



Spectrum
Healthcare Partners



2021 Service Profile

This past year has been a notable one for Spectrum Healthcare Partners. On September 30, 2021, Spectrum celebrated its 25th anniversary.

Over the years, we have grown from a relatively small medical practice to one of the largest healthcare organizations in the state of Maine. I am proud and appreciative of the work our physicians, advanced practice providers, other clinical staff, and our administrative team have accomplished last year – and the past 25 years – to advance our efforts to provide high-quality medical services to patients across northern New England.

While this past year has remained a unique experience for all of us while dealing with the impacts of the COVID-19 pandemic, those challenges have allowed our dedication, commitment, and resiliency to shine. It is during the hardest times that true leaders emerge, and Spectrum Healthcare Partners continues to be a champion for independent medical practices. As we welcome a new year, we will continue our focus on high-quality, cost-effective care, and we will continue to foster the collaborative relationships we share with our hospital, provider practice, health insurer, employer, government, and other partners.

The vision and dedication of our founding physicians established the foundation that we have built upon over the past 25 years. I invite you to watch our 25th anniversary video, which features several of our early physician leaders and founders of Spectrum including Drs. Christopher Pope, Roger Pezzuti, Michael Pancoe, Robert Isler, Katherine Pope, Stuart Gilbert, and Michael Jones. You will also hear from SHCP’s current physician leaders including our president, Dr. Michael Quinn, as well as one of our community board members, Dr. Eric Lister. These physicians share their perspectives on the formation of the organization and its most notable successes over the past quarter century. You can view the video at spectrumhcp.com/25thanniversary or by scanning the QR code below.

We look forward to continuing our work providing leadership and support to our communities, and we wish you all well.



Scan to watch our 25th anniversary video!

–David Landry, CEO



“It is during the hardest times that true leaders emerge, and Spectrum Healthcare Partners continues to be a champion for independent medical practices.”

Spectrum entered 2021 with high hopes that COVID-19 would soon subside. However, the year brought multiple variants and many more infections, with Maine recording more than 1,000 daily cases by the end of the year.

In the face of the continued pandemic, Spectrum remained nimble and resilient. Vaccinations for physicians and staff started in late 2020 and continued until everyone was protected. We are proud to have a 100% vaccination rate across the Spectrum enterprise. As a result of our efforts, interruptions have been progressively fewer and patient care has continued.

In 2021, the Spectrum board renewed its focus and commitment to delivering high-quality, cost-effective care in every community we serve. We have made many exciting changes to improve patient experience, including implementing a new electronic health record (EHR) in our orthopaedic and interventional radiology divisions (see story on page 14).

We’re privileged to serve our patients and look forward to more success in 2022.

–Herbert E. Cushing, MD



“As a result of our efforts, interruptions have been progressively fewer and patient care has continued.”

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**On September 30, 2021,
Spectrum Healthcare Partners
celebrated its 25th anniversary.**

Spectrum was formed as the result of a merger of five practices: two anesthesiology groups, two radiology groups, and one pathology group. Since then, Spectrum has integrated more than 10 other practices, developed multiple hospital relationships, and expanded into other communities.

In 1996, the physicians who founded the organization created a healthcare model that was largely unheard of at the time: a multispecialty medical practice that was both physician-owned and physician-directed. This model, which was the vision from day one, set the stage for Spectrum to influence healthcare policy and delivery, and has uniquely positioned the organization to provide high-value medical services throughout Maine and other parts of northern New England. The evolving healthcare model and changes in both the delivery and financing of medical services was key to both the formation and goals of Spectrum.

Historically, healthcare and medical services were delivered in a very decentralized and fragmented manner dominated by small, independent physician practices, community hospitals, and state-based health insurance companies. In the 1990s the industry experienced tremendous consolidation – first amongst the

insurance companies and then with the hospital systems. In 1995, there were 40 independent hospitals in Maine, nearly 12 commercial health insurance companies, and over 90% of the physicians were in private practice. Today, there are three health systems in Maine, four commercial health insurance companies, and over 70% of the physicians are employed by hospitals.

The vision of Spectrum's founding members was to create a large and diversified organization that would be able to sit at the same tables as the emerging health systems, regional and national health plans, government, business, and other key stakeholders. Spectrum continues to be relevant because size really does matter. Diversity – both geographically and from a specialty perspective – is important, and Spectrum's growth has allowed us to have influence with the key stakeholders in the region.

At the time of Spectrum's formation, there were roughly 55 physicians making up the organization, primarily centered at Maine Medical Center in Portland and Eastern Maine Medical Center in Bangor. The goal then was to find ways to expand outreach and accessibility and create a

platform to bring subspecialty medical care to more communities throughout Maine. This approach allowed Spectrum to increase their relevancy and influence in healthcare policy and financing.

Over the years, Spectrum grew from a relatively small medical practice to one of the largest healthcare organizations in the state of Maine, with over 200 physicians practicing in the areas of anesthesiology, orthopaedics, pain management, psychiatry, pathology, radiation oncology, radiology, and

vascular and interventional radiology services. Spectrum continues to be strong, resilient and a beacon for independent-minded physicians.

Spectrum has always been a champion for independent physician practices, which has fueled our growth and allowed us to remain nimble in the face of an ever-changing healthcare landscape. Spectrum's unique business model has provided a durable and scalable framework, as evidenced by the substantial growth across each division

and the management infrastructure that led to the establishment of Spectrum Management Services Company.

Spectrum Management Services Company was founded in 2019 through a partnership between Spectrum Healthcare Partners and MBMS, a leading national provider of medical billing services. Together, the organizations offer a comprehensive suite of practice management and financial services to improve its clients' business and operational performance.

25 years ago, Spectrum's founding physicians built a foundation that has supported the organization's growth and resiliency over the years.

Spectrum has meaningful partnerships with healthcare systems, employers, insurers, managed care organizations, and policy makers.

When decisions get made about healthcare delivery, the physician perspective is represented, which ensures our ability to deliver high-quality, cost-effective care in every community we serve.

Pictured, from L to R: Robert Isler, MD; Michael Quinn, MD; Katherine Pope, MD; Michael Pancoe, MD; Roger Pezzuti, MD; Eric Lister, MD; Stuart Gilbert, MD; Michael Jones, MD; David Landry; Christopher Pope, MD

2021

**We are proud to have
delivered 1,643,610
services, served
648,173 patients,
offered \$1,701,962 in
free patient care, and
\$1,018,776 in local and
statewide charitable
contributions.**

**1,643,610
services provided**

**648,173
patients served**

**\$1,701,962
free care provided**

**\$1,018,776
charitable
contributions**

1996

Spectrum Medical Group is formed through the merger of 5 practices.



Dolly the Sheep is cloned.

1997

Spectrum includes 65 physicians across three specialties: anesthesiology, pathology, and radiology.



First emojis are developed.

1998

David Landry joins Spectrum as COO, a role he holds until becoming CEO in 2007.



Google.com is founded.

MEANWHILE . . .

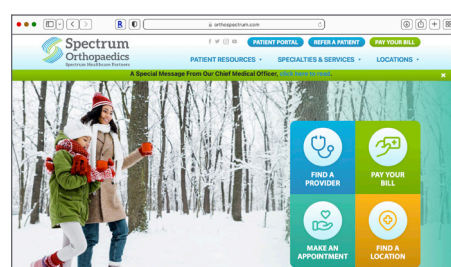
ANESTHESIOLOGY

Our anesthesiology division added a new pain management specialist in August of 2021. Syena Sarrafpour, MD, joined Isaac Chemmanam, MD, in providing pain management services at our orthopaedic practice in Portland. Our pain management physicians are uniquely qualified to prescribe and administer pain medications beyond the operating room and see patients at many of our sites of service.

