2018 Quality & Safety Value Report

Hartford HealthCare
Message from Our Chief Executive Officer

On behalf of everyone at Hartford HealthCare, thank you for your interest in our quality-and-safety journey. It’s an ongoing quest to provide the best and most advanced care and a consistently great patient experience across Connecticut and beyond.

They say, "It takes a village." With more than 20,000 employees, we’re beyond a village, but we are definitely a community. Hartford HealthCare is a diverse and devoted community of healers and helpers that is dedicated to improving the health and well-beings of the communities it serves. What binds us together is our commitment to our patients and families. That commitment is built around our values of integrity, caring, excellence and safety. And it’s reflected in our vision of being “most trusted for personalized coordinated care.”

In these pages, you will see the many ways in which we have championed safe, high-quality care – always working to improve in order to earn the trust of those we serve every day. We believe that providing the best care efficiently in the most appropriate setting will help us make care more affordable. We also are ensuring that every interaction with our organization – at any of our nearly 300 sites of care – is a warm and compassionate experience. Those elements – quality, efficiency and experience – are our ingredients for high value healthcare.

We have made tremendous strides over the last decade. This remarkable progress is due to the passion of our talented staff. I invite you to explore their many achievements in this report and to entrust all of your healthcare needs to Hartford HealthCare.
Message from Our Chief Medical Officer

Making Healthcare More Affordable

In past years, the Annual Quality and Safety Value Report has focused mainly on quality, safety and patient experience. We have had notable achievements in making Hartford HealthCare a safer health system. We have seen a 75 percent decrease in the frequency of medically caused harm over the past five years and improved clinical outcomes in many areas. We now are focused on providing the best patient/customer experience in the Northeast by 2023, signified by "#123."

This is a “value” report, and we often define value as the intersection of high quality, a great patient/customer experience and fair cost. Because much of the report focuses on the first two, I want to take a moment to describe some of what we’re doing to make care more affordable at HHC.

HHC derives 52% of its revenue from ambulatory care and 48% from hospital care. We are no longer a “hospital company,” but a fully integrated healthcare organization spanning the full care continuum. During the last several years, HHC has anticipated the needs of its consumers by creating a large network of ambulatory and imaging centers across Connecticut. These centers provide uniformly excellent care close to home for our patients/customers and typically at lower cost, compared to the same services in hospitals. Consumers paying an ever higher share of healthcare costs are choosing our outpatient centers.

We also have launched 17 HHC/GoHealth Urgent Care Centers. They are expected to see nearly 250,000 patient visits this year. They offer convenient, extended hours and easy online scheduling. The HHC/GoHealth network is fully integrated into HHC’s Epic electronic health record and integrated laboratory and imaging platforms. The result is seamless care and customer service shown to be better than some national customer service leaders, like Geico and Southwest Airlines. All of this comes at an affordable cost and frees up our emergency departments to treat more serious conditions.

Integrated Care Partners, our clinical integration organization, has invested heavily in care coordination staffing and technology that has successfully prevented hospitalizations and hospital readmissions, thereby reducing the total cost of care. These efforts are further enhanced by the cooperation and involvement of Hartford HealthCare at Home – Connecticut’s largest home care agency. HHC at Home coordinates care with our physicians and hospitals.

Our Clinical Care Redesign Program now is in its second year and is designed to improve the quality of care and reduce waste. The programs successes will be described in this report.

HHC is working to reduce the cost of care to consumers. We believe that value in healthcare is not simply a matter of the price tag. It’s the combination described above: consistently excellent care, a great patient/customer experience and cost. That’s how we provide value to those we’re privileged to serve. We are committed to ever greater transparency, cost efficiency and quality in our effort to create and sustain healthier communities.

Rocco Orlando III, MD
Senior Vice President & Chief Medical Officer
Hartford HealthCare
Patient Experience

Hartford HealthCare (HHC) continues to focus on Patient Experience as a primary focus in order to become #1 in patient experience in the Northeast by 2023. We are providing the best patient experience centers around how we collectively participate in the moment to moment interactions with patients and their families. Ultimately, this commitment to the patient experience will elevate the mission and vision of HHC to cultivate health and healing in our communities building and sustaining trusting relationships in coordinated care. As an organization and commitment to our journey the creation of Experience, Engagement, and Organizational Development (EEOD) was formed under the leadership of Gerry Lupacchino, Sr. Vice President.

In order to enhance our journey to becoming #1 in customer experience in the Northeast by 2023, we recognized that we also need to focus on staff engagement, the ultimate driver of the patient experience.

