LaVine, MD (pictured at left), to deliver a training program that provides trainees with a mentored primary care experience integrating education and clinical skills instruction. In an innovative twist, the program will be structured as a clinic-within-a-clinic in Northwell’s largest primary care practice.

The IMPACcT program is designed for trainees who are interested in receiving enhanced exposure to ambulatory medicine. Trainees receive expanded primary care education on nationally recognized high-priority primary care topics, an interprofessional, team-based clinical training experience in caring for a diverse patient population, and one-on-one career mentorship from a dedicated general internal medicine faculty member.

The program brings together trainees from four clinical professions — medicine, physician assistants, pharmacy, and psychology — from several leading institutions and programs in clinical training:

• Hofstra Northwell School of Medicine
• Internal Medicine Residency Program at Northwell Health
• Hofstra Northwell School of Graduate Nursing and Physician Assistant Studies
• Pharmacy Program at St. John’s University College of Pharmacy and Health Sciences
• Psychology Extern Program at Northwell Health’s Zucker Hillside Hospital

“Today’s healthcare environment requires a greater emphasis on coordinated care across providers, patients, and their caregivers,” Dr. Conigliaro says. “The goal is to graduate confident primary care physicians who understand that efficiency and high-quality patient care depend on a cohesive team approach.”

“Northwell Health’s Department of Medicine has a strong tradition of providing excellent clinical care to patients in the ambulatory arena. This cornerstone of primary care has allowed us to build new and innovative programs of primary care delivery like IMPACcT to engage trainees and ultimately improve the care of our patient population.”

— Nancy LaVine, MD
Primary care settings and hospital emergency departments can provide fleeting openings for early intervention with at-risk substance users. These opportunities are often underutilized because clinicians feel uncomfortable or uncertain about how to address this topic. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a structured, evidence-based model used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs.

In 2013, the Substance Abuse and Mental Health Services Administration awarded more than $10 million to Northwell and the New York State Office of Alcoholism and Substance Abuse Services to collaborate with the National Center on Addiction and Substance Abuse to build a sustainable model of screening in primary care that can be replicated throughout the state. The project was to screen more than 150,000 individuals over five years at sites across the system. Front-line staff, such as nurses and medical office assistants, administer a five-item pre-screen for risky substance use behavior to all patients during triage. Based on the given responses, a negative or positive flag is auto-generated through an SBIRT tool embedded within the electronic health record. If positive, the patient is approached by an SBIRT health coach, who asks additional questions. Following this second screening, the SBIRT team determines if the patient is eligible for a brief intervention and/or referral to further treatment.

Halfway through its initial service grant, this partnership among the Departments of Medicine, Emergency Medicine, and Behavioral Health has already administered more than 160,000 screens in nine Northwell sites, far surpassing its goals. The next challenge is to scale and sustain SBIRT services by continuing to inform dissemination efforts of the SBIRT model in additional Northwell sites and throughout New York State. To diversify sustainability efforts, the team is partnering with digital health companies to develop tablet applications that facilitate SBIRT training and enhance service delivery. The Department of Medicine rollout to primary care practices is led by Sandeep Kapoor, MD (pictured second from right), with oversight by principal investigators Joseph Conigliaro, MD, MPH, Jonathan Morgenstern, PhD, and Nancy Kwon, MD, MPA. The team trains and engages nurses, medical assistants, residents, physicians, medical students, and other healthcare professionals to increase their knowledge, skills, and comfort level. The initiative’s interprofessional and interdisciplinary team-based approach has ignited thoughtful conversations about how to normalize the screening process and better help patients in need.
The promise of telehealth for patients with chronic conditions

An estimated five million Americans are living with congestive heart failure, and the prevalence is more than 25% greater among African Americans than whites. Congestive heart failure is the most frequent diagnosis in hospitalized patients over 65 and is a leading cause of disability and death.

Congestive heart failure is characterized by recurrent periods of clinical exacerbation that often lead to repeated physician office visits and high rates of emergency department and inpatient hospital utilization. Unfortunately, most patients living with this condition in the community receive exacerbation-focused care without a comprehensive chronic management program. As a result, the care is repetitive and inefficient, leading to costly cycles of hospitalization, rehabilitation, and home care after exacerbation. The only follow-up monitoring is an occasional physician office visit. This lack of management leads to poor health outcomes, reduced quality of life, limited functional status, and increased healthcare costs.

Renee Pekmezaris, PhD, studies ways to improve the quality of life for patients, especially those with chronic illnesses living in the community. In 2013, the Patient-Centered Outcomes Research Institute (PCORI) awarded the Feinstein Institute for Medical Research $1.35 million for a landmark study of telehealth technology, with Dr. Pekmezaris as principal investigator. Dr. Pekmezaris and her colleagues believe the study may identify a cost-effective care approach for community-dwelling patients living with chronic disease by demonstrating the feasibility of telemonitoring as a tool for self-management.

In the study, healthcare providers remotely monitor, evaluate, and educate patients on a weekly basis using video and other telecommunications technologies, and patients monitor their own conditions daily. The new delivery mechanism may result in improvements in health, satisfaction, and quality of life, in part because it encourages patients to take a more active role in their own care.

In July 2016, PCORI awarded an additional $1.5 million to the Feinstein Institute to study whether a home-based pulmonary rehabilitation program can meet the needs of Hispanic patients diagnosed with chronic obstructive pulmonary disease. Dr. Pekmezaris and Negin Hajizadeh, MD, MPH, are co-principal investigators.