Our anesthesiologist intensivists continue to provide critical care services at several hospitals across the state to help manage and provide care to patients during the COVID-19 pandemic. An anesthesiology intensivist is an anesthesiologist with additional training in critical care, including pharmacology and resuscitation. The Spectrum anesthesiology intensivist team, led by William Sauer, MD, was called upon by our hospital partners to expand our services during the height of the COVID-19 crisis in 2019.

ORTHOPAEDICS

In December of 2021, we launched a new orthopaedic website at OrthoSpectrum.com. We worked closely with our patients, physicians, and other key members of the orthopaedics team to gather feedback to create an improved visitor experience. The newly redesigned website offers visitors quick and easy navigation to our services, locations, and provider information as well as improved functionality, integrated social media buttons, and access to a new online patient portal. The patient portal will improve patient care and satisfaction by integrating patient engagement tools.



Preview of our new user-friendly orthopaedic website.

Our orthopaedic division launched a webinar series that is dedicated to discussing how best to address certain injuries that may occur in the workplace. The series is led by Spectrum Orthopaedics physicians who explain the physiology behind the injury, diagnostic processes, and potential treatment options.

PATHOLOGY

Our pathology division has a high standard of excellence measured by quality metrics to assure and improve patient care best practices. Spectrum's major discordance rate (the rate of inaccurate diagnoses) is .0018%, which is significantly lower than the 3% benchmark identified in the work of Peck, et al (1). In addition, Spectrum's pathology division performs routine second reviews of specimens 17.83% of the time, which exceeds the 8% benchmark identified in the work of Chantal, et al (2). In the second quarter of 2021, Spectrum's average turnaround time was 1.76 days, which exceeds the College of American Pathologists' benchmark of 2.0 days.



Michael A. Jones, MD, Spectrum pathologist, was honored as Life Trustee by ABPath for his many contributions to their board. Dr. Jones was a trustee of the ABPath from 2013–2020 and served as vice president in 2020 and treasurer in 2018–2019.

RADIATION ONCOLOGY

Our radiation oncology division, in collaboration with the Maine Medical Center Department of Radiation Oncology and the Maine Medical Center Research Institute, has expanded its research trials and is currently participating in 24 clinical trials. The studies allow patients with a broad range of malignancies to participate in cutting-edge, practice-changing research close to home. The program is very active, and during the past year enrolled 53 patients in these studies. The division has been a national accrual leader to both the Dana Farber Cancer Institute FABREC trial (hypofractionated vs. standard post-mastectomy radiation therapy after reconstruction) and the NRG CC007CD trial (investigates the role of survivorship care planning in prostate cancer) with 11 and 19 patients, respectively, in 2021 alone. The division also added four new phase-three trials to its portfolio that are particularly noteworthy: the ECOG-ACRIN's EA8191 INDICATE (prostate cancer), and EA2174 (esophagus cancer) trials, and NRG Oncology's GU009 PREDICT-RT (high-risk, localized prostate cancer) and BN007 (glioblastoma/brain cancer) trials. The results of all of these trials will improve outcomes for Mainers with cancer in the future.

RADIOLOGY

Collectively, the physicians in the Spectrum radiology north and radiology south divisions have subspecialty training in all areas of diagnostic radiology, making Spectrum the only healthcare team in the state of Maine that has the expertise to offer a full range of non-invasive diagnostic imaging exam interpretations by a radiologist with advanced subspecialty training. These areas include: computed tomography (CT), Magnetic resonance imaging (MRI), pediatric imaging, nuclear medicine neuroradiology, musculoskeletal radiology, breast imaging, and interventional radiology.

The radiology north division implemented OneConnect in March of 2021. OneConnect is a single source of communication consolidating a wide variety of communications, such as critical findings to referring providers. OneConnect is a best-practice support system creating improved patient care, enhanced customer service, improved radiologist satisfaction, and increased productivity.



Sharon Siegel, MD, Spectrum's radiologist, was elected as chair of radiology for Maine Medical Center. Dr. Siegel transitioned into this role in early January of 2022.

CORPORATE

Spectrum launched a dyad leadership program (Leading As Partners) in 2021 aimed at developing core competencies and fostering collaboration for each division's physician and administrative leaders. The areas of focus include Understanding Work Styles, The Art and Practice of Effective Communication, Leading Through the Unknown, and Influencing as Partners. Through workshops, coaching, and various assessments, the program supports the dyads, as well as each individual, as they proactively plan for and respond to challenges, support organizational culture, and provide financial stewardship.

Our Medical Staff Services team (MSS) deployed a new software platform, MD-Staff in April of 2021. The new platform has exceptional functionality and has allowed us to enhance credentialing and payor enrollment services to both SHCP providers and our external clients, as well as streamline our ambulatory surgery center (ASC) credentialing and privileging process. Additionally, MSS implemented physician CME activity trackers, which allows physicians to easily check on the progress of their CME during their current license period. The physician CME activity trackers are customized based on the physician specialty and accreditation requirements.

1999

Premier Health is established as Spectrum's first related venture focused on diagnostic imaging throughout Maine.



First Bluetooth device is launched.

2000

Spectrum continues to expand in Maine and begins offering services in NH and MA.



The first draft of the human genome is released.

2001

Radiation oncology is established as a separate division in Spectrum.



September 11 attacks occur in NY, DC, and PA.

(1) Martyn Peck 1, David Moffat 2, Bruce Latham 3, Tony Badrick 4, Review of diagnostic error in anatomical pathology and the role and value of second opinions in error prevention, PMID: 30068638 DOI: 10.1136/jclinpath-2018-205226
(2) Chantal C H J Kuijpers 1, Gerard Burger 2, Shaimaa Al-Janabi 2, Stefan M Willems 3, Paul J van Diest 3, Mehdi Jiwa, Improved quality of patient care through routine second review of histopathology specimens prior to multidisciplinary meeting, PMID: 27030307 DOI: 10.1136/jclinpath-2015-203488

In the 1980s and 1990s, medical images were stored in the basement of healthcare facilities in what were called “film libraries.” Radiologists were often “in-person” consultants to other physicians during the days of film. If physicians were looking for patient information, they would come down to the film library and “check out” a patient’s files . . . if they could find them. They would then bring the films over to the radiologists in the reading room and the radiologists would consult with the leading physician. Although a laborious process by today’s standards, these interactions provided a unique opportunity to collaborate and gain a greater understanding about clinical cases.

Largely led by the American College of Radiology (ACR) and National Electrical Manufacturers Association (NEMA), the creation of a process that could both transmit and store the medical images from and between hardware manufacturers began. The creation of picture archive and communications systems (PACS) developed in a way that allowed all medical studies to be stored in a digital database and then distributed out to the medical community electronically. These images could be seen simultaneously by multiple providers. The creation of such a database allowed larger hospitals to offer smaller hospitals a chance to collaborate and to improve access and technological capability. Smaller hospitals were offered

the chance to buy limited components of the whole system while also storing their medical images. This was an easy sell – a cost-effective way to improve patient care and delivery.

There are two primary uses for the PACS. One, PACS replaces hard-copy images; there is no longer a need to manage film archives. This not only improves convenience but also eliminates the need for space within a facility. Digital copy, often referred to as soft copy, can be accessed instantly. Two, the capabilities of off-site viewing and reporting is a monumental advancement in radiology and medicine as a whole. Practitioners are able to be at different physical locations while having access to the same information, simultaneously.

The PACS or, more generally, medical images, are integrated with health information systems. These include hospital information systems (HIS), electronic medical records (EMR), practice management systems (PM), and radiology information systems (RIS). This integration has led to improved patient experience, physician satisfaction, and care delivery. It has also allowed for improved management of workflow and has facilitated more frequent collaboration and case reviews among a wide group of practitioners.