• Every Customer Matters
• Every Employee Matters
• Every Physician and Provider Matters

Our focus for every group is to ensure they feel listened to, communicated to in a way they understand, and treated with courtesy and respect (based on research from the Beryl Institute).

Every Moment Matter in 3 Key Populations

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<th>Every Patient/Customer Matters</th>
<th>Every Employee Matters</th>
<th>Every Provider Matters</th>
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<td>Experience training is both in-person and virtual</td>
<td>All-staff experience training Every Moment Matters internal “Marketing” campaign</td>
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<td><strong>Every Employee Matters</strong> We raise engagement issues at the end of every meeting as part of our standard agenda: Did you feel listened to? Did we communicate with each other in ways that were understood?</td>
<td>Training leaders to focus on key engagement issues: I feel listened to, respected, communicated to clearly and like I belong</td>
<td>Provider support network building and strengthening</td>
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<td><strong>Every Provider Matters</strong> Did we create an experience of courtesy and respect?</td>
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<td>Self-care and wellness</td>
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Driving Organizational Transformation; Making Patient Experience a Strategic Initiative. HHC is a high reliability organization and to meet our goal of becoming #123 in the Northeast, the Office of Experience at HHC took measures to:

1. Create accountability with outcomes aligned with balanced score card standards. Service Excellence training to all employees: Providing an Exceptional Experience: Making Every Moment Matter, Service Recovery, and Values-Based Interactions

2. Implementation and reinforcement of customer experience best practices

3. Incorporation of institute/regional executive experience steering committees

4. Focused efforts on unit and provider specific accountability, including priority indices (unit specific critical items from the Press Ganey customer experience surveys), and transparency of ratings
After this restructuring, we began our second phase which incorporated collaboration with our lean partners, service support teams, medical and nursing staff, frontline caregivers, and organizational development. In the second phase, we then created a process to cascade our metrics down to unit specific levels identifying priority indices, developing a patient experience driver, and creating unit specific action plans with a method for follow up and accountability.

System wide dashboards were created outlining all units with specific attention on the lower performing units with actionable plans to improve the patient experience.

Two primary best practices that require consistent adherence to are:

- **Intentional Hourly Rounding:** To connect with your patients, reduce fear and proactively address needs, a member of the nursing team will round on every patient, every hour.

- **Clinical Manager Rounding:** Clinical Managers purposefully round on new patients to establish an interpersonal connection, reassure patients that they have a leadership resource to contact and address any service recovery needs. Service Recovery categorical data is collected through the rounding and trended for resource allocation and ongoing process improvement.

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### Established Customer Experience Center

- Receive ~ 120,000 survey data points weekly
- Analyze data down to unit function levels and derive feedback
- Human-Centered Care Team partners with local leaders to create action plans around data and feedback
- At 30th in customer experience percentile ranking in 2016 – Now trending at 52nd

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### Accountability

- Unit-based performance metrics
- Executive patient-experience steering committees
- Patient-experience best practices
- Focused plans for lower-performing units

### Education

- Online and in-person training for all employees
- Providing an exceptional experience: Making every moment matter
- Values-based interactions
- Service recovery

### Engagement

- Fostering the culture of patient-experience ownership
- Staff & provider engagement
- Reward/recognition
- Lean initiatives – support drivers/huddle reports
- Collaboration with Quality, Risk & Patient Advocacy
Year End Results and Successes:

- Acute Care improved from the 30th percentile nationally on the Overall rating of care given to 43rd percentile nationally
- Emergency Department improved from 25th percentile nationally on the Overall rating of ER care given to 34th percentile nationally
- Medical Group improved from 31st percentile nationally on the standard Overall Assessment to 54th percentile nationally
- Inpatient Behavioral Health improved from 15th percentile nationally on the Overall rating of care given to 31st percentile nationally
- Outpatient Rehabilitation improved from 44th percentile nationally on the Overall rating of care given to 65th percentile nationally

**HHC was recognized at the annual meeting of the Healthcare Information Management Systems Society for using advanced analytics to monitor and improve our customer experience results. In a presentation entitled “Aligning Patient Experience Data to improve Patient Centered Care” the approach used highlighted the following successes:**

- Developed alignment of patient experience analysis across the system through the use of a single data tool and supporting curriculum
- Use analytics to compare patient experience across units, locations, and providers to derive best practices and areas of improvement
- Evaluate specific details around areas of concern that patients have through individual surveys
- Provide automated weekly updates of patient experience data rather than manual, laborious monthly updates
- Inspired new drivers and initiatives to improve patient experience and outcomes
- Enable access to timely and detailed customer survey information across HHC
Welcome to the #123 Experience Application