Dr. Pekmezaris is a Professor at the Hofstra Northwell School of Medicine. As Northwell Health’s Vice President for Community Health and Health Services Research, she oversees a range of health services research studies, with a special focus on the growing population of patients living with complex and chronic illnesses.
Ready to face the past: Genetic insights as cancer control

Ravi N. Sharaf, MD, MS, is a pioneer in the revolutionary new field of clinical cancer genetics. He is focused on finding new hope for patients with hereditary gastrointestinal cancer syndromes. Dr. Sharaf heads Northwell Health’s Division of Gastroenterology’s initiative in gastrointestinal cancer genetics, a cornerstone program of the Northwell Cancer Institute. The initiative is a multidisciplinary effort, drawing on the expertise of the Department of Medicine, the Feinstein Institute for Medical Research, and Cold Spring Harbor Laboratory.

In his work, Dr. Sharaf pursues the National Cancer Institute mandate to “take the genome to the clinic” and realize the promise of precision medicine — an emerging approach to disease treatment and prevention where genomic information is used to tailor medical care. Dr. Sharaf has a particular interest in Lynch syndrome, the most common hereditary gastrointestinal cancer syndrome, which predisposes those affected to multiple different malignancies, including colorectal, endometrial, and ovarian cancers. The prevalence of Lynch syndrome is similar to that of hereditary breast and ovarian cancer syndrome; however, Lynch syndrome is much less publicized, meaning patients and physicians often overlook the diagnosis.

Lynch syndrome is caused by a mutation in one of five genes. Though cancer risk in Lynch syndrome is variable and gene-dependent, spanning as many as 60-fold genes, recommended clinical management is uniform, consisting of a lifetime of annual- to-biennial invasive screening tests and prophylactic risk-reducing surgery. Dr. Sharaf is working to tailor medical care in Lynch syndrome to a patient’s gene-dependent cancer risk by developing a model to help physicians determine which patients should undergo genetic testing and receive coaching from a genetic counselor. The hopeful result: A fine balance of screening that maximizes the appropriate use of medical tests, minimizes patient burden associated with intensive clinical care, and shapes national health policy recommendations for gene-dependent clinical management in Lynch syndrome. The Department of Health and Human Services and the Centers for Disease Control and Prevention have identified this type of work as a national priority.

Grounding Dr. Sharaf’s research is an expertise in genetics, gastroenterology, health services research, and clinical-guideline development. He received his formative training at the National Institutes of Health and NewYork-Presbyterian/Columbia University Medical Center. He also trained at Stanford University Hospital & Clinics, completing fellowships in gastroenterology and cancer genetics and obtaining a Master’s degree in Epidemiology and Clinical Research.

Dr. Sharaf was recently named to the National Cancer Institute Cancer Research Network Scholars Program and received a New York State Empire Clinical Research Investigator Program award. In 2014, Dr. Sharaf was one of only seven individuals selected for the AcademyHealth Delivery System Science Fellowship, a competitive professional development grant that supports experienced investigators in enhancing and applying their analytic skills to critical research topics in a delivery-system setting.

Before shifting his focus to research, Dr. Sharaf supervised the Division of Gastroenterology’s quality improvement initiatives and was awarded a prestigious United Hospital Fund fellowship designed to develop national leaders in quality and patient safety.

Dr. Sharaf is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.

“My goal is to develop and deliver personalized medicine on a population level. The clinical, research, and operational infrastructure at Northwell makes this possible in a manner that few institutions can.”

– Ravi Sharaf, MD, MS
Evolving upward and onward: A new clinical trials center builds on momentum

As the Department of Medicine continues to grow its research enterprise, it has reached a natural next step in its evolution: solidifying the research infrastructure and creating the position of Vice Chair for Clinical Trials. With his many years of experience designing and running clinical trials, David Bernstein, MD, was the natural choice for the new position. Along with his responsibilities in this new role, he will continue to serve as Chief of the Department of Medicine Division of Hepatology and Director of the new Sandra Atlas Bass Center for Liver Diseases.

The appeal of clinical studies lies not just in new partnerships with leaders in the field, but also in the ability to offer patients early access to new therapeutics. The Department’s research work has grown in both quantity and quality, with a cultural shift initiated by Department Chair Thomas G. McGinn, MD, MPH, and accelerated by the highly visible presence of the Hofstra Northwell School of Medicine.

Over the past 10 years, the Department has established key research recruitment sites for trials of pharmaceuticals in Hepatitis C, lupus, and inflammatory bowel disease (IBD), among others.

To explore opportunities and expand the Department’s clinical trials, Dr. Bernstein is collaborating with Elaine Brennan, Managing Director of Northwell’s Pharma Ventures team. Pharma Ventures seeks to develop partnerships with global pharmaceutical, biotech, and device companies and establish Northwell as the premier destination for industry-sponsored clinical research. To date, the team has partnered with several pharmaceutical companies and other private industries to launch studies in areas such as genomics research for personalized medicine, a telemedicine strategy for diabetes patients, new diagnostics for sepsis in ICU patients, and medication trackers for chronic obstructive pulmonary disease medication.

Northwell’s uniquely large, diverse patient population provides an ideal foundation for a successful clinical trials operation.

