The quest for value:  
Creating excellent patient care in a complicated healthcare landscape

Hospitals throughout the country are dealing with similar challenges—regulatory and financial pressures, decreasing state and federal reimbursement, and a complex, stressful and dynamic environment.

To remain viable, Yale New Haven, like many other hospitals, began to form or join health systems, which offered opportunities to reduce costs by centralizing business activities and creating scale to better manage risk and access to the payer markets.

Since 1983, Yale New Haven has grown from a hospital to a health system, with other members—Bridgeport, Greenwich, Lawrence + Memorial and Westerly hospitals...with a Children’s Hospital and Smilow Cancer Hospital...Northeast Medical Group physician practice...and dozens of outpatient locations. And always, with its partner, Yale School of Medicine.

Careful strategic and operational initiatives have enabled Yale New Haven Health to avoid the operating losses, service cutbacks or employee layoffs experienced by other hospitals. Success, while not an easy journey, has followed a single, straightforward strategy: a quest for value.

The quest for value has two basic principles: high-quality, patient-centered care and a vigorous focus on safety. In order to support the cost of that care and safety, we have redesigned how we run our organization.

This clinical redesign approach has allowed us to maximize quality and safety and invest in our buildings and technology. We have eliminated variability and redundancy, standardized processes and the purchase of equipment and medications, and preserved what was best in our culture.

What we have learned is that by becoming flexible and redesigning ourselves, it is possible to provide high-quality, safe care and a positive patient experience, while managing and even reducing the costs to patients and insurers. Even in this volatile environment, Yale New Haven Health has provided demonstrably greater value to those we are privileged to serve.

On the cover: Ava Sypher-Piper
A Message from the Chief Executive Officer

People who come to Yale New Haven Health hospitals, physician practices or care centers have different health concerns and needs. Each has a unique experience that is shaped by the care, the communication and the people they encounter.

While the needs of each patient may be different, Yale New Haven Health is committed to providing a care signature that looks and feels right each and every time. Very simply, when patients choose any one of Yale New Haven Health’s facilities for their health care, they will receive the same high-quality, patient-centered care that defines the value we provide to patients and loved ones.

We can tell patients about the tremendous strides we are making in patient safety and clinical quality. We can show them the latest technology that saves lives. We can renovate buildings and build new ones. But if our patients don’t see these investments in terms that they can feel, then we will not be successful. For what our patients do evaluate – each and every time they visit or call on one of our staff members – is how we made them feel during their stay or visit or call.

This is why consistency and standardization are so important. Patients need to have the same good experience whether they are in Greenwich, Bridgeport, New Haven, New London or Westerly, Rhode Island, or Westchester County, New York. That is the value Yale New Haven Health brings to its hospitals, their communities and our patients.

I am proud of our performance in fiscal year 2017. We enhanced access to our care sites, we significantly reduced safety events, we improved the quality of care provided, and the voices of our patients told us they feel better about their care and caring. We achieved this while welcoming our newest members, Lawrence + Memorial and Westerly hospitals. In addition to participating in a multitude of system-sponsored care initiatives, they went from a $26 million loss last year to near breakeven this year.

I extend my personal thanks to our leadership team, physicians and staff for their contributions, each and every day, throughout the year. Our job is to continue to find ways to enhance the value of what people see and experience when coming in contact with our health system.
Yale New Haven Health 2017 Performance Highlights

In an industry that relentlessly searches for the next remarkable medical breakthrough, Yale New Haven Health asked what would happen if it were to apply equal vim and vigor to creating a culture of continuous improvement, ongoing creative problem solving and persistent scrutiny of process and costs.

Yale New Haven Health is committed to that very innovation and excellence needed to advance patient care, teaching, research and community service by building a culture of value innovation among physicians and employees. Such a culture strengthens the health system’s programs and services, improves and streamlines delivery of care, encourages collaboration that brings ideas to fruition, engages patients and families and looks at ways to better manage the total cost of care across the continuum.

Our value innovation capitalizes on our people and our renowned programs as well as lessons learned through our continuous improvement initiatives and development of new processes and technology.

Our achievements and highlights of the past year reflect that commitment to value.

Safety, Quality and Operational Effectiveness

Safety and Quality

As a High Reliability Organization (HRO), Yale New Haven Health continuously strives to improve the quality and safety of health care – to not only reduce errors but to completely eliminate them. During the year, the serious safety event (SSE) rate was reduced at each system hospital: Bridgeport Hospital by 72 percent; Greenwich Hospital by 82 percent; and Yale New Haven Hospital by 64 percent. Although Lawrence + Memorial (L+M) and Westerly hospitals used different measurement tools, the institutions reported three and one SSEs, respectively, which were all-time lows for both. As all delivery networks approach zero, supplemental approaches are underway to begin to reduce precursor events – those that reach patients but have little to no detectable harm. It is important in a high reliability organization to eliminate all harm that could reach our patients.

YNHHS conducted a Safety Culture Survey at all delivery networks which validated high reliability progress in areas such as non-punitive response to error, communication openness, feedback and communication about error and frequency of events reported. Improvement was noted in all 12 domains that are reported. Overall participation in the survey was 55 percent.

More than 70 ongoing projects were featured at the annual YNHHS Joseph A. Zaccagnino Patient Safety and Quality conference where staff from across the system shared best practices learned throughout the year. A team from Yale New Haven Hospital earned the overall conference winner award for their project, “Pharmacy Assisted Admission Medication Histories and Reconciliation: Full Hospital Expansion,” which focused on decreasing admission medical reconciliation discrepancies for all patients admitted to the hospital. By incorporating a pharmacy-assisted process with dedicated pharmacy resources and standardized processes, the team saw a 43 percent reduction in admission discrepancies within a few months. Given the project’s success, similar plans were adopted at Bridgeport and Greenwich hospitals.