HHC BSC FY19 Progress
The #123 Experience application allows you to:
- Monitor your unit(s)' overall rating of care and performance indices
- Visualize trends in HCAHPS performance
- Compare your unit with others to facilitate the sharing of best practices
- Analyze survey detail and patient comments
- Identify areas for improvement in patient experience scores

HHC Target: 74.54%
FY19 Progress

Every Customer Matters
Every Employee Matters
Every Physician and Provider Matters
Inpatient
Target 74.00%
FY19 Progress

Emergency Services
Target 66.50%
FY19 Progress

Behavioral Health
Target 60.90%
FY19 Progress

HHC MG
Target 83.20%
FY19 Progress

Community Network
Target 87.40%
FY19 Progress
Improving Care

The traditional model of health care has focused on the treatment of individual patients, who present with acute illnesses in a fee for the service payment system, with some added preventive care services such as cancer screening.

Population health is a model of healthcare focusing on the “triple aim” of controlling the cost of care, enhancing the patient experience of care, and improving quality outcomes for a population, whether segmented by geographical locations, chronic disease states, or socioeconomic risk factors. Alternative payment systems, increasingly promoted by Centers for Medicare and Medicaid Services (CMS) as well as private insurance payers, reward this approach.

Hartford HealthCare has established ICP as a clinically integrated provider network, with enhanced resources to provide holistic, coordinated care, to track populations over time, and to collect data to support achieving quality aims.

The ICP approach centers on primary care providers, both employed and in private practices. Embedded RN and social worker Care Managers work with the practice populations. They focus on high-risk situations such as transitions from hospital to home and high-risk patients with multiple or complex chronic conditions. They engage with patients to do complete clinical and social assessments of their healthcare needs. Behavioral health clinicians are embedded in many practices and address the prevalent psychosocial factors impacting health. ICP Pharmacists support patients and providers with management of complex medication regimens and promotion of cost-effective medication choices.

The multidisciplinary team uses the Healthy Planet module of EPIC to document care plans and track quality outcomes. Some of the performance results of these enhanced capabilities include:

- 35,000 outreaches by Care Managers to 11,000 unique patients at transitions of care or for management of chronic illnesses
- Practices with integrated behavioral health showed greater than 30% improvement in anxiety and depression screening scores as well as a 24% reduction in emergency department visits and hospital admissions
- Quality dashboards built in Healthy Planet showed improvement in patients’ receiving preventive screening exams as well as in quality measures of chronic conditions
- ICP enables provider revenue from value-based payer agreements, helps the lower total cost of care for joint replacement bundles of care and assisted Hartford HealthCare Medical Group practices to participate in a State of Connecticut value based pilot for Medicaid patients

The Comprehensive Care for Joint Replacement (CJR) model aims to support better and more efficient care for beneficiaries undergoing the most common inpatient surgeries for Medicare beneficiaries: hip and knee replacements (also called lower extremity joint replacements or LEJR). This model tests bundled payment and quality measurement for an episode of care associated with hip and knee replacements to encourage hospitals, physicians, and post-acute care providers to work together to improve the quality and coordination of care from the initial hospitalization through recovery. CMS select participating hospitals and the organizations are required to participate. Our hospitals selected were Backus Hospital and MidState Medical Center. The participant hospitals are responsible for cost and quality of care from hospitalization for surgery through ninety days after admission. Hospitals are held accountable for this care through increased coordination of patients’ care among hospital, physicians and post-acute care providers. The CJR program complements other initiatives currently piloted by CMS, such as accountable care organizations (ACOs). ACOs are designed to address population costs and quality, and therefore must include preventive initiatives that avert disease and reduce the incidence and prevalence of chronic health care conditions. The CJR complements these broader efforts as it provides strong incentives to improve quality and manage overall spending within an episode of care.
The CJR program has accomplished the following to improve the overall quality and value to our patients.

- Optimization of surgical practice (blood transfusion rate decrease, multi-modal pain management for early ambulation)
- Reduced variation in utilization of skilled nursing facilities from baseline performance years
- Close alignment with Integrated Community Network (PPN) with report cards generated and shared with partners

Performance for the second year (October 2016 to September 2017) resulted in a payout of $268,000 from CMS (177 episodes), of which Backus Hospital received $198,000, and our Orthopedic Partners received $70,000.