“The tremendous clinical volume of virtually every disease state, in a multi-ethnic, multi-economic setting, positions Northwell to fill any clinical trial for any disease out there.”

—David Bernstein, MD
Clinical Care

175,197
OUTPATIENT VISITS IN 2015

243,602
INPATIENT VISITS IN 2015

$75,869,606
NET PATIENT REVENUE

NSUH & LIJMC
JOINT COMMISSION DISEASE-SPECIFIC CARE CERTIFICATION
INPATIENT DIABETES & PALLIATIVE CARE

$2.5 MILLION
GRANT FROM CMS TO EXPAND
HEALTHY TRANSITIONS
FOR CHRONIC KIDNEY DISEASE

SANDRA ATLAS BASS
CENTER FOR LIVER DISEASES
OPENED SEPTEMBER 2016

36,000
MEDICARE BENEFICIARIES IN
MSSP ACO LAUNCHED IN 2016

1 of 14
COMMUNITY BASED PALLIATIVE CARE LEADERSHIP CENTERS IN
THE NATION

100+
AMBULATORY SITES

$3.8 MILLION
FIVE-YEAR GRANT FROM THE
CDC AWARDED TO PREVENT
HIV/AIDS ON LONG ISLAND, NEW YORK

537 faculty
JOINT VENTURE IN 2016 WITH
DAVITA TO DELIVER FULL SUITE OF
OF KIDNEY CARE SERVICES

300 hospitalists
ACROSS 14 PROGRAMS

NEW IN 2015: CENTER FOR
WEIGHT MANAGEMENT
“Northwell is uniquely poised to deliver care to racially and socioeconomically diverse populations residing in urban and suburban settings. Thus, the institution becomes a laboratory of potential discoveries that can then be translated to other systems.”

—Lyndonna Marrast, MD, MPH

Shining a light on health disparities

The Affordable Care Act (ACA) is gradually increasing healthcare coverage for poor, uninsured, and minority Americans, but whether it improves their access to care will depend on the availability of physicians. Currently, the majority of U.S. minority patients are cared for by doctors who are also minorities, despite their relative underrepresentation: African-Americans make up 12% of the population, but just 6.3% are physicians. Hispanics make up 16% of the population, but only 5.5% are physicians.

Lyndonna M. Marrast, MD, MPH, was principal investigator for the landmark study that confirmed these striking data, with results published in 2014 in JAMA Internal Medicine. Dr. Marrast has been using these data to make a strong case for diversifying the physician workforce. In her view, diversification is an important strategy for better meeting the healthcare needs of disadvantaged patients as ACA implementation proceeds.

Analyzing data from a federal survey of 7,070 patients, Dr. Marrast found that disadvantaged patients were more likely to be cared for by minority physicians, regardless of how “disadvantaged” was defined: by income, race/ethnicity, Medicaid-insured, uninsured, non-English speaking, or poor health.

Dr. Marrast is expanding her research portfolio to study technology-based interventions to improve primary care for patients with diabetes. For example, she uses culturally appropriate patient education strategies to reach Indo-Americans. In another visible and wide-reaching effort to increase awareness of health disparities, Dr. Marrast is collaborating with colleagues in the Department and the School of Medicine to craft the foundational material for a federally supported educational project that has the potential to fundamentally re-shape primary care. She is serving as the Health Equity content lead.

Dr. Marrast’s background is an extraordinary blend of training, research, and experience in internal medicine, public health, and health disparities. Just before her recent appointment as Assistant Professor of Medicine at Hofstra Northwell School of Medicine, she completed a two-year fellowship in general internal medicine at Cambridge Health Alliance (CHA), a teaching affiliate of Harvard Medical School. At the same time, she earned a Master’s degree in Public Health at Harvard School of Public Health, with a focus on clinical effectiveness.

In 2015, Dr. Marrast was a finalist for the Society of General Internal Medicine Milton W. Hamolsky Junior Faculty Scientific Presentation Award. The recognition was for her work on racial and ethnic disparities in mental health and related expenditures for children and young adults across the U.S. The results were published in 2016 in the International Journal of Health Services.
Dr. Sandy Balwan

Sandy Balwan, MD, is not one to sit on the sidelines. As the landscape of medical practice evolved, she knew she wanted to “direct change, rather than be in the passenger seat.”

As Chief Medical Officer/Vice President of the Northwell Health Clinical Integration Network IPA (Independent Practice Association), she is realizing that goal. Her team simplifies participation in value-based arrangements — both commercial and governmental — for community-based providers in the Northwell Health Premium Network, a subset of the IPA. Premium Network providers are held accountable to and rewarded on quality performance on pre-defined measures for all patients under value-based offerings.

The IPA also manages Northwell Health ACO, the organization’s Medicare Shared Savings Program, which launched in 2016 and covers approximately 36,000 Medicare beneficiaries. As part of this program, the IPA works with its community-based providers to ensure they succeed under MACRA (Medicare Access and CHIP Reauthorization Act of 2015).

Dr. Balwan still sees and maintains a close connection with patients. “If I have lab and imaging results they need to know about, I call them myself,” she says. “Coordinating care is part of my job.”

Dr. Balwan is Associate Professor of Medicine at Hofstra School of Medicine.

Dr. Warren Licht

Northwell Health is continuing to expand its ambulatory network westward, with Warren B. Licht, MD, at the helm.