Operational Improvement: Value Positioning

The system’s Cost and Value Positioning initiative generated cost savings of $84.2 million this year, including operational cost savings. YNHHS identified $50 million in supply chain cost savings opportunities over the next five years, focusing on non-traditional areas such as human resources benefit management, financial services and information technology services. The Clinical Governance committee worked to create a best-practice and evidence-based formulary for clinical supplies, while the Operations Governance committee focused on the review and management of non-clinical supplies.

The clinical redesign process, instituted three years ago, infuses standardized compliance with best practices and established guidelines. Over 1,000 staff and 200 physicians
participated in more than 150 projects to drive efficiency, resulting in improvement in quality outcomes, as well as cost savings of $9 million. Projects included standardizing respiratory care for Pediatric Intensive Care Unit patients; creating virtual hospice beds to reduce the number of comfort measures only deaths by half; and decreasing duplicate labs, use of CT scan and length of stay to provide better, safer, more efficient care for patients.

To better manage the cost of caring for certain populations prospectively to improve their health outcomes while enhancing service and quality and reducing costs, YNHHS introduced a Total Cost of Care initiative which focuses on areas such as care management and readmissions, bundles and specialty care and the Medicaid population.

**Supply Chain/Non-Labor**

A major focus of the year was the integration of L+M Healthcare into YNHHS, and L+M Medical Group into Northeast Medical Group. Numerous initiatives to enhance L+M Healthcare’s performance were successfully implemented, including investments in clinical services, infrastructure improvements and operational improvements totaling over $23.7 million. In addition, YNHHS created
cost savings of $2.8 million through supply chain management and another $1.8 million in operational and capital cost avoidance.

Yale New Haven Health System’s Clinical Governance and Operations Governance structure enabled non-labor committees and task forces to work together to reduce variation, reduce cost per unit of service and assure that decision-making is value based and sustainable by focusing on patient experience, safety, clinical quality, operational efficiency and cost. This year, YNHHS realized $38 million in non-labor savings. The non-labor committees also achieved $8.7 million in operational and capital cost avoidance.

**Clinical and Information Technology**

Information technology played a key role in value innovation for Yale New Haven Health through the support of numerous initiatives to improve communication, collaboration, patient safety and provider engagement.

Communication between providers improved with an enhancement to Mobile Heartbeat, the health system’s mobile clinical communication tool. Users gained the ability to text as well as send photos, allowing providers to view pertinent pictures related to patient care. To help give physicians and other healthcare providers more time to spend in direct patient care, YNHHS integrated the leading speech recognition software with the health system’s electronic health record. M-modal Fluency Direct captures the provider’s spoken word and enables the ability to document without using a keyboard or transcriptionist. The tool saves time and improves the quality of clinical notes. The health system also piloted the use of virtual scribes – trained medical scribes who further free physicians from data entry, data retrieval and chart navigation.

In June, YNHHS launched ACR (American College of Radiology) Select, an electronic tool in the emergency departments and inpatient areas to help clinicians choose the most appropriate advanced imaging tests.
To enhance the patient experience, YNHHS launched OpenNotes, which provides patients access to their care providers’ notes in their electronic health record. Enhancements to the electronic patient portal, MyChart, gave patients the ability to schedule appointments directly with providers, pay their bills and check for upcoming appointments.

YNHHS also introduced PeraHealth, a clinical surveillance interface based on the Rothman Index, which measures patient acuity with a regularly updated health score based on the patient’s vital signs, nursing assessments and lab results in a graphical format. PeraHealth helps the care team spot at-risk patients for earlier intervention.

Ensuring that pertinent patient information is available to patients and their healthcare providers, YNHHS continued to participate in the largest national health data exchange platform in the country. Last year, YNHHS exchanged 1.2 million patient records across more than 1,200 U.S. hospitals and 32,000 clinics.

The health system also started upgrading its enterprise resource planning system to a new integrated platform called Infor. This initiative will integrate management of Yale New Haven Health core business processes including human resources, supply chain and financial systems and will create the ability to access the system via mobile devices.
Provider of Choice
Service Growth and Access Improvement

Patient volume was stable compared to previous years. Inpatient discharges increased 11.2 percent, and outpatient encounters increased by 23.3 percent, in large part due to the addition of Lawrence + Memorial and Westerly hospitals.

YNHHS announced a new community partnership with Day Kimball Hospital in Putnam. The partnership gave Day Kimball patients access to specialty care, such as cardiology, and introduced YNHHS’ tele-ICU service at the 165-bed community hospital so that acutely ill patients can be remotely monitored by YNHHS intensivists. The partnership also helped the organization save $300,000 in purchasing costs as part of the agreement.

YNHHS also began a partnership with PhysicianOne Urgent Care, the leading provider of urgent care services in the region, to offer broader access throughout the state. The centers also help mitigate some of the wait times at the health system’s walk-in centers and emergency departments.

In creating the foundation for a culture of value innovation, YNHHS started working with Yale Center for Biomedical and Interventional Technology. The organizations agreed to invest in new, promising technologies that have the potential to impact the total cost of care and clinical outcomes.

The Y Access patient transfer service coordinated 7,387 patient transfers from other healthcare facilities – an 8 percent increase. SkyHealth, the system’s critical care air transport service, experienced a 14 percent increase with 190 recorded flights.

Additional System-wide highlights of the year included:

- Integration of Psychiatry and Behavioral Health services
- Launch of a liver cancer program through Smilow Cancer Hospital and Yale Cancer Center
- A new Center for Living Organ Donors at Yale New Haven Transplantation Center
- An Oncology Extended Care Clinic at Smilow Cancer Hospital to provide supportive care and symptom management
- Expansion of Outpatient Pharmacy Services to provide specialty services for oncology, hepatitis C, HIV, cystic fibrosis, multiple sclerosis, rheumatology and transplant patients, as well as those in New London, Westerly and New York
- A precision medicine initiative between Yale New Haven Health and the Yale Center for Genome Analysis
- Introduction of VERA (Virtual Exercise Rehabilitation Assistant) to help patients recover at home from joint replacement or spine surgery
- Expansion of Smilow Cancer Hospital/Yale Cancer Center clinical trials to Trinity Health of New England and L+M Hospital
- Expansion of pediatric emergency medicine to Greenwich Hospital
Patient Experience
The Patient Experience Council’s new Standards of Professional Behavior were introduced across YNHHS, providing a consistent framework for employees and medical staff that aligns with the health system’s five values. Managers, employees and physicians received training on the new standards, which were incorporated into employee performance evaluations.