Digital images integrated with electronic health records expand service lines and access to care and improve the overall delivery of patient care.

SPECTRUM HEALTHCARE PARTNERS WAS A CRITICAL ELEMENT TO THE EVOLUTION OF PACS IN MAINE.

In Maine in the 1990s, PACS were centered at Maine Medical Center. Early Spectrum radiologists, such as Roger Pezzuti, MD, championed these efforts with the hospitals. Spectrum Healthcare Partners, known then as Spectrum Medical Group, was a critical collaborator in the evolution of PACS in Maine. As imaging matured alongside CAT scanning, MRI, ultrasound, nuclear medicine, and interventional radiology, digital images were typically at the epicenter of diagnosis and treatment. Integrating digital images with electronic health records allowed service lines and access to care to expand as the overall delivery of patient care was improved.

SPECTRUM RADIOLOGY IN 2021

In 2021, Spectrum’s radiology division has continued to expand with its insourced teleradiology program. The program allows for radiologists to interpret studies from Maine sites of service while based in Florida, Colorado, Michigan, Connecticut, and Massachusetts. Through this program, Spectrum teleradiologists receive images to interpret from facilities that are outside the radiologists’ geographic vicinity. The radiologists are able to view the images and provide a

diagnostic interpretation while meeting turnaround time expectations.

In response to the global pandemic, a rapid deployment of home workstations became a priority to provide radiologic expertise in the event of physical distancing needs. “The teleradiology model provides a wide range of advantages,” states Michael Quinn, MD, radiologist in Spectrum’s radiology south division and Spectrum president. “It not only has helped ensure the delivery of radiology services to our partners’ sites, but it has also evolved into a creative solution for improving radiologist satisfaction and for addressing staffing shortages in the current labor market.”

Corey Couto, MD, radiologist and managing director of the radiology north division, also appreciates the benefits of the teleradiology model. “Maine has a lot of rural areas, particularly in the northern part of the state,” he says. “Teleradiology is immensely helpful in allowing us to improve patient care by providing increased access to subspecialists and an electronic pathway to triage care to other subspecialists, such as neuroradiology, nuclear medicine, and cardiac imaging.”

Spectrum radiology provides teleradiology solutions throughout the state.



Corey Couto, MD, managing director of Spectrum’s radiology north division



Michael Quinn, MD, radiologist and chairman of the SHCP Board of Directors.

“The teleradiology model provides a wide range of advantages.”

–Michael Quinn, MD

2002

Anesthesiologist Charles Higgins, MD, creates Spectrum’s regional block program.



2003

Spectrum creates its first fully outsourced billing and management services partnership with McKesson / Per Se Technologies.



2004

Spectrum employs nearly 200 physicians.



MEANWHILE . . .

U.S. wins 34 medals in Winter Olympics in Salt Lake City.

Health Savings Accounts are established.

Wristbands for a Cause are introduced.

Since its inception, Spectrum has been known for collaboration and innovation.

Over the past quarter century, these tenets have manifested themselves in a myriad of ways. Today, we see a high degree of collaboration between our orthopaedic surgeons and our anesthesiologists, as they work together to provide patients with high-quality surgical care.

Joint replacement offers an excellent example of how Spectrum physicians collaborate to deliver services. Spectrum Orthopaedics Surgical patients take advantage of many advances in medical care, beginning even before they enter the surgical suite.

James Kuhn, MD, an orthopaedic surgeon at Spectrum Orthopaedics, notes that the improved focus on patient experience is among the most notable changes in joint replacement surgery over the years. "Preparation for surgery is much better than it used to be. We now have patient education materials to help ensure that patients and their support teams are prepared for what to expect with joint replacement," says Dr. Kuhn. "We also frequently refer patients to 'pre-rehabilitation' to make sure they are able to do things such as use a walker and navigate stairs, in addition to optimizing their physical condition before surgery."

Perioperatively, there have been a number of improvements that enhance patient safety and outcomes. Notably, materials have evolved, which has significantly improved the durability of replacement joints. In hip replacement, for example, ceramic or polyethylene bearings are now commonly used. In the past two decades, we have also seen a dramatic increase in the number of younger patients undergoing joint replacement. As the average age of patients shifts downward, the longevity of the replacement joint becomes increasingly important. With the latest materials, it is not uncommon for patients to expect a replacement joint to last 20 years or more. This is a significant improvement from the not-so-distant past when metal-on-plastic prosthetics would often require revision surgery 10-15 years after implantation.

Regional anesthetic techniques, also known as "blocks," have also improved, both peri- and postoperatively. During surgery, Spectrum anesthesiologists typically administer spinal anesthetics or regional blocks as opposed to full anesthesia, which offers many enhanced safety benefits, such as lower risk of infections and blood clots. Peripheral nerve blocks are also often used post-surgically to control pain for up to 48 hours. When used in combination with multi-modal analgesia (i.e., medications from different classes), this leads to lower narcotics usage.



James Kuhn, MD, orthopaedic surgeon

“We now have patient education materials to help ensure that patients and their support teams are prepared for what to expect with joint replacement.”

—James Kuhn, MD

Orion Nohr, MD, Spectrum anesthesiologist, leads Spectrum's Regional Block Program. The Regional Block Program offers services at 10 locations throughout Maine, including the Spectrum Ambulatory Surgery Center (ASC), where Spectrum orthopaedic surgeons perform most of their outpatient surgeries.

"Regional blocks can help reduce stress on the body when you undergo surgery, such as joint replacement," says Dr. Nohr. "When you have a nerve block you often need less anesthetic during surgery and less pain medication both during and after surgery. You may also have a shorter recovery period and better pain relief."

“When you have a nerve block you often need less anesthetic during surgery and less pain medication both during and after surgery. You may also have a shorter recovery period and better pain relief.”

—Orion Nohr, MD

Patients undergoing joint surgery 25 years ago would typically be in the hospital for one to two days, then discharged into a rehabilitation facility. Today, a hospital stay of more than one night would be unusual, and many patients go home the same day. When surgeries are performed in an ASC, patients can avoid the hospital altogether.

"Not all patients are candidates to have surgery in an outpatient setting, such as the Spectrum ASC, due to health reasons or insurance coverage. But having joint replacement surgery done at our ASC is a great option for many," says Dr. Kuhn. "Patients go home the same day and it's much less expensive for patients and insurers."

SPECTRUM REGIONAL BLOCK PROGRAM

The Spectrum Regional Block Program was created by Charles Higgins, MD, in 2002 to provide an effective, safe method for peri- and post-operative pain management. With regional blocks, Spectrum anesthesiologists inject a local anesthetic near a nerve, which effectively "blocks" the nerve from carrying pain messages to the brain. Regional blocks are often used in concert with other anesthetics and/or pain control medications. Patients who receive nerve blocks typically require less supplemental medication, thereby minimizing side effects, such as nausea or drowsiness. Patients often experience a reduced recovery time, allowing them to begin earlier participation in physical therapy or other rehabilitative treatments.



Orion Nohr, MD, anesthesiologist and director of Spectrum's Regional Block Program

The Regional Block Program is currently available in 10 locations throughout Maine and is led by Orion Nohr, MD.

2005

Vascular & Interventional Physicians integrates into Spectrum.



YouTube is launched.

2006

Spectrum elects Robert Isler, MD, to a three-year term as board president.



Twitter is launched.

2007

The Spectrum radiation oncology division begins offering intensity-modulated radiation therapy (IMRT).



First iPhone is released.

MEANWHILE . . .