As Vice Chair for Ambulatory Operations for the Medicine Service Line, Dr. Licht is responsible for recruiting physicians and integrating established practices under the Northwell umbrella. “In an era of physician burnout, I want to ensure that practicing medicine as part of the Northwell team remains rewarding for physicians at all stages of their career,” says Dr. Licht.

Dr. Licht is also the clinical operations lead for the service line’s 14 Manhattan-based ambulatory practices. He has recently started working with leadership in Westchester and Staten Island to expand their ambulatory networks.

At Lenox Health Greenwich Village, which houses the first freestanding emergency department in Manhattan, Dr. Licht serves as Director of Medical Affairs, liaising with the physician community and alerting them to the facility’s short wait times and its laboratory and imaging services.

With a longstanding interest in overseas work, Dr. Licht has also devoted time to the nonprofit organization Crossing Thresholds. Its goal is to provide educational opportunities for underprivileged children in Kenya.

Dr. Licht is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.
Division of Rheumatology: Growth, diversification, innovation

The Northwell Health Division of Rheumatology is making significant advances in all three aspects of the Department of Medicine’s tripartite mission: clinical care, research, and education. Its breadth and depth are striking: innovative treatment for common disorders and unusual cases; a continuously groundbreaking research enterprise; and expanding educational offerings at all levels of physician training and development. The Division’s unique corps of pioneers, thought leaders, and rising stars attracts one of the nation’s most diverse patient populations, providing unparalleled opportunities for research and training. Headed by Richard Furie, MD, an internationally respected expert in lupus and anti-rheumatic drug development, the Division boasts centers of excellence in care for the full range of rheumatic and immunological disorders.

World-class research

The Division’s research enterprise runs the gamut of contemporary biomedical studies, with today’s thought leaders mentoring and collaborating with tomorrow’s innovators. Trained as a rheumatologist, Peter K. Gregersen, MD, has devoted more than three decades to understanding the molecular genetics of rheumatoid arthritis and has identified more than 50 genes associated with risk for autoimmune disorders. A frequent collaborator with Dr. Gregersen, Betty Diamond, MD, has shattered paradigms and transformed lives with her work on autoimmune and musculoskeletal disorders, especially systemic lupus erythematosus (SLE). She played a leading role in identifying the genetic basis for antibody production and showed that anti-DNA antibodies can arise by somatic mutation during an immune response.

Dr. Furie is an international authority on clinical research design in the area of systemic lupus. He played a pivotal role on the Northwell team developing belimumab (Benlysta), a monoclonal antibody that lowers levels of a growth factor essential to the survival of B cells, which are critical to the development of autoimmunity. Unmet needs, however, remain for patients with SLE. Therefore, his team is industriously pursuing the next breakthrough in SLE treatment.

Galina S. Marder, MD, also served on the Northwell Health team that worked on the development of belimumab. She is continuing that work as investigator on a study evaluating the efficacy and safety of belimumab as a maintenance therapy in adults with refractory idiopathic inflammatory myopathies.

The Division’s strong tradition of innovative research is reflected in the work of rheumatologist Meggan Mackay, MD, who serves as the Department of Medicine’s Associate Chair for Research, and co-directs, with Cynthia Aranow, MD, the clinical trials unit in the Center for Autoimmune & Musculoskeletal Disease of the Feinstein Institute for Medical Research. The Center brings together investigators across the traditional research continuum, supporting innovative approaches to the study of autoimmune disease from bench to bedside.
“With a three-decade perspective, I continue to be amazed by the incredible transformation of Northwell Health in all aspects of health care, from patient care to education to research.”

– Richard Furie, MD

A system-wide infusion center

A clinical cornerstone of the Division is the Center for Infusion Therapy, which takes advantage of the Division’s unique synergy among its clinical care, research, and training missions. The Center was launched with just two beds when the Division’s research program started in 1995. The timing was fortuitous: A new age in anti-rheumatic drug development was dawning, and Northwell was at the forefront as biologics came onto the scene. One of the first drugs to be approved was infliximab (Remicade), a monoclonal therapeutic antibody that revolutionized the treatment of rheumatoid arthritis, psoriatic arthritis, and inflammatory bowel disease. The Center soon expanded from clinical research on Remicade to administering it to patients more broadly. As other biologics were approved, the small unit, designed solely for clinical research, was shared between clinical research study infusions and administration of the new biologics as they were approved. With just two beds, three nurses, and a research coordinator packed into approximately 100 square feet, additional space was needed. Two moves later, the Center now has about 10,000 square feet of clinical space and an eight-bed unit for both research and commercial infusions.

Today, the program has transitioned into a premier Northwell Health site for infusions of biologics for patients with inflammatory diseases. Under the leadership of Ann McCally, RN, a team of five nurses has amassed unequalled experience and expertise in infusing patients with a vast array of immune-mediated disorders.

Looking ahead, Dr. Furie (pictured at right) sees the landscape continuing to shift. “Biologics and novel small molecule therapies are changing the field,” he says. “The immunology revolution, the transition from lab to bedside, has been uplifting for the field of rheumatology. The new treatments have had transformative effects on patient care, not just for rheumatoid and psoriatic arthritis, but for lupus and all the other inflammatory diseases.”