More than 1,000 staff members from across the YNHHS attended the annual Patient Experience Conference in October, which showcased more than 80 patient experience initiatives. Projects addressed best practices in discharge and care coordination; interdisciplinary collaboration; medical practice; patient and family engagement and education; staff engagement; tools, data and processes; and unit-specific performance improvement.

Clinical Integration
Continuing gains made in bridging transitions of care, clinical integration work groups that consisted of a broad cross-section of the medical community, developed and implemented shared clinical practice guidelines in diabetes, heart disease and pulmonary disease for implementation among community practice groups. The Advanced Care Planning work group developed a toolkit to facilitate advance care planning discussions between providers and patients. The toolkit, available to NEMG physicians, includes printable healthcare representative and living will forms and patient education brochures.

YNHHS also deployed EmmiEngage®, an interactive, multi-media patient education program for gastroenterology and sleep services. The Emmi suite of products includes prevention campaigns that offer targeted patients health reminders related to flu vaccines, annual wellness visits or eye exams. Seventy-five percent of patients reported that the Emmi programs made them more aware of how their lifestyle impacts their health.

Community Benefits
During the year, YNHHS provided $154.8 million in uncompensated care, which includes $94.1 million in free and charity care, plus more than $60.7 million in bad debt.

As a community partner, YNHHS remains committed to building stronger neighborhoods through support of
affordable housing programs, child care, job training and economic development.

Collaborating with local partners, YNHHS worked to implement community health improvement plans and key issues identified in the 2016 Community Health Needs Assessments. Local initiatives included working with the statewide non-emergency medical transportation providers; supporting Get Healthy CT; and co-sponsorship of a symposium on the state’s opioid epidemic.

The health system sponsored hundreds of health screenings, support groups, community education talks, leadership activities and financial grants and assistance to maintain and improve the health of the local communities. YNHHS continued to support education programs for those interested in various medical careers.

People across Yale New Haven Health, along with physicians and staff at the Yale School of Medicine, sent more than 15,000 pounds of supplies and medication to Puerto Rico, devastated after Hurricane Maria in September. YNHHS was the first U.S. healthcare system to organize and provide medical relief for Puerto Rico. YNHHS also donated $50,000 toward hurricane relief to Vizient Inc., which donated more than $1 million for emergency relief for employees of healthcare organizations in southern Texas and Louisiana affected by Hurricane Harvey.

**Employer of Choice**

**Human Resources**

This year’s YNHHS employee engagement survey results surpassed the national benchmark for employee engagement, with 77.1 percent completing the survey.
and over 80 percent indicating that they were “content” or “engaged.” Employees gave high marks to factors such as employee recognition, fair compensation, job security, helpful performance reviews and use of new technologies to support work.

YNHHS has made diversity and inclusion an organizational priority. The YNHHS Office of Diversity and Inclusion launched a cultural competency class to help employees respond to the racial, ethnic and socio-cultural diversity of patients, colleagues and staff. This year, YNHHS was again recognized as a “Top Performer in LGBTQ Healthcare Equality” by the Human Rights Campaign (HRC) Foundation, earning high ratings in its commitment to equitable, inclusive care for LGBTQ patients and their families.

The Know Your Numbers Plus employee wellness program continued in its fifth year, with 83 percent of employees participating in free health screenings and completing additional steps to save up to $500 on their FY 2018 medical benefit premium costs. YNHHS offered reduced costs to employees who need high-cost, specialty medications for oncology, hepatitis C, multiple sclerosis and other complex conditions.

The livingwell CARES care coordination program that helps employees manage certain chronic health conditions increased enrollment to 822 participants with 78 percent reporting positive progression toward meeting their health goals. The program also demonstrated an overall decrease in per-member-per-month costs, total healthcare costs, decreased emergency department use and lower hospital admissions.

Forbes Magazine named YNHHS to its annual list of “America’s Best Employers.” YNHHS was one of 500 companies with more than 5,000 employees to be recognized and was ranked highest among the 17 Connecticut companies named.
Institute for Excellence
The Institute for Excellence (IFE) provided 26,430 hours of classroom and workshop instruction for 2,936 employees and managers across the health system. The IFE collaborated with Yale School of Management to offer a system-wide accelerated leadership development program for 19 directors and vice presidents.

Over 25,000 employees completed approximately 360,000 hours of learning activities through HealthStream and other programs. Expanded use of e-learning technology extended to education for NEMG practice optimization, Epic enhancements, Standards of Professional Behavior and performance management integration, as well as patient safety and professional development initiatives.

The SYN:APSE Center for Learning, Transformation and Innovation designed and constructed a new, 8,000-square-foot simulation center at 730 Howard Avenue in New Haven. During construction, the center continued to provide 22,000 hours of simulation-enhanced experiences to over 7,000 employees across YNHHS. Programs included:

- Simulation-enhanced nursing orientation for all newly hired medical-surgical, pediatric and critical care nurses at Yale New Haven Hospital
- Chemotherapy administration recertification for more than 200 nurses at Smilow Cancer Hospital
- Inter-professional code team training across all delivery networks
- Facility design, safety testing, patient experience training and workflow analysis for new, renovated, inpatient and ambulatory clinical spaces across the health system
Financial Performance

Yale New Haven Health, like all hospitals in Connecticut, experienced a unique set of issues related to healthcare finance. On the national level, the future of healthcare reform continued to be in flux. At the state level, local economies continued to struggle to generate growth, while state leadership searched for solutions to mitigate a $5 billion budget deficit. The health system, however, posted an operating margin of 2.9 percent and a total margin of 7 percent this year.