Future population health projects include bundled episodes of care around hospitalizations for congestive heart failure and chronic obstructive lung disease. Also, partnership with community organizations to address socioeconomic issues affecting patients, improvement of care and outcomes for a patient with type II diabetes mellitus and focus on geriatric best practices with CarePartners of Connecticut. Our joint venture Medicare Advantage plan, with enhanced coordination of care between hospital, nursing home, and ambulatory providers.
Care Logistics Center (CLC)

The CLC is Hartford HealthCare’s (HHC) command center for assigning patients to hospital beds and managing the inflow of over 7,000 patients annually to our hospitals. CLC is changing the way HHC manages patient flow across the system. With our drive to become #1 in personalized and coordinated care by 2023, the HHC CLC plays a pivotal role in achieving that milestone. The CLC improves the patient experience by eliminating waste, improving system visibility and aligning care and resource coordination across all HHC hospitals and Emergency Departments. A goal of HHC is to provide the highest quality of care while ensuring no patient waits for the care they need. Hospital throughput is a marker of quality. A shortage of beds for incoming patients may result in patients not receiving timely treatment. Therefore, the need to transition patients out of the hospital when appropriate and without delay is essential to hospital throughput and to improving the patient experience. At the HHC CLC, our team knows that improving patient throughput is not just about seeing patients as quickly as possible. It is a complex task of making sure that patients receive quality care in the right location, at the right time, with the right expert clinicians.

Delays at each level of the patient’s journey through a healthcare system, from admission through discharge, impact thousands of patients daily. These delays are quite often due to the inefficiencies that exist in all healthcare systems. Delays in transitioning patients out of acute care beds lead to delays in admitting patients. Delays in moving patients in the Intensive Care Units (ICU) to less acute beds lead to critical patients not being able to move to the ICU beds they need. The lack of inpatient beds leads to acutely ill patients in community hospitals, not being able to transfer to a tertiary care hospital promptly.

Every day the HHC CLC develops an interdisciplinary, multifaceted strategic plan to improve patient flow across our system. The HHC CLC must account for and coordinate the movement of every patient that comes into or transitions out of our acute care hospitals. The co-location of critical care nurses, environmental and transportation dispatchers and the recent addition of emergency medical services dispatchers at the HHC CLC allows for our system to maximize our utilization of limited resources thereby significantly improving the way patients are moved throughout the system, improving access to appropriate care and enhancing the patient experience. The HHC CLC, working together as one cohesive team, has enabled the staff to identify inefficiencies and create standard processes thus dramatically increasing the number of patients who can access the quality care provided in our HHC acute care facilities.

Future goals of the HHC CLC include managing the system’s inpatient psychiatric facilities, coordinating transitions from acute care to post-acute care services, being an information resource hub for patients post-hospital transition and using remote technology to monitor the clinical status of patients in the hospital and at home. The field of Medicine is rapidly changing. Our field has been slow to utilize the power associated with robust data analytics and the power that comes from using this data to improve the care we provide. The HHC CLC is on the leading edge of utilizing this data to move towards our ultimate goal of #123.
On January 6, 2019, Dyanne Colby-Chace, RN at the HHC CLC received a call at 8:10 pm from Dr. Jolin, ED attending at Backus Hospital. A 70-year-old gentleman presented at the Backus ED and received a diagnosis of both a heart attack and a stroke within minutes, Dyanne was able to connect the Backus ED attending and arrange an immediate call with the Neurology attending physician at Hartford Hospital, the interventional cardiologist. The staff reviewed the case, and the decision was made to transfer the patient to the Hartford Hospital ED where he was to receive a stat neurological exam. After discussion with the stroke attending and chief of the Ayer Neuroscience Institute Dr. Mark Alberts, the neurology and stroke teams decided that it was safe for the patient to go to the cardiac cath lab at Hartford Hospital. Post-transfer of the patient to the lab he received a lifesaving percutaneous transluminal coronary angioplasty (PTCA) to a 100% occluded right coronary artery. The patient was home five days later.

On February 28, 2019, Lisa Begley, RN at the HHC CLC received a call at 9:26 am from Dr. Bahadory, ED attending at Backus Hospital regarding a 90-year-old male with a ruptured aortic aneurysm. Lisa placed a call to Dr. Webster-Lake, vascular surgery attending at Hartford Hospital and Lisa facilitated a conversation about the patient. Unfortunately, all of the operating rooms were full at Hartford Hospital. Before the opening of the HHC Care Logistics Center, the patient most likely would have been sent to Yale. Lisa, however, was able to place a call to The Hospital of Central Connecticut and quickly learned that their cath lab hybrid operating room was free and ready to accept a patient. Life Star flew the patient to The Hospital of Central Connecticut Emergency Department. Dr. Parth Shah, vascular surgery attending drove from Hartford Hospital to THOCC to perform the surgery and repaired the patient’s ruptured abdominal aortic aneurysm. The patient was home in a week.