As a result, the Division’s fellowship program has grown, from a single fellow each year to two, and is now directed by Anne Davidson, MBBS. Adds Dr. Davidson, “In a sign of the times, they’re focused on research careers in clinical medicine, not just laboratory-based work, largely because of the remarkable clinical exposure here at Northwell Health. They see interesting case after interesting case, where interventions with novel treatments make a big difference.”

Dr. Furie adds that one way he encourages and supports the division’s physicians is to provide each one with a niche to develop in the form of a specialized center of care and research. “For example, my focus is on lupus and antiphospholipid syndrome, and I do research in lupus and I follow the literature in lupus.” He notes that this broad-based version of subspecialization is no doubt responsible for Northwell’s appeal to doctors and even more so to patients. “Here they can come and see international authorities with very specific expertise.”
A lifelong commitment to serving

Bridget I. Earle, MD, still remembers the moment she knew she wanted to be a doctor. She was still in high school and was participating in the Mount Sinai Scholars Program, an endeavor designed to bring underrepresented minorities into the medical profession.

“My three summers shadowing an African American medical student were pivotal,” Dr. Earle recalls. “It was the first time I saw African Americans training to be doctors.”

Yet she took her time taking the plunge after graduating from New York University. She decided to give back to her community by teaching high school chemistry at the Paul Robeson School in Brooklyn. “It was the best thing I ever did,” Dr. Earle says. “I was able to serve as a mentor to my students and inspire them, just as my medical school mentor had done for me.”

But medicine was her true calling. Dr. Earle completed her internal medicine residency at North Shore University Hospital, where she served as chief resident. Her first position was as a hospitalist at Greenwich Hospital, where she saw firsthand older patients suffering before they died. At the time, the hospital did not have a palliative care program.

Seeing a need, Dr. Earle came back to North Shore University Hospital to complete a yearlong fellowship in hospice and palliative care. She now serves as the site director of the geriatric and palliative medicine team at North Shore University Hospital, as well as director of the 10-bed palliative care and advanced illness suite.

Under her watch, the team offers symptom control for pain and agitation for patients who are “older, complex, and vulnerable,” as well as support for family members and guidance in making difficult decisions, such as when to stop treatment.

Dr. Earle is well known in the palliative care community. Over the past two years, she has presented her work in the field at the Center to Advance Palliative Care (CAPC) national seminar. Her areas of interest include music therapy and examining racial disparities at the end of life.

In fact, Dr. Earle is working on adding music therapy to North Shore’s program. “I’ve seen staff at risk for burnout and patients suffering from pain and anxiety respond to the calming effect of music,” she says.

Although her career focus is on older patients, she has never forgotten the importance of mentoring young people. In June 2016, Dr. Earle gave the keynote address for the Medical Scholars Pipeline Program at Hofstra Northwell School of Medicine. Similar to the Mount Sinai program Dr. Earle attended, this program’s mission is to increase the number of underrepresented groups in health care.

Speaking to an audience of high school students starting the program, Dr. Earle sent them a heartfelt message. “I attended a program like this one when I was young, and it changed my life,” she told the students. “I am an example of what can happen when you believe in your dreams. You find out that they are attainable.”

Dr. Earle is Assistant Professor of Medicine at Hofstra Northwell School of Medicine.
He has also pioneered several innovative population health programs. One of these efforts is the Program for Transition from Pediatric to Adult Primary Care. Its goal is to facilitate the transition of young adults with special health care needs from pediatric to adult primary care, while minimizing the loss of critical medical information and ensuring that patients have continued care. The program is a joint effort between the Divisions of General Internal Medicine, General Pediatrics, and Adolescent Medicine. This effort is led by a multidisciplinary team, including Mariecel Pilapil, MD, MPH, dual-trained in internal medicine and pediatrics; Daniel Coletti, PhD, a clinical psychologist in the Division of General Internal Medicine; and Cindy Rabey, RN, a clinical nurse.

Dr. Conigliaro also oversees another innovative program — the Northwell Health Center for Weight Management. He recruited a top physician, Jamie Kane, MD, diplomate of the American Board of Obesity Medicine, to lead this program. It approaches weight loss with a holistic and empathetic focus on behavioral strategies to optimize the overall health of patients and their quality of life. The program offers a multidisciplinary approach involving medical, psychological, and nutritional assessments to provide each patient with skills in goal setting, weight and behavioral management, lifestyle planning, and problem solving. The Weight Management Program supports patients at three practice locations, from Manhattan to Great Neck to Syosset.

In addition, the Division places a strong emphasis on improving the quality of patient care. The leadership team systematically assesses vaccination (influenza and pneumococcal pneumonia), screening rates for breast and colorectal cancer, hemoglobin A1c levels in diabetics, and patient experience metrics through Press Ganey. During monthly data reviews, the team compares provider and site-level data against peers and looks for opportunities to improve. In addition, the Division’s practice at 865 Northern Boulevard is certified through 2017 by the NCQA (National Committee for Quality Assurance) Diabetes Recognition Program for its use of evidence-based measures and for providing excellent diabetes management, which includes control of diabetic hemoglobin A1c levels, blood pressure control, eye examinations, nephropathy assessment, and smoking and tobacco advice and cessation. The practice also recently received NCQA Level 3 Patient-Centered Medical Home (PCMH) certification.

Dr. Conigliaro is Professor of Medicine at Hofstra Northwell School of Medicine.
Northwell Health has a long tradition serving the Long Island community in the field of advanced endoscopy, earning a reputation for excellence. To lead this growing enterprise, Northwell now has its first system-wide Chief of Endoscopy: Divyesh Sejpal, MD.