The favorable margins were due to $25 million of unbudgeted supplemental tax payments, continued growth in key services, effective expense management and projected revenue cycle management enhancements of approximately $242 million.

A major focus of the year was the integration of L+M Healthcare into Yale New Haven Health System and that of L+M Medical Group into Northeast Medical Group. Numerous initiatives to enhance L+M’s performance were successfully implemented, including investments in clinical services, infrastructure improvements and several operational improvements totaling over $23.7 million. In addition to these investments, YNHHS achieved almost $2 million in operational and capital cost avoidance at Lawrence + Memorial and Westerly hospitals.

Given the health system’s positive performance, S&P Global Ratings maintained an “AA” credit rating for bonds issued for Yale New Haven Health as a whole.
In October 2016, Joe Schena, 58, of Fairfield, was in New Hampshire on business when he felt excruciating pain in his abdomen. Rushed to the nearest emergency room, Schena suffered a full perforation of his large intestine. The surgeon removed a 10- to 12-cm piece of large intestine, formed a stoma, or opening, and attached a colostomy bag so that Schena’s intestines could heal. Once stable, he was able to return home. Schena, however, prepared himself for a recovery that would take months.

Four months later, Schena was referred to Jorge Reguero Hernandez, MD, Yale Medicine colorectal surgeon, to have the colostomy reversed.

“Dr. Reguero Hernandez made the experience as pleasant and comforting as possible,” said Schena.

After preoperative testing at Bridgeport Hospital and Park Avenue Medical Center in Trumbull, Schena returned to Bridgeport Hospital for the reconnection surgery. Schena could see the finish line in July, when he was admitted to Bridgeport Hospital for surgery with Saber Ghiassi, MD, of the Yale Bariatric and Gastrointestinal Surgery program, to repair multiple hernias and remove scar tissue caused by his original emergency surgery.

One year after surgery, Schena feels great and is playing golf, thanks to the gastroenterology team at Bridgeport Hospital.
Noni Eden-Davidai of New Canaan never imagined she would one day need support to face the toughest day of her life; whether to have a preventive double mastectomy to decrease the odds of developing breast cancer.

After learning that her cousin had stage 2 breast cancer and tested positive for the BRCA1 gene mutation, she discovered additional links in her family history to cancer.

Eden-Davidai, 54, wanted firm answers. "For me, knowledge is power," she said. She decided to undergo genetic testing and tested positive for the BRCA1 gene mutation, which put her at a much higher risk of developing breast and ovarian cancer.

“The more I learned, the more I knew that a prophylactic mastectomy was the right choice for me,” she said.

Eden-Davidai chose to work with Barbara Ward, MD, medical director of the Breast Center at Smilow Cancer Hospital's Greenwich Hospital campus, and Keith Attkiss, MD, a cosmetic and reconstructive plastic surgeon who specializes in breast reconstruction.

“I knew I was in good hands,” she said. “They made me feel safe. I trusted them.”

“It’s not an easy decision for anyone, especially if you don’t have breast cancer at the time. It’s a very personal, individualized decision,” Dr. Ward said. “Some women grow tired of the stress of having an annual biopsy because a screening test found something suspicious.”

Eden-Davidai has no regrets. "It’s an empowering feeling to have made this decision," she said. “I chose life over cancer.”
Katy Sypher-Piper of Clinton initially balked at taking her 4-year-old daughter, Ava, to the Emergency Department at Lawrence + Memorial Hospital.

Today, she touts L+M, as Ava, over the course of other visits, has bonded with nurses, doctors and L+M’s child life coordinator, Stephanie Henry.

“We’ve been there multiple times, so it’s nice that every experience has been so good,” she said.

That one night in the Emergency Department, for example, doctors not only treated Ava’s pain and dehydration after a recent tonsillectomy – they soothed her worried mother, too.

“Ava was in pain and it was really the first time she ever expressed anger toward me, and I was devastated,” Sypher-Piper recalled. “But the staff was so supportive. They told me it was age-typical development. The doctor explained that, with medically complex kids her age, it’s a very challenging time, as they struggle between independence and the need for help.”

During a couple of trying moments for Ava, L+M staff also delivered the perfect distraction: personal pillow cases handmade by L+M volunteers. One featured cats; another, ladybugs.

“Ava’s excellent medical team has helped her live a good quality of life despite everything, and I like to give credit where it’s due,” Sypher-Piper said. “L+M Hospital is exceptional.”
As president of the Westerly Hospital Auxiliary, Carol Desillier helped fund the purchase of a treadmill for the hospital’s cardiac rehabilitation program – she just never expected to use it.

Desillier’s journey from donor to patient began earlier this year with a sensation in her chest that felt like “someone poked a hole in my right lung.” A trip to the Westerly Hospital Emergency Department proved otherwise. She was having a “full-blown heart attack.”

Desillier feared she was going to be put in a helicopter and flown to Providence for treatment, but the emergency physician at Westerly Hospital explained that a team of specialists at nearby Lawrence + Memorial Hospital was preparing for her arrival.

“They were waiting for me when I got there,” she said. “The doctor himself met me as they got me out of the ambulance. I was scared to death at the moment, but he calmed me down, and they took me right into surgery.”

Two days later, Desillier was home. A few weeks later, she was back at Westerly Hospital, enrolled in cardiac rehab and walking on that new treadmill.

“I’m alive and kicking!” she said. “The rehab team is great, monitoring me and teaching me about diet and exercise. And now I exercise every day – because I want to live!”
A take charge attitude

Jocelyn DeJesus should trademark the ear-to-ear smile that quickly lights up her face. Her joy is infectious, even when she talks about living with chronic hepatitis B and the discovery of a tumor in her already fragile liver.

“The virus was suppressed for a year and my liver enzymes were good for six months when I found out that I had stage 3 liver fibrosis,” the mother of three-year-old twins said. “My doctor said the extent of the fibrosis looked like someone with cirrhosis.”