Patient Stories
Clinical Care Redesign

In fiscal year (FY) 2018 the Clinical Care Redesign (CCR) program continued in pursuit of its mission to improve quality of care, reduce unnecessary care variation, and reduce cost across Hartford HealthCare (HHC). As the organization strives to embody “One Standard of Excellence” throughout the organization, CCR is helping bring that standard to life in all clinical areas. HHC constantly seeks to deliver the best possible outcomes to its patients every time they receive care while also being good stewards of healthcare resources and driving down costs wherever feasible. CCR continues to operate on the principle that variation in care translates to variable quality outcomes and costs. Through standard adoption of evidence-based best practices led by providers and clinicians and reinforced by the quality team, CCR supports the HHC vision to be “Most Trusted for Personalized Coordinated Care.”

To be successful along this journey in CCR, HHC first had to be willing to challenge the status quo and to think and work differently in the ways the organization provides care to patients. Provider leaders from across HHC were appointed to join the program and were trained to utilize the HHC CCR playbook. Also, all providers participating in the Provider Leadership Development Institute were oriented to the CCR Playbook, thus increasing the overall bench strength of the provider leaders in care redesign as well as accumulating increased buy-in for the CCR program at large.

Other foundational keys to success in CCR are the availability of data and evidence-based solutions. Data is necessary to define the current state and highlight opportunities in discovery and then to quantify the quality and cost outcomes after implementation of the project work. After learning all the opportunities, Identification of care pathways occurs based on prominent medical society guidelines, industry best practices, and available clinical literature. Through provider engagement, data analysis, and evidence-based clinical pathways the CCR program has observed many successful outcomes over the past year.

The clinical areas in focus for CCR FY18 were: Chronic Obstructive Pulmonary Disease (COPD)/Pneumonia, Colorectal Surgery, Cardiac Cath Lab, Cardiovascular Surgery, Sepsis, and Interventional Radiology/Peripheral Vascular Supplies. Under the guidance of the program executive sponsors and through a partnership with supporting departments, HHC provider/nurse dyad teams lead the way in HHC acute care facilities to achieve the targeted quality and cost outcomes with a keen, patient-centered focus.

CCR has made a meaningful impact on the quality of care patients receive across HHC as well as contributed significant financial improvements in FY18:

- In the COPD/Pneumonia space, the organization achieved a 1.25 day reduction in length of stay from 5 to 3.75, a 12% reduction in CMS readmission rate, and a 68% decrease in duplicate steroid utilization from baseline.
- Since the implementation of Enhanced Recovery after Surgery (ERAS) for colorectal procedures at Backus Hospital, there is an observation of promising quality outcomes, as evidenced by a decreased average length of stay by more than 50% from 4.6 to 2.1 days.
- A threefold increase in ERAS patients receiving no narcotics to aid recovery from 3.7% to 12.8%, a rise in the return of normal gut function by post-operative day two from 47.7% to 97.2% of patients, and a sizable reduction in inpatient complications from 34.8 to 2.7%.
- The Cardiac Cath Lab achieved a 50% reduction in the percentage of Percutaneous Coronary Intervention (PCI) patients sustaining acute kidney injury, reaching the national benchmark (National Cardiovascular Data Registry (NCDR) 50th percentile).
- An observation of a tremendous decrease in the door to balloon time for ST-Elevation Myocardial Infarction (STEMI) patients from sixty-six minutes in 2016 to thirty-eight minutes in August 2018 placing HHC well below the NCDR top decile time of forty-eight minutes.
- In cardiovascular surgery, transcatheter aortic valve replacement (TAVR) patients consistently transition to a step-down level of care versus ICU level of care preserving HHC’s most specialized acute care beds for other patients in need.