Over its 25-year history, the Spectrum pathology division has been at the forefront of new developments in molecular testing and has led many collaborative initiatives to advance diagnostic medicine and cancer care. Such initiatives have included co-directing a Molecular Tumor Board, in which Spectrum pathology fully interprets comprehensive tumor testing for patients with a wide variety of cancer diagnoses. These detailed case reviews involve the analysis of anywhere from 50 to 700 genes to help oncologists

tremendous advances over the past 25 years, particularly in the last decade. The evolution of molecular genetic testing has led to the development of “precision medicine,” which guides physicians and researchers in developing customized care plans based on an individual’s genetics, environment, and lifestyle. Molecular and genetic testing of tumor tissue has evolved from a step in the care of a small proportion of cancer patients in the later stages of treatment to a fundamental part of all aspects of the care plan for many cancer patients.

tumor boards will play an increasingly important role in developing treatment approaches that can help improve outcomes based on individual patient needs.”

The origins of precision medicine were based in oncology, and breast cancer more specifically. As molecular testing evolved, physicians were better able to stratify breast cancer diagnoses and identify potential genetic causes or protagonists of the cancer. An early example of this is HER2/neu, a protein that is involved in the growth of normal breast cell tissues, but if overproduced can cause breast cells to replicate too quickly. The drug Herceptin was developed as one of the first targeted agents to block the effects of the HER2 protein and was approved in the late 1990s to treat HER2+ breast cancers. Following the success of Herceptin, several other targeted cancer therapy agents were approved in subsequent years for breast as well as other types of cancers, such as chronic myeloid leukemia (CML) and lung adenocarcinomas.

Molecular biomarkers are now routinely used in all phases of cancer



Karen Rasmussen, PhD, FACMG, clinical geneticist in Spectrum's pathology division

choose between conventional therapies, off-label molecularly targeted therapies, and clinical trials -- both locally available and nationwide. Karen Rasmussen, PhD, FACMG, clinical geneticist in the Spectrum pathology division, runs the monthly sessions with local oncologists. Based on the molecular interpretations provided by Dr. Rasmussen, the group discusses the pros and cons of various therapeutic options.

Molecular and genetic testing has seen

“As molecular and genetic testing continues to evolve, we will have an expanded ability to treat cancers using biologically targeted agents based on a tumor’s underlying genetic-driver mutations,” says Dr. Rasmussen. “As this type of precision medicine becomes more prevalent, molecular

care, including the initial diagnosis of some cancers, prognostic assessment, prediction of response to therapy, and long-term monitoring of disease. They are also regularly used to identify hereditary cases, which not only benefits the patient, but also influences the healthcare of family members. Most recently, molecular tests are under development for early detection of a wide range of cancers, many of which currently have no other early detection mechanism.

While molecular genetic tests have their origin and greatest clinical utility in oncology, this aspect of precision medicine is also becoming part of routine care in other areas of medicine such as cardiology, endocrinology, infectious disease, benign hematology, pulmonology, and more.

The Spectrum pathology division, including pathologist Robert Christman, MD, plays a central role in the newly formed MaineHealth Precision Medicine Council and Precision Oncology Committee, with a goal of expanding molecular testing in several areas of medicine. In 2021, Spectrum played an integral role in a variety of initiatives, including:

- ▶ Launching a multi-gene assay for diagnosis, prognosis, and therapeutic guidance in some hematologic cancers.
- ▶ Working together with MMC

gynecologic oncologists and genetic counselors to establish an algorithm to incorporate first-line PARP-inhibitor therapy as part of routine cancer care. PARP – or poly (ADB-ribose) polymerase – is a protein that helps repair damaged DNA.

- ▶ Launching a system for testing all newly diagnosed lung adenocarcinomas for biomarkers that determine the most appropriate first-line therapy. As part of this

process, Spectrum established a “navigator” position who streamlines the ordering and reporting processes, gathers all background clinical information required by insurers, and assists with specimen management.

- ▶ Creating testing algorithms used in the diagnosis and management of cardiomyopathies with reduced cost and turnaround time.

“Spectrum’s activities with the Precision Medicine Council are quickly expanding to other areas of medicine,” says Dr. Christman. “We are continuously exploring the clinical utility of new molecular tests, problem-solving around those tests, educating clinicians, creating efficient workflows, tackling reimbursement issues, and assisting our clinician colleagues in getting the right test at the right time for their patients.”



Robert Christman, MD, pathologist

2008

Blood Management initiatives, led by Spectrum Pathology, leads to a 30% reduction in the use of red blood cell transfusions.



2009

Spectrum radiologists overread more than 20,000 cases – more than any other group in northern New England.



2010

First Spectrum Scholar is named, granting scholarship funds for study at MMC–Tufts University School of Medicine.



MEANWHILE . . .

Retail DNA tests are made available to the public.

The HITECH act calls for “meaningful use” of electronic health records.

The ACA is signed into law.

Twenty-five years ago, electronic medical records were largely unheard of.

Healthcare providers documented patient information via paper medical records. These records were then stored in a medical office or a warehouse, and needed to be faxed, scanned, or mailed in order to transfer them. Paper medical records required a very cumbersome process for documenting and storing patient care data, which led to complex workflows, challenges with sharing information with other practices, and sometimes errors in patient treatment or diagnoses.

As early as the 1960s, medical practices began implementing new ways to store and share medical information. This also included the beginning of transitioning medical film to digital images, and hospital-based "reading rooms" evolving into digital libraries.

Today, electronic medical record (EMR) systems are integral to the provision of medical care. These systems help facilitate integration and support medical offices and centers. EMR systems allow providers and clinicians to access patient information, provider notes, and clinical reporting. When paired with a practice management (PM) system, the systems have the ability to hold patients' clinical, demographic, and insurance information, and include functionality that allows the medical office team



Melissa Wise, accounts receivable lead, conducts an EHR/PM training session with her colleague, Shana Qualey.

to schedule appointments and track insurance and patient billing payments.

It is important to understand the difference between electronic medical record (EMR) and electronic health record (EHR) systems. The two terms are used interchangeably, but they are not the same, per the Office of National Coordinator for Health Information Technology. EMRs are the digital version of the paper charts used by clinicians until recently. They contain a patient's medical history, and the treatments the patient has undergone. EMRs were initially developed and implemented with the intent to replace paper records, and stayed within each practice, in much the same way paper records did. EHRs include everything an EMR does, but have additional functionality that is focused on the total health of

the patient. EHRs are built to share information between healthcare organizations, including laboratories and specialists. The information in the EHR also moves with the patient, to specialists' offices, the hospital, and nursing homes.

EHR and EMR systems significantly improve both clinical and business workflows, which help healthcare practitioners deliver enhanced patient care.

HERE AT SPECTRUM . . .

In keeping with the organization's commitment to leverage technology to improve patient care, Spectrum's orthopaedic and vascular and interventional radiology divisions began transitioning to a new EHR and PM earlier this year through NextGen Healthcare.

The system provides advanced functionality that encompasses the entire patient journey, including registration, prior authorization, check-in, consultations with various providers, physical therapy, and surgery, to name a few. A large team of clinicians, technologists, and staff collaborated in this very complex initiative.

In October, the NextGen PM system went live for our orthopaedic and vascular interventional radiology divisions, and the EHR system went live for 25% of our orthopaedic providers.

The new platform will help Spectrum facilitate integration between clinics and external providers and will provide Spectrum physicians and clinicians with enhanced tools to provide excellent patient care.

The first phase of the implementation required long hours and a great deal of collaboration across a wide range of Spectrum team members. The effort was reflective of the organization's



Bryce Wolf, MD, orthopaedic surgeon, provided physician leadership throughout the implementation of the new EHR/PM systems.

commitment to delivering high-quality healthcare for years to come.

“As technology evolves, so does our ability to provide high-quality, patient-centered care,” says Bryce Wolf, MD, orthopaedic surgeon. “With the new functionality the EHR and PM systems bring, we are better able to consistently deliver the most appropriate treatment protocols practice-wide, improve our diagnostic capability, become more effective, improve our efficiency, and, most importantly, enhance the overall patient experience.”