Dr. Sejpal’s research and clinical care are uniquely synergistic, making state-of-the-art evidence and cutting-edge technologies available to clinicians on the frontlines while encouraging and guiding research initiatives and quality control. This support is offered across the organization’s diverse clinical settings, including all endoscopy practices, as well as hospital-based inpatient and ambulatory care and diagnostics.

Nationally known as an innovator in imaging modalities and therapeutic endoscopy, Dr. Sejpal has focused on bringing the latest technologies to the organization, including optical coherence tomography for imaging Barrett’s esophagus; confocal laser endomicroscopy for evaluation of biliary strictures and pancreatic cysts; endoscopic drainage of pancreatic fluid collections; and single operator cholangiopancreatoscopy, an endoscopic method used for both direct visual diagnostic evaluation and simultaneous therapeutic intervention of the bile ducts and pancreatic ducts. Dr. Sejpal also has numerous funded active clinical trials. He recently received a grant for a study that prospectively evaluates cholangioscopy in the detection of residual biliary stones that are missed during conventional endoscopic retrograde cholangiopancreatography, or ERCP.

Since coming to Northwell Health, Dr. Sejpal has taken a special interest in the Bioskills Education Center. This 6,200-square-foot state-of-the-art facility offers surgical training, continuing medical education, and research with the most advanced technologies in video and endoscopic surgical equipment. Its mission: to provide an exceptional hands-on experience utilizing cadaveric specimens for regional, national, and international workshops for audiences that include physicians, medical professionals, associations, and vendors.

Dr. Sejpal established a fellowship in advanced endoscopy in the summer of 2014. He is Professor of Medicine at Hofstra Northwell School of Medicine.
“I love being a physician. My career adds value to my life. I am energized to make an impact on direct patient care on a broad scale, to work at improving processes and the outcomes of healthcare delivery.”

– Henry Bodenheimer, MD

Another perspective on the science of healthcare delivery

Henry Bodenheimer, MD, has pursued a multifaceted career in medicine: as a physician and clinical researcher in the areas of autoimmune liver disease, advanced transplantation, and hepatitis, and as a leader in health care.

While a resident in internal medicine, Dr. Bodenheimer was introduced to liver disease by pioneers in the field, those who defined it as a specialty. His interest in transplantation emerged and thrived during and after his fellowship, just at the time when transplantation was expanding in the U.S. Around the same time, Dr. Bodenheimer also conducted cutting-edge clinical research, publishing in the New England Journal of Medicine some of the original papers defining treatment of Hepatitis C with interferon, the first generally available treatment for this disease.

An additional clinical focus has been autoimmune liver disease, particularly primary biliary cholangitis (PBC), a complex, highly variable condition that leads to cirrhosis, liver failure, and at times, transplantation. Still a primary research interest of his, Dr. Bodenheimer says of PBC: “I was drawn to study it because of the significant challenges for these patients, who face multiple associated autoimmune conditions. They may present not only with liver disease but also with autoimmune thyroid disease; vitiligo, an autoimmune skin disease; rheumatoid arthritis; celiac disease; or systemic lupus.” Starting at the time of his fellowship, he conducted multiple clinical trials on therapeutics for PBC. His first paper on liver disease was a review of this condition, published in 1979.

Dr. Bodenheimer joined the Department of Medicine in September 2015. He says he was attracted to Northwell Health because of his growing interest in health system innovation, which began while serving at Beth Israel Medical Center in Manhattan, first as Chief of Gastroenterology and then as Chair of Medicine. The move to Northwell Health, a vibrant, rapidly evolving healthcare organization, gives him the opportunity to have an impact on the quality of delivery of health care on a large scale. His passion is not only about the care of his individual patients, but includes a vision of how excellent care can be delivered at scale to improve health outcomes for a community. He acknowledges the rapid changes in the healthcare field have been disruptive, but not without added value. “Much of health care had been designed around caregivers rather than patients.”

Dr. Bodenheimer divides his time at Northwell Health’s Department of Medicine into two parts: half as a clinician in the Department’s rapidly growing Sandra A. Bass Center for Liver Diseases, half as Medical Director for the Eastern Region of the Medicine Service Line. There, his job is to help integrate practices with Northwell’s systems.

Dr. Bodenheimer is Professor of Medicine at Hofstra Northwell School of Medicine.
Bedside endocrinologists improve post-discharge outcomes

Most endocrinologists do the bulk of their work in the outpatient setting. Occasionally, they might see a patient or two in the hospital, but that’s not their primary focus. That’s how it was when Rifka C. Schulman, MD, was a resident and chief resident at Long Island Jewish Medical Center (LIJMC).

But the diabetes epidemic sweeping the nation for years has changed the picture, calling for a new approach. On any given day, roughly one-third of hospitalized patients at LIJ have diabetes. While general medical and surgical teams handle more straightforward cases of diabetes, the inpatient diabetes team has been set up to manage the most complicated ones. Challenges for these patients run the gamut and include poor dietary choices, fear of insulin injections, interactions with other medications that exacerbate glucose levels, and lack of insurance and social support.