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<td>Percentage Increase in Early Screening in the ED across HHC</td>
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<tr>
<td>100%</td>
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<tr>
<td>45% in September</td>
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<td>94% in December</td>
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Additionally, the organization built on ERAS principles to develop the Enhanced Recovery for Cardiac Surgery (ERACS) clinical pathway which was created and launched in Epic. In Sepsis work, HHC leveraged Epic to integrate visual alerts, screening, and triage mechanisms, created real-time patient-specific sepsis reports, and optimizing the use of best practice alerts in the Emergency Department (ED). Early screening for Sepsis in the ED improved drastically from a baseline of screening of 45% of patients to 94% system wide. In Interventional Radiology (IR) and Peripheral Vascular (PV), a physician group from across HHC evaluated products and came to consensus on streamlining and standardizing purchase and utilization of IR/PV supplies. As a result of this work, HHC realized $490,000 in annual savings, consolidation of suppliers and contracts, and mitigation of annual price increases totaling $306,000 through the power of having many providers at the table and engaged in the negotiating process. In addition to the impressive quality outcome improvements seen through the CCR program work in FY18, there was also 9.5 million dollars in financial improvements for the year.

As the Clinical Care Redesign Program continues to grow and expand, it remains HHC providers, nurses, other clinicians, and support team members that have truly embraced the mission to improve the health and healing of the people and communities we serve through a focus on quality and creating a single standard of excellence. HHC’s expertise and willingness to challenge the current state have translated to the achievement of substantial quality and cost outcomes over the course of FY18. These leaders and teams examined the clinical data, isolated opportunities, identified best practices, created new pathways for the best possible care, educated HHC staff, and leveraged the single, integrated electronic health record to achieve the goals of CCR. As HHC iterate in coming years, the tenets and principles of the CCR Program and playbook will continue to serve as a vehicle to bring the strategy “One Standard of Excellence” in clinical care to fruition.
Community Network

Fall Prevention Program

Hartford HealthCare at Home (HHCAH) observed an increase in falls resulting in significant fractures and head injury in both the home health and hospice programs in quarter four of 2017. A Quality Assurance Performance Improvement (QAPI) project collaborative between HHCAH and Hartford HealthCare Rehabilitation Network (HHCRN) was undertaken in quarter one of 2018 to address injury prevention. The team focused its work on prevention of injuries when falls occur developing a falls algorithm and therapy referral guide. Staff members received education on standardized care for fall prevention, care planning, and post-fall assessments.

Overall, falls continued to trend down throughout 2018 while falls with significant injury remained constant in the certified home care program.

Hospice Fall Incidence

Falls incidence in the hospice program continued to trend down throughout 2018. HHCAH investigates all falls.
Patient Story

Multidisciplinary Team at Home

Tom fell on the porch stairs and knew he was hurt. A trip to the emergency room made the diagnosis: several fractured ribs. Tom said, “I was angry at myself. I’m dealing with enough with now Parkinson’s. I’ve always been independent and will not ever stop driving, golfing or living at home.”

The team realized that Tom’s independence and new-found loss of control were critical to address. The group engaged Tom in identifying multiple hazards in the home with a self-assessment of fall hazards and guided Tom through a list of repairs and modifications. A team of nurses, physical and occupational therapists visited following his emergency room visit. The nurse worked with the physician to simplify his medication regime and reduce his risk of low blood pressure. The occupational therapist worked with Tom to maintain his balance while carrying out his daily tasks and addressed his fear of falling again. The physical therapist worked with Tom to make the necessary modifications to his bath and stairs.

After forty-five days, Tom was discharged with a home exercise program and with the necessary adaptation to his home. Tom also hung onto his self-assessment of home safety in case he needed it in the future.

“When I fell I was afraid that I was losing control and would not be able to do the things I used to do like walk the dog and play golf. However, after some time I was able to walk stairs and take the dog for a walk. I’m still working on this but realize I’ll get there in small steps.”

Patient Story

Independence at Home

A husband and his wife began service with Independence at Home (IAH) more than four years ago; IAH is a program where the HHC staff assists patients to live independently in the comfort of his/her home. Service started with homemaking only and slowly transitioned to a Monday through Friday all day personal care assistance program. They developed a strong relationship with their original caregiver, Janet. The couple loved watching tennis and taught Janet all about the game so they could debate who the greatest players were. Whenever Janet had additional availability, they would increase their hours of service because they saw great value in her care. Over the years, the wife’s health began to decline, and when they needed more care than what Janet could provide, the daughter decided to hire another agency to save money. The husband quickly became disappointed and frustrated with the lack of quality offered by the agency. He frequently made phone-calls to IAH to cover shifts that the other company would miss and eventually, the patients switched all of their care back to IAH. When the wife passed away last year, the husband continued IAH services for himself. He stated that Janet was such an integral part of his life that he could not imagine this grieving process without her. As his health is beginning to decline, he has increased to around the clock care with another caregiver who has also left an extraordinary impact on his life. According to him, his new caregiver, Josephine, brightens his spirits every day. She not only manages all of his care and household chores, but she also sings with him and takes care of his twin mini poodles.