Peter “Rob” Hubbs, MD, a Spectrum anesthesiologist, serves on several MaineHealth IT governance committees and is the informatics medical director for MaineHealth. He has led many quality improvement and regulatory compliance initiatives, analytics projects, and provider efficiency programs for Epic, the EHR utilized by MaineHealth.

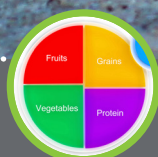


Peter “Rob” Hubbs, MD, anesthesiologist

Dr. Hubbs is also the chair of the Spectrum Technology Committee, which assists the Board of Directors in oversight of technology and adoption of innovative technologies. The next phase of technology adoptions at Spectrum will be focused on innovation with the help of technology, also referred to as digital transformation. Spectrum collects and stores voluminous data, not just from our encounters with patients, but also from the activities we perform. Spectrum's ability to "curate" this data, and to understand it and analyze it, will enable the organization to provide better care and be more efficient.

2011

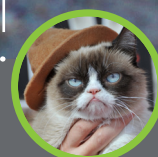
Specialty Solutions is formed by Spectrum and three other Maine physician groups.



USDA updates the food pyramid emphasizing grains and vegetables.

2012

Pathology Medical Group joins Spectrum.



Grumpy Cat's (real name Tardar Sauce) first photo is posted.

2013

Spectrum co-founder, Michael Pancoe, MD, chairs fundraising campaign to create new pediatric treatment space at EMMC.



1.3 million (+/-) inpatient joint replacement procedures were performed in the U.S.

At the beginning of the 20th century, not long after radiation was first used to image

and diagnose cancer, radiologists discovered that delivering doses of radiation to the same spot over several days could reduce the size the tumors and thereby treat cancer. With that, the field of radiation oncology was born. In its infancy, the techniques and treatments were rudimentary,



Ian Bristol, MD, served as the managing director of the radiation oncology division from 2016 to 2021.

they were based on two-dimensional imaging, hand calculations, and alignment only to a patient's surface anatomy. Treatments were delivered exclusively with radioactive isotopes like Cobalt 60, unlike what can be achieved with modern-day linear accelerators. Outcomes often reflected such treatment delivery as well, and many patients developed severe and, at times, life-threatening toxicities as a result. The mantra in that era was "treat the room and cone down to the patient."

However, with the advent of computer technology, advanced imaging, and modern-day linear accelerators, radiation oncology has been revolutionized. These changes have allowed oncologists to define not only a tumor's exact location and structure, but also the same for critical structures nearby at risk for damage from radiation exposure. Sophisticated computer algorithms are now utilized to determine the exact amount of radiation the oncologist wants to administer. Treatment is delivered to patients with extreme accuracy and precision by utilizing intensity modulation and daily imaging of the patient in the treatment position, with alignment directly to a patient's tumor or their internal anatomy. Modern day outcomes reflect these changes as well. Cancer cure rates are on the rise and severe or life-threatening toxicities are rare.

Changes to the field began in the 1990s, when oncologists started using computer algorithms and three-dimensional conformal therapies to improve treatment. Conformal radiation therapy (CRT) uses CT images and computer algorithms to reconstruct the location of a tumor, high-risk tissue (for example draining lymph node basins), and other nearby organs at risk in three dimensions. Radiation beams are matched to the shape of the tumor from a variety of different angles to

pinpoint dose delivery. In the early 2000s, this method was improved by varying not only the angle and shape of beam delivery, but also the intensity of radiation dose delivered, using a technique called Intensity-modulated radiation therapy (IMRT). IMRT allows the radiation oncologist to essentially "paint" the radiation dose within the patient, such that high doses are delivered to tumor cells, intermediate doses to at-risk tissue, and very low doses to nearby healthy tissue.

Volumetric intensity modulated arc therapy (VMAT) is a technique that improves on IMRT by delivering the radiation dose continuously, from multiple degrees, as the treatment machine rotates around the patient.

Our board-certified and fellowship-trained radiation oncologists deliver over 30,000 treatments to adults and children every year.

Image-guided radiotherapy (IGRT) has also improved with the ability to acquire low-dose CT scans while the patient is stabilized for treatment to ensure that organs are aligned with millimeter precision. Such techniques allow for faster, more sophisticated

treatment, the delivery of "stereotactic radiosurgery" (SRS) or "stereotactic ablative" (SRT, SBRT, or SABR) techniques when appropriate, and minimize side effects and risks by bending dose out of nearby normal tissue.

SPECTRUM'S IMPACT

Ian Bristol, MD, joined Spectrum 15 years ago, and has had the opportunity to witness firsthand the exciting advances within the field of radiation oncology and at Spectrum specifically. "Here at Spectrum, we offer cutting-edge treatment with a community feel. There is nothing we cannot do that a major hospital in a metropolitan city can do, with very few exceptions."

Spectrum Healthcare Partners, through our partnership with Maine Medical Center's Cancer Institute, offers today's most advanced radiation oncology care. Every year, our board-certified and fellowship-trained oncologists deliver over 30,000 treatments to adults and children. We are also the only radiation oncology group in the state of Maine that is a member of NRG Oncology. NRG Oncology brings together several leading research organizations to conduct oncologic clinical research, including phase II and phase III clinical trials, as well as formative studies to shape future oncologic research.

The advent of technology has been revolutionary in the last 25 years and

has allowed oncologists to improve their delivery of care by curing or palliating patients with cancer in the most efficient, precise, and tolerable way possible. Spectrum's radiation oncology team treats adults and children with all types of cancer and also uses radiation therapy to treat benign conditions. Spectrum offers a full range of today's most advanced types of radiation therapy including VMAT, IMRT, SRS, SRT, SBRT, and brachytherapy.

In 2020, radiation oncologist Whitney Beeler, MD, joined Spectrum Healthcare Partners after recently graduating as chief resident from the highly regarded University of Michigan Radiation Oncology program. Dr. Beeler brings extensive experience using the latest technologies, including SBRT and SRS, to treat cancer patients. She also has a particular clinical interest in performing brachytherapy for patients with gynecologic cancer and currently plays an important role in delivering this treatment for women in Maine.

Brachytherapy is the delivery of internal radiation using a radioactive source that is guided by the implantation of catheters or needles directly into the tumor or body cavity. This is often performed under sedation within the operating room, sometimes in close conjunction with gynecologic oncology. By delivering radiation internally, the

dose delivered to a tumor can be escalated much higher than what would be possible or safe using external x-ray-based radiation treatment.

"Gynecologic brachytherapy is an integral component of curative-intent treatment for women with high risk or recurrent endometrial cancers, and is clearly associated with improved overall survival in women with locally advanced cervical cancers," states



Whitney Beeler, MD, is a radiation oncologist with a clinical interest in treating gynecological cancers.

Dr. Beeler. "Despite its importance, however, this technique is underutilized across the world and even within the U.S. due to a lack of resources, physician expertise, and socioeconomic factors. It is a privilege to be able to offer and perform such a sensitive procedure for my female patients, and I have no doubt that the quality of our team – from nursing, to therapists, dosimetrists, and physicists – translates into better outcomes for these women."

2014

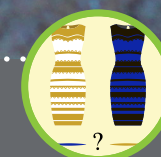
Spectrum adds its orthopaedic division through a merger with leading independent orthopaedic practices.



ALS Ice Bucket Challenge raises \$115 million.

2015

Spectrum becomes largest the non-hospital-based healthcare organization in Maine.



Blue/black or white/gold? Dress meme debate ensues.

MEANWHILE . . .

Opioid usage has increased markedly since the mid-1990s.