That’s also when they found the tumor. DeJesus suspected as much. When it was confirmed after an MRI, her reaction was true to her take-charge personality. “What do we need to do? Let’s figure this out,” she said without hesitation.

DeJesus had hepatocellular carcinoma, a primary malignancy of the liver that mostly occurs in patients with underlying chronic liver disease and cirrhosis. Within a few weeks, she was ready to trust in her faith and her care team at Smilow Cancer Hospital and the Yale New Haven Transplantation Center as they successfully performed the first major robotic liver resection in Connecticut.

“Using advanced technology of robotic surgery, our team removed a 6-cm hepatocellular carcinoma during Jocelyn’s liver resection, which resulted in faster recovery time with less pain and a shorter hospital stay,” said her surgeon, David Mulligan, MD, director of Yale New Haven Transplantation Center.

“I’m so happy with my care team,” DeJesus said. “I wasn’t just a number. They made me feel like I was part of their family. That’s when you know you’re in the right place.”
Paul Tantimonico was the love of his wife Jan’s life. The couple shared a cozy home with Lucy Lu, their pet Shih Tzu, until chronic obstructive pulmonary disease claimed Paul’s life.

While a specialist’s diagnosis indicated that Paul had three years to live, no one prepared Tantimonico for what would happen to Paul. His final days, she said, were far from peaceful. The experience left her shattered emotionally and physically.

“Leading up to, and after, Paul’s passing, I was exhausted. It only got worse,” she said. Tantimonico found herself stopping at rest areas for quick naps on her way to and from work. Her physician, Michael Cafaro, MD, an internist with Northeast Medical Group (NEMG) suspected an underlying sleep disorder. He referred her to an NEMG sleep medicine colleague, Stasia Wieber, MD.

While waiting for Dr. Wieber in the treatment room, Tantimonico said the setting reminded her of when the doctor gave her Paul’s prognosis. The memories flooded back. “Almost six years later, all I could do was cry.”

But this time was different. How she was treated changed her perception of patient care: “Dr. Wieber listened to my story, acknowledged my feelings and fear, and comforted me. She explained my treatment so I knew what to expect. She cared.

“It is reassuring that there are physicians, like Dr. Cafaro and Dr. Wieber, who connect with patients and don’t lose sight of the family and how they’re treated. That connection makes a remarkable difference in patient care for a positive patient experience,” she said. “I wouldn’t be here today without that support.”
Delivery Networks and Northeast Medical Group

Bridgeport Hospital

Bridgeport Hospital is a 383-bed urban teaching hospital and home to the second inpatient campus of Yale New Haven Children’s Hospital. Affiliated with Yale School of Medicine, the hospital operates the only burn center in Connecticut – The Connecticut Burn Center. Bridgeport Hospital is certified by the Joint Commission as a Primary Stroke Center and approved by the American College of Surgeons Commission on Cancer as a teaching hospital cancer program.

2017 Bridgeport Hospital Highlights

With its focus on building its investments in clinical programs, infrastructure and employees, Bridgeport Hospital delivered high-value, patient-centered care while enhancing patient experience and safety and maintaining strong financial performance. The serious safety event rate continued to improve. The Joint Commission reaccredited the hospital and awarded the Norma Pfriem Cancer Center with its Gold Level commendation and certification for the Stroke Center. Collaborating with community partners, the hospital began implementing the 2016–2019 Community Health Improvement Plan, focusing on cardiac and diabetes, healthy lifestyles, behavioral health and substance abuse and access to care. Other community health improvement initiatives included Get Healthy CT, Get Healthy Walk ‘n’ Talks, behavioral health screenings and the Dispensary of Hope – a free pharmacy that provides prescription medications at no cost to uninsured and low-income residents of the greater Bridgeport region. Highlights of the year at Bridgeport Hospital included:

Hybrid Operating Room

Patients in need of aortic aneurysm repairs, aortic valve replacements and other heart and vascular procedures now benefit from one of the area’s most advanced hybrid operating facilities. The $5.7 million Elizabeth M. Pfriem hybrid operating room for advanced cardiac and vascular procedures was designed to enhance patient safety and outcomes. It is equipped with the latest imaging system which offers flexible positioning and excellent image quality using low-dose X-rays.

Allison Family Neonatal Intensive Care Unit

The renovation of the Neonatal Intensive Care Unit, part of the Yale New Haven Children’s Hospital Bridgeport campus, neared completion. The $7 million renovated area will provide a
more private and family-centered environment for the care of premature and critically ill infants.

**Improving Access** The Park Avenue Medical Center, which opened in 2016, expanded its service offerings by bringing wound care, interventional radiology and the Yale Medicine bariatrics program to the community. The center, which had almost 20,000 patient visits this year, ranked in the top 2 percent of ambulatory centers nationally in patient satisfaction. The hospital’s Emergency Department opened a new observation unit, doubling its capacity, providing more rapid turnaround time for patients discharged home or admitted to an inpatient unit.

**Clinical Redesign Initiatives** To improve quality and service while reducing costs, the Enhanced Recovery After Surgery program expanded from joint replacement to obstetrics and gynecology as well as urology, improving patient outcomes and reducing recovery time. The hospitalist service expanded direct admission and implemented medication reconciliation for 80 percent of its patients to ensure the accuracy of medication information.

**Greenwich Hospital**
Greenwich Hospital is a 206-bed community teaching hospital, affiliated with Yale School of Medicine. It was the first Connecticut hospital to receive the Joint Commission Gold Seal of Approval for adhering to strict standards for
excellence and safety in spinal fusion and total hip and knee replacement. The hospital also received the American Heart Association and American Stroke Association quality achievement award for its higher stroke care standard. As a progressive regional healthcare center, it includes Smilow Cancer Hospital’s Greenwich Hospital campus.