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Patient Story

Inpatient Rehab

It all started when Michelle Polzun thought she was getting a cold as she was feeling run down and her shoulders felt very sore. She ended up in bed for a few days as her symptoms got progressively worse. She began to sense something far more severe was wrong when her hand closed and would not open again. She went to the ER of her local community hospital where they told her that she should call her doctor about it the next day. She woke up later that night and couldn’t move at all. Her son called an ambulance which took her back to the local hospital. She was then transferred to Hartford Hospital for emergency surgery for an abscess in her spine. She spent ten days in the ICU before being admitted to the Inpatient Rehabilitation Unit (IRU) where she remained for the next thirty days.

Upon her arrival to the IRU, Michelle was unable to move the upper and lower extremities on the left side of her body and required assistance to get out of bed and into a wheelchair. Working with the IRU staff, Michelle realized she faced a long and challenging road to recovery but was determined to regain her movements and function. The physical and occupational therapists she worked with put her through extensive strength and balance training and spent countless hours with her using all of the IRU’s state of the art technology to help get Michelle back to her healthy life. After a month of hard work, she was able to transition home from the IRU with the ability to bathe and dress on her own and walk with the use of a walker and orthotics. Her home care therapists focused on helping her with strength, balance and gait exercises and after two weeks she was able to transition to outpatient therapy at a Hartford HealthCare Rehabilitation Network clinic near her home. Her outpatient therapists continued to help her regain her strength and balance and improve her coordination with her left hand. They said she continues to make tremendous progress and expect her to no longer need services soon.

“This has been extremely tough, but everyone here was so encouraging that I was always motivated to keep going and never give up,” Polzun said of the therapists she worked with in all the settings of care she went through. “They were my cheerleaders, and I would never have been able to get where I am without them.”
Zero Suicide

Since 2015, the Hartford HealthCare (HHC) Behavioral Health Network (BHN) has committed itself to improving patient safety through the implementation of Zero Suicide. The Zero Suicide initiative represents a philosophy of care and a set of tools for healthcare systems to dramatically reduce the number of suicide deaths among people in care. The BHN continued to advance this essential quality and safety initiative in 2018 through the implementation of several best practices.

As more organizations throughout the BHN began implementing Zero Suicide, leadership recognized the need for a system-wide governance structure to organize and support this work. Subgroups were developed to focus on areas identified as opportunities for improvement in initial case review, including care transitions, environment of care and suicide risk assessment.

Post-transition phone calls have been rolled out to inpatient, partial hospital and intensive outpatient programs, and some residential settings. The goal of these Caring Connection Calls is to continue the connection with patients after transitioning from care, when they are most vulnerable and at risk for readmission. Through this follow-up, BHN entities can support patients as they access care and resources in the community, fill prescriptions for essential medications, and follow through on aftercare plans. Documentation templates for these calls are built into the electronic medical record, and data is collected on completed calls to reduce variability across the system. Ultimately, the hope is that these calls not only reduce suicide risk but also improve the overall patient experience.

In addition to Caring Connection Calls, wellness checks are done for patients who fail to show at initial intake appointments, at the partial hospital, and intensive outpatient programs. These follow-ups, which align with the Zero Suicide best practice of supporting patients at vulnerable transitions in care, are designed to prevent patients from falling through the cracks in the healthcare system and increase opportunities to connect them with care.

The Zero Suicide model prioritizes the training of both clinical and non-clinical staff to improve their ability to assess suicide risk and intervene appropriately. The Institute of Living created and implemented a four-hour suicide assessment training for clinical staff and this year made it available to clinical staff throughout the rest of the BHN. Also, twenty-five individuals, both clinical and non-clinical, are trained to run professional education courses for non-behavioral health staff on an evidence-based approach to identifying and intervening with suicidal individuals. The goal is to offer this sixty-minute training to HHC partners in medical settings across the system, thus broadening the footprint of Zero Suicide across the continuum of care.

The next area of focus is the environment of care with an emphasis on ligature risk. Completion of exhaustive rounding in all inpatient areas, which resulted in more than 350 risk items being identified and cataloged, and a resolution for all high-risk items. Ongoing ligature risk rounding occurs at behavioral health facilities every quarter.