“Many of our patients come from overseas, have limited financial resources, and frequently don’t speak English,” says Dr. Schulman. “These are the ones we put a lot of effort into. It’s essential to come up with a realistic plan for when they go home. For example, an uninsured patient discharged with a standard insulin plan will likely be unable to afford the over $400 monthly out-of-pocket expense, which often results in non-compliance. So we send our uninsured patients home with a cost-effective insulin plan. We’ve found that this approach enables them to obtain the medication and comply with their post-discharge instructions.”

Dr. Schulman leads a multidisciplinary team that includes fellows, who handle initial consultations, two nurse practitioners, two nurse educators, residents, and medical students. The team works closely to maximize available resources so that patients get what they need. The team also coordinates care post-discharge.

Northwell Health’s diabetes programs have been awarded the Joint Commission’s Certificate of Distinction for Inpatient Diabetes Care. “That was a huge initiative,” says Dr. Schulman. “It took several years to line up the necessary resources and create protocols for insulin pumps, hypoglycemia, and other needs.” The initiative also maintains ongoing performance improvement metrics to track rates of hyperglycemia, hypoglycemia, hemoglobin A1c monitoring, and diabetes education on all of the hospital units.

“Most endocrinologists in the community do not regularly come to the hospital. I’m effectively an endocrinology hospitalist.”

– Rifka Schulman, MD
“We’ve been putting these programs together for over a decade. Now everything has clicked: primary care, health education, nutrition, pharmacy support, Hepatitis C treatment, support groups, legal aid. It’s taken years to build it all. So when the field caught up, we were ready.”

– Joseph McGowan, MD

Patience, planning, and stellar teamwork build New York’s top AIDS program

New York State is at the forefront of the campaign to end the HIV/AIDS epidemic, and Northwell’s Center for AIDS Research and Treatment (CART) is leading New York’s efforts. The largest New York State-designated AIDS Center on Long Island, CART provides comprehensive HIV care to more than 2,100 HIV-infected individuals. CART’s model of care focuses on “one-stop” multidisciplinary HIV primary care. The model includes CART’s innovative medical case management program, which has a strong focus on linkage and retention in care. It uses creative outreach strategies to identify and engage individuals without scheduled appointments and those who have dropped out of care.

The ability to achieve complete suppression of HIV has dramatically changed the outcome of this once universally fatal infection, and CART’s services reflect those changes. Obstetrical services deliver healthy, virus-free babies to infected mothers; surgical services provide comprehensive surgical care; and advanced dental care is offered at multiple locations. Clinical trials provide the newest therapeutics and state-of-the-art treatments. Extensive psychosocial, mental health, medical nutrition, specialty pharmacy, health education, legal aid, and treatment adherence programs supplement primary care to help patients achieve emotional control over their disease while ensuring proper use of medications.

CART Director Joseph P. McGowan, MD, provides some context for all the superlatives: “We’ve cobbled together at least a dozen grants to develop a very comprehensive management program that can serve as a model not just for HIV care but for any chronic disease.” For example, despite the need for prevention, outreach has never been a strong suit for providers. “We had to break down the walls,” he continues. “We know we’ve always delivered excellent care, but now we’ve opened a satellite clinic, we’re out in the field, we’re testing people, we’re doing behavioral interventions with high-risk HIV-negative people to keep them healthy, and we are providing PrEP (Pre-exposure prophylaxis) to prevent HIV infections in high-risk persons.”

In recognition of this work, the U.S. Centers for Disease Control and Prevention (CDC) recently awarded CART a five-year, $3.8 million grant to prevent HIV and AIDS on Long Island. Dr. McGowan is the principal investigator for the project, which is part of a $216 million federal initiative to deliver the most effective HIV prevention strategies among 90 community-based organizations nationwide.

CART also has initiatives underway to increase HIV testing in the primary care setting, particularly in urgent care centers and every emergency department in Northwell’s 21 hospitals. “It’s been the law since 2010, but implementation has been a challenge,” Dr. McGowan says. “If you look at emergency departments across the country, uptake on HIV testing is often extremely low. But by standardizing it and rolling it smoothly into the primary care workflow across Northwell Health, it has been adopted as a model program for the entire state.”
Meeting the patients where they are

Over the past 13 years, during CART’s tremendous growth spurt, Dr. McGowan and his staff have been struck by the grave missed opportunities resulting from patients who are no longer in touch. To address this issue, the team decided to implement a multi-pronged, proactive strategy to retain them.

Retention is an explicit top priority for every patient, starting with admission. A full-time social worker, supported by the team’s health educators, focuses solely on enhancing retention. On a regular basis, a list is generated of the 2,300 patients who received care at CART over the most recent two years but have not been seen since, or have no upcoming appointment scheduled.

Using that confidential list, CART staff launch an array of outreach tools. They begin with standard fare such as telephone calls followed by letters. Next, however, they go out to “meet” the patients where they are, scouring thousands of healthcare and vital records such as hospital admissions, pharmacy records, and state health records. If these searches come up empty-handed, the team steps up its game, sending the dedicated outreach worker into the field — always with the simple, pressing mandate — to “make contact.”

CART patients maintain an HIV viral suppression rate of 93%, compared to 53% for Long Island and New York State. At the heart of the program is CART’s open-door policy, which mandates that all who seek treatment must be accepted regardless of ability to pay.
Talking about transition: Changes in the field and the division

In 2015, the leadership at Northwell Health’s Division of Pulmonary, Critical Care, and Sleep Medicine experienced a big change. Long-time Division Chief Harry Steinberg, MD (pictured at left), stepped down, and Harly Greenberg, MD (pictured at right), took the helm. The outgoing and incoming chiefs have been colleagues for almost 25 years, most of that time at Northwell Health.