In 2017, the U.S. Department of Health and Human Services declared the opioid crisis a public health emergency and by 2019, it was estimated that more than 10 million people had misused prescription opioids in the prior year. The increasing number of patients with opioid use disorder (OUD) has complex implications for medical professionals who treat patients with acute or chronic pain, including particularly unique



Aurora Quaye, MD, Spectrum anesthesiologist and faculty scientist at MMC's Centers for Outcome Research and Evaluation (CORE) focuses her research on best practices for perioperative opioid reduction. Her work has been published in medical journals such as the *International Journal of Obstetrical Anesthesia*, *Journal of Addiction Medicine*, *Seminars in Cardiothoracic & Vascular Anesthesia*, and the *Journal of Clinical Pharmacology* (accepted 11/7/2021).

challenges for anesthesiologists, who are responsible for managing a patient's perioperative and postoperative pain.

Aurora Quaye, MD, is a Spectrum anesthesiologist and researcher who also serves as a faculty scientist at the MMCRI Center for Outcomes Research and Evaluation (CORE). Dr. Quaye's work focuses on opioid reduction strategies, including studying novel approaches for safely and effectively managing perioperative and postoperative pain for those with OUD. Dr. Quaye and her team are working on several prospective and retrospective studies, while also identifying multidisciplinary research collaboration opportunities with medical and surgical subspecialties.

Dr. Quaye is currently conducting a retrospective study that aims to identify risk factors for patients developing OUD following total joint replacement surgery. The study seeks to determine the incidence of persistent opioid use following these surgeries, identify predictors and characteristics of persistent opioid use, and evaluate whether perioperative regional anesthesia or joint type influences the risk of OUD.

“Although the majority of opioid prescriptions are for the treatment of chronic pain, approximately 7% of all opioid prescriptions are written by orthopaedic surgeons, so this is an important population to study,” says Dr. Quaye.

“The existing literature suggests that patients who were taking opioids prior to joint surgery have an increased risk for persistent opioid use, but there is an evidence gap regarding risk factors for those who were not. Our research will focus on patients who did not use opioids 12 months prior to surgery to determine other potential predictors for persistent opioid use or OUD. The results will help inform best practices for anesthesia and perioperative pain management, and potentially improve patient outcomes.”

Dr. Quaye will be conducting this study through the Observational Health Data Sciences and Informatics network (OHDSI – pronounced “odyssey”). OHDSI includes researchers from 30 countries and health records for approximately 600 million patients worldwide.

We are dedicated to our leadership in medical education. Clinicians from all of our divisions are committed to teaching, training, and mentoring medical students and residents. Many of our physicians serve as faculty at the region's medical schools, and several as residency program directors at local area hospitals.

ANESTHESIA DIVISION CREATES ADULT CARDIOTHORACIC FELLOWSHIP

To expand the delivery of high-quality care in the communities we serve, our anesthesiology division recently expanded its teaching and education services to include fellowship training in Adult Cardiothoracic Anesthesiology. Jessica Hathaway, MD, led the initiative to establish the first cardiothoracic fellowship program in Maine at Maine Medical Center (MMC). The program provides robust training in cardiac, thoracic, and vascular anesthesiology as well as critical care medicine with didactic, clinical, and project-based learning opportunities.

However, there are just five other programs in New England, all of which are Boston-based. The new program at Maine Medical Center provides a unique opportunity for fellows because of its significant volume of patients and range of diseases in a less urban center. “As a student of cardiothoracic anesthesia, you

want exposure to everything,” says Dr. Hathaway. “Our program provides a case diversity and complexity that is generally only found in major urban centers. It's a wonderful opportunity for fellows and for our state.”

VASCULAR INTERVENTIONAL RADIOLOGY RESIDENCY PROGRAM

When the Maine Medical Center (MMC) Integrated Interventional Radiology (IR) Residency Program was established, the program was among the first 12 programs accredited by the Accreditation Council for Graduate Medical Education (ACGME).

Joseph Gerding, MD, is a Spectrum radiologist and the program director of the IR Residency Program. The program faculty consists of over 40 radiologists, including eight interventional radiologists and one endovascular surgical neuroradiologist.

The program allows only one resident per year, and permits the internship to be done with the surgical program at MMC. This allows the intern to incorporate themselves into the clinical team at large and improve our communication across departments.

The diverse patient population enables the residents to perform a comprehensive array of IR procedures that rivals those usually only performed at major academic institutions.

PHYSICAL THERAPY ROTATION PROGRAM

To establish strong relationships with the communities we serve, our physical therapy centers offer rotations to graduate and undergraduate students.

The rotations are available to students who are currently enrolled in – or are applying to – a physical therapy program. The program prepares students for practice in a specialty area, such as sports medicine, and provides an opportunity for students to gain hands-on experience in treating patients.

Our graduate students complete each of their three rotations at one of our physical therapy centers and are paired with one of our licensed clinicians. Our undergraduate students join our clinicians for observation to prepare them for applying to a graduate physical therapy program.

We are affiliated with the University of New England, University of Connecticut, George Washington University, and Saint Joseph's College of Maine.



Megan Cutter, DPT, and physical therapy manager at Spectrum Orthopaedics Windham.

2016

Maine's first orthopaedic walk-in care facility, OrthoAccess, opens in Portland.



Fidget spinners are the hot Christmas toy.

2017

Spectrum Medical Group becomes Spectrum Healthcare Partners.



US DHHS declares the opioid crisis a public health emergency.

MEANWHILE . . .

SPECTRUM OFFERS COVID VACCINE CLINICS

To help expand access and improve vaccination rates in Maine, Spectrum offered multiple COVID vaccine clinics in 2021: Moderna clinics in January/February and April/May, and a Johnson & Johnson clinic in May. The clinics were staffed by Spectrum employees and local volunteers who provided vaccines to 386 individuals. The demand for vaccines was very high at the time the clinics were offered, so they provided a valuable service to the community.

The vaccination rate among Spectrum employees is 100%.



Audrey, a community member, receives her vaccine dose at one of Spectrum's COVID-19 vaccine clinics in 2021.

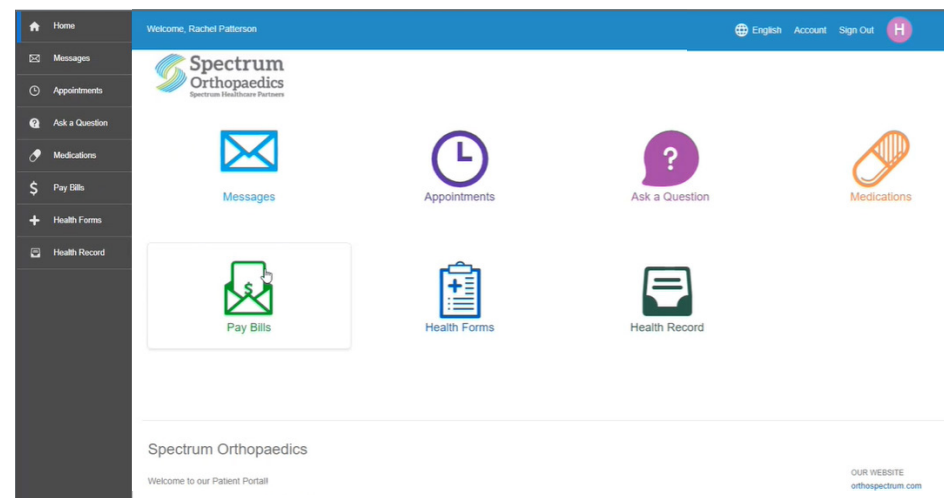
One of the four tenets of the Institute for Healthcare Improvement's Quadruple Aim – and Spectrum's quality improvement efforts – is improved patient experience. The quality, risk, and patient safety department at Spectrum works closely with each clinical division as well as other operational departments to help ensure that patients have a positive care experience with Spectrum physicians, providers, and staff members. Spectrum's efforts in this regard take a variety of forms, including consistently looking for new ways to leverage technology to improve patient communication and other processes. Spectrum's orthopaedics and interventional radiology divisions recently implemented a new electronic health record (EHR) and practice management (PM) system (see story on page 15). In addition to improving clinical workflows and consolidating

patient data into a single platform, the new system includes a patient portal that will allow patients to engage with the practice more easily.