2017 Greenwich Hospital Highlights

Greenwich Hospital remained committed to achieving value by focusing on enhancing patient care and managing finances, and this year increased volume in targeted services, expanded access and improved patient safety and quality. For the second consecutive year, the hospital’s stroke program received the Get with the Guidelines Stroke Gold Plus Quality Achievement Award from the American Heart Association/American Stroke Association. Committed to enhancing community health, the hospital sponsored diverse programming including the Kids Cooking in the Kitchen series, teaching children about healthy eating, and the Nurse Is In program for free blood pressure screenings. Through its local partnerships, the hospital continued to implement its Community Health Improvement Plan to reduce chronic disease, promote behavioral and mental health and improve access to care. Other highlights of the year included:

Emergency Department Improvements

Greenwich Hospital’s Emergency Department, which handles about 40,000 emergency visits from Connecticut and New York each year, completed a multi-million dollar renovation designed to deliver care more quickly and efficiently. The work included the addition of four exam rooms, a fast-track area to treat patients with less complex conditions, new centrally located nursing work stations for easier, quicker access, expansion of a behavioral health unit for patients with mental health issues, a bereavement room and technology upgrades in every exam room. Greenwich Hospital also opened a new pediatric waiting room and added pediatric specialists from Yale New Haven Children’s Hospital to supplement emergency pediatric care around the clock.

3-D Imaging Navigation System

Greenwich Hospital acquired the Artemis device, a three-dimensional imaging navigation system that combines magnetic resonance imaging and ultrasound to improve detection, monitoring and treatment of prostate cancer. The device is particularly useful for men with elevated prostate-specific antigen levels who choose active surveillance for lower-risk prostate cancer.

Patient Experience

The hospital continued to reinforce a positive patient experience, earning high scores on HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) and above-target Press Ganey scores in outpatient areas and the Emergency Department. For the fourth year, the hospital received the 2017 Women’s Choice Award as one of America’s Best Hospitals in patient experience, cancer care, breast center and obstetrics. The hospital also was named as one of America’s Best Hospitals for bariatric surgery by the Women’s Choice Award. Other honors included Healthgrades’ Outstanding Patient Experience Award and Press Ganey’s Guardian of Excellence Award for outstanding patient experience in inpatient services.

Lawrence + Memorial Hospital

Founded in 1912, Lawrence + Memorial Hospital is a 308-bed, general acute care hospital that provides medical, surgical, pediatric, psychiatric and obstetrical services to the communities of southeastern Connecticut, Fishers Island, New York, and Washington County, Rhode Island.
As the cornerstone of Lawrence + Memorial Healthcare, which includes Westerly Hospital and the Visiting Nurses Association of Southeastern Connecticut, L+M offers cardiac acute, step-down and rehabilitation programs and is the only eastern Connecticut hospital that performs emergency and elective angioplasty. The Smilow Cancer Hospital Care Center in Waterford provides medical oncology services, gynecological oncology and radiation oncology to area residents.

2017 Lawrence + Memorial Hospital Highlights
In its first year of affiliation with Yale New Haven Health, Lawrence + Memorial experienced transition and progress in adopting system policies, processes and practices designed to standardize patient care, improve efficiencies and achieve financial savings. The hospital made huge financial strides during the year, achieving breakeven after years of losses, and upgrading its debt rating with Standard and Poor’s to an “A+” by year’s end, realizing $2 million in gains through clinical redesign initiatives and labor and non-labor-related savings. YNHHS implemented Epic at both hospitals and expanded services in neurosurgery, spine surgery, oncology, psychiatry, general surgery and cardiology. The hospital also invested in community-building efforts through the Community Health Improvement Plan, focusing on improving mental health, reducing substance abuse, nurturing healthy lifestyles and ensuring access to care. Community programs continued to target asthma, HIV outreach, maternal and child health, breast and cervical cancer and cardiovascular disease prevention and early detection. Other key highlights included:

New Senior Leadership In June, Lawrence + Memorial Healthcare welcomed Patrick L. Green, FACHE, as president and chief executive officer of Lawrence + Memorial and Westerly hospitals. He joined Oliver Mayorga, MD, who earlier in the year, became the organization’s chief medical officer after overseeing emergency medicine since 2009.

Community Speaks Out To help address the need to provide quality housing for individuals in addiction recovery, Lawrence + Memorial Hospital awarded $5,000
to Community Speaks Out, a voluntary certification program for sober houses in New London. This led to the development of quality standards that cover all aspects of recovery residence operations, including health, safety, ethics, administrative practices, a recovery support environment and good neighbor practices.

**Breathe Well** Lawrence + Memorial Hospital received the Connecticut Hospital Association’s prestigious John D. Thompson Award for Excellence in the Delivery of Healthcare. The award recognized the hospital’s use of data in its Breathe Well–Respira Bien program – an initiative to help people learn how to control their asthma better and to reduce the number of patient admissions to the Emergency Department for the treatment of asthma.

**L+M Cancer Center joins Smilow** The L+M Cancer Center transitioned to become the Smilow Cancer Hospital Care Center in Waterford, with services in medical oncology, hematology, gynecology oncology, radiation oncology, genetic counseling, lab services and a new, contemporary pharmacy. The facility also was among the first sites in the network to introduce a new leading edge medication in the treatment of multiple myeloma.

**Westerly Hospital**

Westerly Hospital is a 125-bed hospital that provides Washington (RI) and New London (CT) counties with family-centered medical care and a wide array of medical, surgical, laboratory and rehabilitative services. In addition, the hospital offers interventional pain management, wound care, an anti-coagulation clinic and cardiac pulmonary rehabilitation services. With 130 primary and specialty physicians, Westerly Hospital serves the entire community with family-centered medical care.