Trained as a pulmonologist, Harry Steinberg, MD, was the division’s first chief and served as acting chair of the Department of Medicine for a year. He mentored incoming chief Harly Greenberg, MD, as the two built Northwell Health’s pioneering program in sleep medicine from the ground up. Dr. Greenberg has advanced the field of sleep medicine as investigator or co-investigator of many clinical research trials, with special focus on the cardiovascular consequences of obstructive sleep apnea. His clinical expertise also includes other respiratory disorders of sleep: insomnia, narcolepsy, parasomnias, restless leg syndrome, and circadian-rhythm sleep disorders. Dr. Greenberg was co-investigator on a major international clinical trial that established the efficacy of continuous positive airway pressure (CPAP) therapy as an important treatment for patients with mild- to- moderate obstructive sleep apnea.

The Northwell Health Sleep Disorders Center is one of the largest sleep medicine diagnostic and treatment facilities in the region. Fully accredited by the American Academy of Sleep Medicine, the Center performs nearly 2,000 adult and pediatric sleep evaluations each year and hosts a fully accredited Sleep Medicine Fellowship Program.

To mark the transition, a reporter sat down with Department of Medicine Chair Thomas McGinn, Dr. Steinberg, and Dr. Greenberg to talk about their shared history and the field of pulmonary, critical care, and sleep medicine.

“Dr. Greenberg’s abilities as an academician, teacher, mentor, and caregiver are unsurpassed. I am confident he will provide the leadership and vision our division and our patients deserve.”

– Harry Steinberg, MD
Dr. Steinberg: When I started, back in 1974, I was the sole pulmonologist at LIJ (Long Island Jewish Medical Center). Today we have 35 faculty. We’re as big as some departments of medicine in small hospitals.

Dr. Greenberg: I remember a story you told me. The Chair of Medicine came to you and said, “You’re pulmonary — what are you going to do?”

Dr. McGinn: He’s found plenty to do.

Dr. Steinberg: Harly did his residency in internal medicine at North Shore University Hospital and went back to NYU for pulmonary fellowship training.

Dr. Greenberg: Then I was hired as full-time faculty at North Shore by the first pulmonology division chief there, the late Mark Schiff, whom we still honor every year at our grand rounds. But I always wanted to develop a sleep medicine program, and I knew that Harry had an interest in that and would be an excellent mentor to me. He turned out to be better than I could have imagined.

Dr. Steinberg: We knew that Harly was at North Shore, so we wrote an advertisement to entice him. And who answered it? His wife, also a pulmonologist, who was working at our then affiliate, Queens Hospital Center. We hired them both! We worked together to grow the program in sleep medicine. We provided clinical care, and we had a very active research program in pulmonary physiology as it related to disorders of breathing during sleep. That was our start.

Our first sleep lab was a bronchoscopy suite during the day. After hours, we opened a futon and put out a little night table and lamp, and it became a sleep lab.

Dr. Greenberg: Harry has been my mentor now for 24 years. I’m very happy that he’s still here to guide me with decisions and different processes along the way.

Q: Are you going to continue on faculty?
Dr. Steinberg: Yes.

Q: What’s the best thing about being able to hand off your work product to a mentee?
Dr. Steinberg: Saturdays and Sundays. [laughs] Having had a hand in developing this program, it’s very important to me to hand it off to someone who will grow it even more. I feel very confident that Harly can take on everything that we’re doing and make it even better. I actually want to hang out and see how it turns out.

Q: Dr. Greenberg has focused on sleep medicine. Dr. Steinberg, what would you say has been your area of interest?
Dr. Steinberg: That’s kind of hard to answer because in the beginning I had to do pretty much everything. Much of what I do now wasn’t there when I started. The whole of medicine, the whole model — everything changed dramatically during my generation. My teachers were all TB docs. And as the field has evolved, I’ve tried to stay interested in everything along the way.

Dr. McGinn: We call it “the master clinician/leader” — taking on the complex patient and putting it all together.

Q: What’s the future of the master clinician?
Dr. McGinn: We have this conversation all the time. You lose [detailed, specific knowledge], and you regret it. On the other hand, these narrow, focused models can also be extremely limiting if people aren’t able to see the big picture.

Dr. Steinberg: I think the goal is to teach inquisitiveness if you can. Curiosity is going to lead people to answer the questions, hopefully, and give them the tools for finding the answers.

Dr. Greenberg: Harry has grown the division in so many areas, and established an academic-based, quality division that’s excelled, akin to the major university pulmonary divisions around the country. That’s a model that’s wonderful to build on. I don’t need to make any drastic changes.

Dr. Steinberg: It’s like watching my grandchildren grow and seeing how it turns out. I enjoy taking on challenges, as Harly will. Fortunately, we have a phenomenal group of colleagues. We can reach into that group and say, “You’re going to be responsible for this.” That is extraordinarily valuable — to be around younger colleagues who excel in what they do, and watch them develop. I enjoy coming to work, to be around all of them.
“The good physician treats the disease; the great physician treats the patient who has the disease.”

– William Osler, MD, 1849-1919
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