Some of the features of the new portal will include the ability to:

- ▶ Request or cancel appointments
- ▶ Send and receive secure messages with providers
- ▶ View patient charts and health records
- ▶ Request medication refills
- ▶ Access a library of patient education materials
- ▶ View statements and billing information

Over time, the functionality of the patient portal will be expanded to further facilitate patient engagement with the practice.



Spectrum Healthcare Partners partnered with MBMS – a nationwide leader in RCM and medical billing services – in 2019 to form Spectrum Management Services Company (SMSC). SMSC offers a full suite of practice management services on either a bundled or a la carte basis.

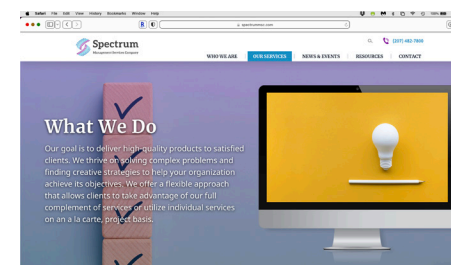
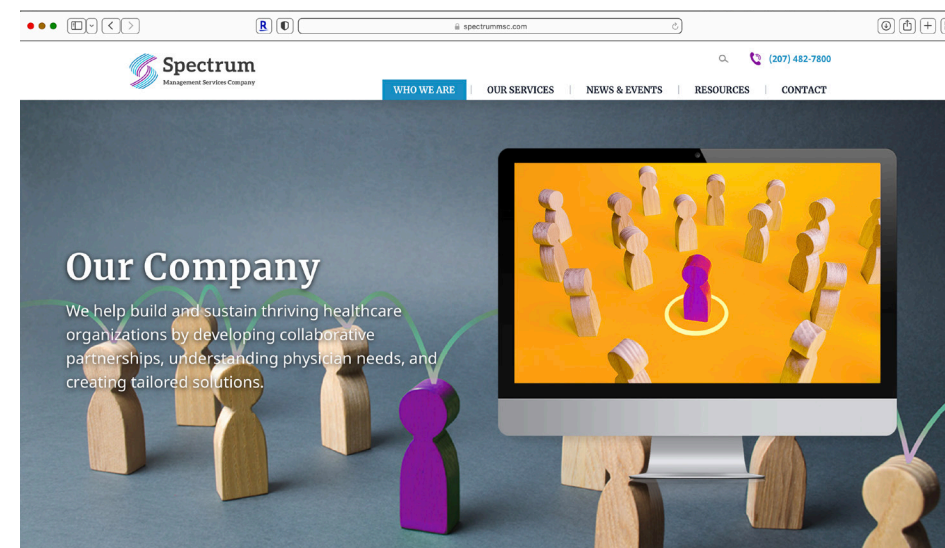
In the past year, SMSC has experienced tremendous growth, acquiring

clients from Maine to Colorado and providing a diverse range of services, including ambulatory surgery center (ASC) management, marketing and communications, medical staff services, payor contracting, and physician recruitment.

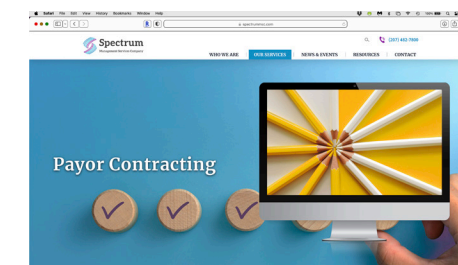
In 2021, SMSC also launched a new website. To learn more, visit spectrummsc.com.

“SMSC was a tremendous help with our payor contracting and negotiation process. They performed a comprehensive contract review of our primary commercial payor contracts and provided a detailed analysis that identified both immediate and longer-term opportunities for revenue enhancement. They shared specific points to use in negotiations that I was able to use successfully in contract renewal discussions with payors.”

–Jim Hueber, COO, Colorado Imaging Associates



Spectrum Management Services Company launched a new website in September of 2021.



Learn more at SpectrumMSC.com.

2018

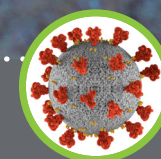
Spectrum employs more than 600 people, including nearly 300 physicians and advanced practice providers.



Researchers refine correlation between specific BRCA1 mutations and breast cancer.

2019

Spectrum Management Services Company is formed.



The first known case of COVID-19 occurs in Wuhan, China.

PHYSICIAN RESILIENCE PROGRAM

Our leadership team recognized early on that our physicians share in the widespread burnout phenomenon affecting American medicine. Fortunately, measures of burnout among Spectrum physicians show them to be happier in their work than their counterparts nationally. To demonstrate our commitment to the wellbeing of our physicians, we have provided a variety of tools, resources, and programs to promote wellness and resilience. One of our offerings is a resilience coaching program that helps support physicians' engagement with patients and colleagues while providing a sense of professional attainment.

The program is a collaboration between coach and physician and provides a paradigm of self-care and self-efficacy, which is then applied directly to the physicians' personal work and life circumstances, with sustainable benefits. When a physician's mental health is at stake, it can have adverse effects on the quality of their clinical work, career satisfaction, peer relationships, and overall engagement with patients.

Program co-creators Les Schwab, MD, a community board member and Marianne Roy, MS, MEd, an organizational development consultant, along with program administrator

Julie Wheeler, Spectrum's chief human resources officer, continue to highlight Spectrum's commitment to wellbeing and resilience.

One hundred percent of participants have rated the program a 10 on a scale of 1–10. Sample participant comments included:

"Coaching helped me to achieve a laser focus on what elements of my work are most meaningful, and gave me the confidence to set different priorities and make different choices in my work."

"This program has helped me to get more balance in my life and be happier at work."

PHYSICIAN LEADERSHIP ACADEMY

Spectrum launched the Physician Leadership Academy this year as a part of our larger Physician Leadership Development & Succession Planning Program. This program exemplifies our commitment to building the leadership and talent of our organization.

The goals of the program are to reinforce the culture of our organization, build self-awareness, practice core interpersonal skills, build financial literacy, and provide our physicians an opportunity to network with their colleagues.

Spectrum is accredited by the Accreditation Council for Continuing

Medical Education (ACCME) to provide continuing education to our physicians.

AMERICAN MEDICAL ASSOCIATION (AMA) RECOGNITION

We were pleased to be recognized by the American Medical Association's (AMA) 2021 Joy in Medicine™ Health System Recognition Program for our efforts to support physician wellbeing and reduce burnout. Each organization was scored on commitment, assessment, leadership, efficiency of practice, environment, teamwork, and support.

AMA recognized 44 health care organizations as recipients of the 2021 Joy in Medicine Health System Recognition Program. Recipients of the award are health systems with a "demonstrated commitment to preserving the wellbeing of healthcare team members by engaging in proven efforts to combat work-related stress and burnout."



Over the past 25 years, women have steadily increased their presence in a healthcare industry that historically has been predominately led by men.

However, there remains a lot of work to do. Today, women make up 70% of the world's healthcare staff, but only 25% of senior leadership.¹ Here at Spectrum, we are committed to improving gender parity not only at the senior leadership level but across our organization. Spectrum has invested in dismantling the barriers to women's professional advancement by addressing recruitment processes, professional development, wellbeing and burnout, and workplace culture. Although the COVID-19 pandemic has resulted in disproportionate job loss by women, the female representation at Spectrum has grown. This is a reflection of the solid foundation that has been laid to acknowledge and embrace the importance of equal representation and work-life balance.