**2017 Westerly Hospital Highlights**

Westerly Hospital achieved improved performance during the year through continued efforts to improve patient care, quality, safety and service. Efforts focused on engaging the workforce, collaborating with community partners to
improve the health and well-being of area residents and strengthening both clinical and financial performance. YNHHS invested in facility and infrastructure improvements this year, including HVAC system renovations; a new water purification system; upgraded inpatient beds and replacement of an aging nuclear gamma camera. Being part of a community that is greatly challenged by mental health and substance abuse-related issues, Westerly Hospital remained committed to increasing patient access to quality behavioral health services and health education. Highlights included:

**3-D Tomosynthesis Mammography** Westerly Hospital added 3-D tomosynthesis mammography to its breast cancer screening tools, which include breast MRI, automated whole breast ultrasound and stereotactic breast biopsy. The 3-D tomosynthesis mammography provides a more precise image than traditional mammography, allowing physicians to catch breast cancer earlier and reducing the incidence of false positives.

**Telemedicine Services** The hospital outfitted two intensive care patient rooms with audiovisual equipment tied to YNHHS’ Insight Tele-ICU system. This technology allows real-time, remote monitoring by a team of critical care physicians and nurses based at Yale New Haven Hospital in New Haven. In addition, a teledicine cart is now used in seven other ICU rooms. Staff uses the system for remote consultations to access specialists as well as review patient vital signs, physiological status and laboratory and diagnostic test results. The technology contributes to enhanced patient safety, improved patient outcomes and increased provider collaboration.

**Health Impact Collaborative** Westerly Hospital and the Health Impact Collaborative committed to focus community health improvement efforts on behavioral health over the next several years, based on the Westerly Community Health Needs Assessment which revealed that the area is challenged by mental health and substance abuse issues. Programming includes community education activities and trainings in Youth Mental Health First Aid and suicide prevention.

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**Yale New Haven Hospital**

Yale New Haven Hospital, founded in 1826 as the first hospital in Connecticut, is a 1,541-bed acute and tertiary care hospital, which also includes Yale New Haven Children's Hospital, Yale New Haven Psychiatric Hospital, Smilow Cancer Hospital and Grimes Center. With two inpatient campuses in New Haven, YNHH is the primary teaching hospital for Yale Schools of Medicine and Nursing and a major tertiary care center for acutely ill or injured patients. The hospital includes several outpatient centers and dozens of radiology and blood-drawing services throughout the state. In collaboration with community partners, YNHH continued to manage the Healthier Greater New Haven Partnership, a group of 40 organizations dedicated to improving the health and well-being of residents in the region. Among its many initiatives, the group coordinated Get Healthy CT Walk ‘n’ Talk events with healthcare providers; a Get Fit/Healthy Kids Day; and a symposium on the opioid epidemic in Connecticut.

**2017 Yale New Haven Hospital Highlights**

Yale New Haven Hospital continued its commitment as a destination hospital by delivering high-quality, patient-centered care, expanding access, improving safety and increasing patient volume in key services. The hospital’s reputation resulted in top national rankings by *U.S. News & World Report* in nine adult specialties and eight pediatric subspecialties.

**Magnet® Re-designation** For the second time, Yale New Haven Hospital received the prestigious Magnet designation from the American Nurses Credentialing Center. The 2016 re-designation survey included the Saint Raphael Campus. With its successful completion, YNHH became one of the largest Magnet designated health care organizations in the country. Magnet designation recognizes quality patient care, nursing excellence and innovations in professional nursing practice.

**Center for Musculoskeletal Care** The Center for Musculoskeletal Care (CMC) added a new, 17-bed unit at the Saint Raphael Campus. To complement the center’s services and meet patient needs, the former Michael J. McGivney Center is being transformed into
a musculoskeletal ambulatory surgery facility, with six operating rooms and 23 pre- and post-operative beds, to provide same-day surgeries for bone, joint and spine conditions.

**Innovations in Medicine** Yale New Haven Hospital pioneered the first FDA-approved hybrid closed loop system for the treatment of Type 1 diabetes. Like an “artificial pancreas,” the system is an external pump that automatically monitors and delivers the exact amount of insulin a person with diabetes needs 24 hours a day. The Heart and Vascular Center was the first hospital in the United States to perform a commercial implant of the Core Valve Evolut PRO transcatheter aortic valve for less invasive treatment of severe aortic stenosis, allowing patients to be discharged sooner.

**Transplantation Center** In July, the YNHH Transplantation Center completed a successful, 18-person kidney transplant, making it the largest kidney chain exchange in Connecticut and one of the largest in the country. The transplant matched nine donors and nine recipients from three different states. The hospital also was the first in the state to conduct follow-up visits for transplant patients using video visits which lets physicians check patients’ incisions, discuss lab results and answer questions while patients remain in the comfort of their homes. The U.S. Health Resources and Services Administration presented YNHH with a platinum award for its organ donation efforts.
Northeast Medical Group
Northeast Medical Group (NEMG) is a multispecialty medical foundation that was established in 2010. With more than 130 locations in Connecticut, Rhode Island and Westchester County, New York, NEMG is part of Yale New Haven Health, a relationship that provides patients with access to the resources of one of the country’s leading health systems. NEMG has more than 1,900 employees including 850 physicians and medical professionals affiliated with Bridgeport, Greenwich, Lawrence + Memorial, Westerly and Yale New Haven hospitals.

2017 Northeast Medical Group Highlights
NEMG expanded the footprint of its physician practices through recruitment, service and facility growth and clinical quality tools to ensure the delivery of integrated, high-quality care that also addresses patient satisfaction. Key highlights included:

Increasing Provider Scope As a result of the affiliation of Yale New Haven Health and L+M Healthcare in September 2016, the physicians and staff of L+M Medical Group (LMMG) officially joined NEMG in April. The integration grew the number of NEMG provider locations to more than 130, increased the number of clinicians and broadened the service area to include southeastern Connecticut and Westerly, Rhode Island. The integration also gave LMMG patients access to the resources, specialists and treatment options of Yale New Haven Health.

Northeast Medical Group Multispecialty Center In June, NEMG officially opened a new facility that brought together 23 clinicians, the healthcare services of eight practices and a walk-in center with evening and weekend hours. The new Northeast Medical Group Multispecialty Center in North Haven includes primary care, cardiology, gastroenterology, neurology, gynecology and pulmonary medicine as well as laboratory services, X-rays and cardiology testing.