At the physician leadership level, several women hold leadership roles at Spectrum and our partner sites. Three female physicians currently serve on the SHCP Board of Directors: Nancy Boulanger, MD; Kim Ginevan, MD; and Kathryn Hanna, MD.

Dr. Nancy Boulanger is the managing director of Spectrum's anesthesiology division and specializes in cardiac

anesthesiology. Dr. Boulanger has served on the SHCP board of directors since 2017. She has also been on the board of Spectrum Management Services Company (SMSC) since its inception in 2019. Dr. Kim Ginevan has been the managing director of our pathology division since 2016 and is fellowship-trained in cytopathology. In addition to serving on the SHCP board of directors since 2020, Dr. Kathryn Hanna is also the medical director of the Spectrum Ambulatory Surgery Center (ASC) and is the chief of orthopaedics at Northern Light Mercy Hospital. Dr. Hanna is a board-certified, fellowship-trained orthopaedic surgeon who specializes in hand and upper extremity surgery.

On the administrative side, three women serve on the executive leadership team for both SHCP and SMSC: Beth Austin, vice president of operations; Leslie Weeks, vice president of physician practices; and Julie Wheeler, chief human resources officer.

In 2019, Beth Austin co-led the development of SMSC. Beth splits her time between SHCP and SMSC, including spearheading SMSC's growth and continued success. Leslie Weeks joined Spectrum as a senior practice manager and was promoted to the executive team in 2019. In her role, she provides executive oversight for all of Spectrum's clinical divisions. Julie Wheeler came to Spectrum in 2014 and



Beth Austin, vice president of operations; Leslie Weeks, vice president of physician practices; and Julie Wheeler, chief human resources officer.



Nancy Boulanger, MD; Kim Ginevan, MD; and Kathryn Hanna, MD.

held several HR leadership roles prior to joining the executive team in 2017. Julie oversees all aspects of human resources for both SHCP and SMSC, including the human resources service line for SMSC.

Gender parity and equality is of crucial importance in the workplace. Spectrum is committed to continuing our focus on dialogue, awareness, sensitivity, and collaboration to improve and achieve parity for all.

(1) WEF, Oliver Wyman

2020

Spectrum's anesthesiology division expands its critical care services in response to COVID epidemic.



World Health Organization declares COVID-19 a global pandemic.

2021

Spectrum celebrates its 25th anniversary!



Kamala Harris becomes the first female vice president.

ANESTHESIOLOGY

CMO Ambulatory Surgery Center (ASC)

InterMed

LincolnHealth – Miles Health Campus

Maine Eye Center

Maine Medical Center

Maine Medical Center – Scarborough Surgery Center

Mid Coast Hospital

Northern Light Mercy Hospital

Plastic & Hand Surgical Associates

Portland Gastroenterology Center

Southern Maine Health Care

Spectrum Ambulatory Surgery Center

Stephens Memorial Hospital

ORTHOPAEDICS

Practice Locations:

Brunswick

Norway

Portland

Saco

Windham

Surgical Sites of Service:

Maine Medical Center

Northern Light Mercy Hospital

Spectrum Ambulatory Surgery Center

Stephens Memorial Hospital

OrthoAccess Orthopaedic Walk-In Clinic:

Portland

Saco

Windham

PATHOLOGY

Bridgton Hospital

Central Maine Medical Center

Coastal Women’s Healthcare

Exeter Hospital

Franklin Memorial Hospital

InterMed

LincolnHealth – Miles Health Campus

Maine Medical Center

Memorial Hospital

Mid Coast Hospital

NorDx Laboratories

Pen Bay Medical Center

Plastic & Hand Surgical Associates

Rumford Hospital

Southern Maine Health Care

Stephens Memorial Hospital

Waldo County General Hospital

RADIATION ONCOLOGY

Cancer Care Associates of York

Coastal Cancer Treatment Center

Maine Medical Center:

Cancer Institute Radiation Oncology, Scarborough

Southern Maine Radiation Therapy Institute at Maine Medical Center, Portland

RADIOLOGY

Blue Hill Memorial Hospital

Brewer Medical Center

Bucksport Regional Health Center

Coastal Women’s Healthcare

Health Access Network

Helen Hunt Health Center

InterMed

Jackman Community Health Center

LincolnHealth – Miles Campus

LincolnHealth – St. Andrews Campus

Maine Coast Mobile Medicine

Maine Medical Center – Brighton Campus

Maine Medical Center Cancer Institute Radiation Oncology

Maine Medical Partners Neurosurgery & Spine

Marshwood Imaging Center

Martin’s Point Health Care

Memorial Hospital

Millinocket Regional Hospital

New England Cancer Specialists

Northern Light CA Dean Memorial Hospital

Northern Light Eastern Maine Medical Center

Northern Light Inland Hospital

Northern Light Maine Coast Hospital

Northern Light Mayo Hospital

Northern Light Orthopedics

Northern Light Primary Care, Gouldsboro

Pen Bay Medical Center

Penboscot Valley Hospital

Rayus Radiology:

Augusta

Bangor

Brunswick

Southern Maine Health Care

Spectrum Vascular & Interventional (VIR)

St. Joseph Hospital

St. Mary’s Regional Medical Center

VASCULAR & INTERVENTIONAL RADIOLOGY

Maine Medical Center

Northern Light Eastern Maine Medical Center

Southern Maine Health Care – Biddeford

Spectrum Vascular & Interventional Radiology (VIR)

St. Mary’s Regional Medical Center



Spectrum’s core tenets include caring not only for patients, but also the broader communities we serve. Although many of Spectrum’s charitable giving efforts focus on healthcare and health-focused organizations, the list of organizations we support is diverse. Spectrum takes a particular interest in supporting groups and initiatives that promote STEM education, which helps develop the medical and scientific leaders of the future.

In 2021, Spectrum established a new partnership with The Ecology School (TES). TES has increased the science literacy and made the study of ecology accessible for tens of thousands of children and adults since it was founded in 1988. Their programming includes summer camps, partnerships with local schools, college internships, and a variety of immersive offerings for people of all ages. The school’s unique instructional model focuses on hands-on, experiential learning.

To accommodate its growing organization, TES embarked on a capital campaign to construct new facilities at the River Bend Farm in Saco. Located on the picturesque banks of the Saco River, the 105-acre agroecology farm includes 3.5 miles of trails, a dormitory, a dining commons, and a variety of indoor and outdoor classroom and meeting space.

SPECTRUM’S COMMUNITY COMMITMENT

In 2021, Spectrum contributed \$1,018,776 to more than 50 organizations across Maine and New Hampshire. In addition to hospitals and other provider entities, Spectrum also supports a wide variety of charitable organizations who focus on education, health and wellbeing, and community development. Examples include the American Heart Association, The Children’s Museum & Theatre of Maine, Dempsey Challenge, Maine Cancer Foundation, Make-A-Wish, Riding to the Top, United Way of Greater Portland, YMCA of Southern Maine, and many more.



The Ecology School (TES) recently constructed a new campus at River Bend Farm on the banks of the Saco River. The 105-acre campus includes 3.5 miles of walking trails, a 144-bed dormitory, an agroecology farm, and a dining commons. Spectrum began a partnership with TES in 2021.

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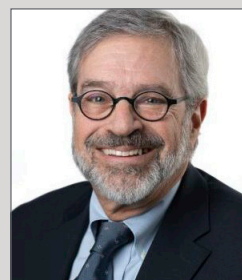
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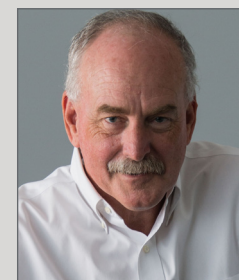
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PAUL LENNON, MD



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THOMAS SCHOVEE

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Radiology

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Radiology

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