Continuum of Care NEMG partnered with The Osborn, a continuum-of-care community for older adults in Rye, New York, to enhance care for residents and patients. NEMG physicians provide medical care for patients admitted for short-term rehabilitation. Services at The Osborn include independent living, assisted living, memory care, short-term inpatient and outpatient rehabilitation and skilled nursing.

OpenNotes To empower patients, families and caregivers about their healthcare decisions, NEMG launched OpenNotes to improve communication between patients and physicians. OpenNotes gives patients access to physician notes through MyChart, improving transparency, communication and patient engagement.
YNHHS Departments and Services

As of September 30, 2017

**Budgeting** helps the hospitals develop and monitor operating, cash and capital budgets.

**Business Development** provides planning and support for System and Delivery Network new ventures and coordinates System ambulatory and population health-based strategies.

**Center for Healthcare Solutions** coordinates YNHHS emergency preparedness activities, provides emergency preparedness leadership and business continuity planning. Its Grants Resource Office helps identify and secure grants and provides project financial and management services.

**Charge Capture/Price Master** coordinates charge master reviews, charge capture and pricing strategies, and Medicaid and Medicare reimbursements.

**Clinical Integration** manages and coordinates clinical integration efforts across YNHHS, including the management and development of care coordination services for patient populations in value-based contracts.

**Corporate Compliance** Corporate Compliance ensures a consistent approach toward ethical issues and values, compliance with external regulatory organizations and ethical employee behavior through the YNHHS Code of Conduct.

**Corporate Facilities** supports all campuses for the design, construction, renovation and operation of all buildings, and is responsible for leasing and management of off-site locations.

**Corporate Finance** provides financial reporting, accounting, accounts payable, tax filing services and payroll for the Health Services Corporation and YNHHS hospitals.

**Corporate Pharmacy Services** coordinates pharmacy services across YNHHS, including operational and formulary standardization, clinical services and pharmacist practice model, procurement and contracting and medication safety and quality improvements.

**Corporated Supply Chain Management** develops strategy and services related to non-labor contract management and negotiations, clinical value analysis, procurement operations, supply chain analytics, materials management/logistics operations and leadership of the cost and value positioning non-labor initiative.

**Data Analytics** maintains an integrated clinical, financial and operational information system to help managers understand and evaluate resource utilization in a timely and accurate manner.

**Diversity and Inclusion Office** works to create an inclusive and supportive environment that embraces the diversity of employees, patients, families, physicians, visitors and community. The office includes an executive Diversity and Inclusion Committee and Diversity and Inclusion teams at each delivery network.

**Financial Planning** helps evaluate resource requests, allocates resources, monitors budgeted versus actual resources and implements corrective action plans.

**Government Affairs and Community Relations** monitors health legislation at state and federal levels, serves as liaison to elected officials and develops relationships with community agencies and stakeholders.

**Human Resources** provides human resource, employee relations, recruitment and human resource information to YNHHS members. Compensation and Benefits handles information, background and monitors the standardization of compensation and benefits programs. HR Information Services supports manager self-service, employee self-service, tuition reimbursement, HR database and HR information technology.

**Information Technology Services** maintains technology infrastructure, clinical applications, business applications and support to serve the needs of patients, physicians and staff.
Institute for Excellence provides System-wide coaching, training and education programs in performance improvement, change management, leadership development, team building and e-learning. The SYN:APSE simulation center provides simulation-enhanced, experiential learning opportunities to YNHHS.

Internal Consulting Group provides project management, data research and analysis, and process management by delivering value, reducing costs, and improving quality and safety through human resources, labor, non-labor and clinical redesign activity.

Laboratory Medicine encompasses microbiology, chemistry, transfusion services, hematology, immunology, molecular diagnostics, virology and surgical pathology. The department also manages blood draw stations located throughout southern Connecticut.

Legal Services provides and coordinates legal and certain risk management services for YNHHS and its affiliates.

Managed Care develops managed care payer strategies, negotiates provider agreements with payers and provides ongoing contract implementation and management support.

Marketing and Communications manages internal and external communications, including media relations, advertising, marketing and digital/social media properties, and oversees the YNHHS Physician Services and Referral Center.

Payroll coordinates the management of payroll functions for all System organizations.

Planning and Regulatory oversees the Certificate of Need process for YNHHS and various regulatory reporting activities. Strategic Planning provides service area data analysis; assesses the impact of market industry changes to guide the business and strategic planning process; supports service line development; and manages community health needs assessment and planning.

Quality and Performance Management supports managers and clinical leaders in improving performance in both clinical and non-clinical areas, measures and monitors patient safety and clinical quality, and develops and maintains electronic dashboards and scorecards to monitor clinical, operating and financial measures.

Reimbursement coordinates regulatory financial filings to state and federal agencies and governmental cost report reimbursement settlements, pursues government reimbursement appeals, and works with net revenue assumptions for compliance, budgeting, and financial reporting.

Specialty Pharmacy Services fills medication prescriptions for complex diseases or transplants and provides patients with services such as insurance authorization, medication management, disease-specific education, home delivery and financial counseling.

System Business Office handles patient billing and account follow-up, patient admitting and registration, financial assistance administration, collection and account recovery, accounts receivable, medical records and coding, credit balances and partial pay account.

Treasury provides investment, debt, banking and insurance advice to the System organizations.

Workers Compensation coordinates a network of workers compensation specialists accessible to employees of the System organizations.
VISION, MISSION AND VALUES

VISION
Yale New Haven Health enhances the lives of the people we serve by providing access to high-value, patient-centered care in collaboration with those who share our values.

MISSION
Yale New Haven Health is committed to innovation and excellence in patient care, teaching, research and service to our communities.

VALUES
PATIENT-CENTERED – Putting patients and families first
RESPECT – Valuing all people
COMPASSION – Being empathetic
INTEGRITY – Doing the right thing
ACCOUNTABILITY – Being responsible and taking action