Lastly, the BHN modified its approach to suicide risk assessment and chose the Columbia Suicide Severity Rating Scale (C-SSRS) as its system-wide screening and assessment tool. Pathways to care are developed to aid the interpretation of the C-SSRS and to assist in triaging patients to appropriate levels of care. Smart forms are scheduled to build into the electronic medical record that will allow staff to capture data and report on progress accurately.
Combating the Opioid Crisis

The severity of the Opioid Crisis in Connecticut led the Behavioral Health Network’s leadership to create a new position: Vice President for Addiction Services. The BHN had a great champion for this work: Dr. Craig Allen. Dr. Allen has been instrumental in establishing the BHN MATCH clinics which focus on providing medication-assisted treatments for substance use and co-occurring mental health disorders in the local community. In addition, he has been actively educating HHC healthcare providers across the system on addiction issues including harm reduction with naloxone, safe use of opioids and alternatives for pain management. He has been a passionate public advocate for addressing the crisis with numerous media and public presentations. The goal for the position of VP of Addiction Services is to coordinate and standardize Hartford HealthCare’s approach to preventing, identifying, and treating substance use disorders within the communities we serve.

During 2018, the opioid epidemic continued to have a significant impact. In Connecticut alone, the Chief Medical Examiner reported 1,017 fatal overdoses – the second highest recorded – with the majority of the deaths attributed to fentanyl, which has outpaced heroin deaths over the past two years. To address this ongoing community need, the BHN expanded its “hub and spoke” treatment model, established new treatment resources and worked to coordinate access throughout HHC and the communities it serves. In 2018, treatment of more than 2,500 patients occurred for opioid use disorder across the BHN.
“Hub and Spoke” Model

In 2018, the BHN’s “hub and spoke” model of care was expanded to improve access and create seamless transitions between HHC emergency rooms, detox and residential treatment facilities, and outpatient treatment programs. Medication-Assisted Treatment, Close to Home (MATCH), an integral part of the treatment continuum, added new locations and introduced a standardized approach to care. HHC emergency departments, the first touch point for many patients with opioid use disorder, began offering naloxone and meetings with a recovery coach to discuss treatment options. After the program pilot in 2018, all HHC emergency departments began to treat patients with opioid use disorder on Suboxone and help them transition to a MATCH program for follow-up care, a practice that was first started by MidState Medical Center in 2016.

In the last three months of 2018, 581 patients with Substance Use Disorders met with Recovery Coaches; 158 had an Opioid Use Disorder, and 14 started Medication Assisted Treatment in the ED.

In 2018, the BHN received three grants and a significant philanthropic gift – totaling more than $5.6 million over the next four years – to help advance addiction treatment. The Meriden Opioid Referral for Recovery (MORR) grant is a partnership between Rushford and the City of Meriden. When a Meriden first responder reverses an opioid overdose using Narcan®, the survivor will connect with a Rushford clinician or recovery coach to help facilitate treatment. The grant also purchases up to 300 Narcan® kits per year and funds training for mental health and crisis intervention training. The goal of the Connecticut Treatment Expansion for Accessibility (CTEA) grant is to engage new and existing patients in treatment for opioid use disorder through the use of recovery support services and new technologies including telehealth and the TryCycle app. Telemedicine enables instant, face-to-face communication between providers and patients through smart phones, while the TryCycle app offers patients and clinicians a way to stay engaged and communicate with one another outside of scheduled appointments. The Recovery Management Check-Up and Support (RMCS) grant from the Department of Child and Family Services provides funding for outreach and early detection of substance use disorders in teens to help shorten the life cycle of relapse, reduce treatment re-entry, and encourage recovery for teens in the community. Charitable funds are used to add recovery support specialists to MATCH treatment teams, incorporate TryCycle and telehealth into treatment programs, and improve access to care through the creation of an in-home mental health and substance use treatment model.

The HHC Opioid Management Council sponsored the first-ever HHC opioid management conference in October 2018. The event offered safe opioid prescription education including sessions on caring for patients in the midst of the opioid crisis, decision support within the electronic health record for the prescription of opioids, best practice alerts for high-risk patients including prompts for naloxone prescriptions, and a system-wide controlled substance use agreement to use with patients and families.
Primary Care Behavioral Health

The Primary Care Behavioral Health (PCBH) initiative – a joint project involving many areas of HHC including the BHN, Integrated Care Partners, and the Hartford HealthCare Medical Group – integrates behavioral health professionals into HHC primary care practices. PCBH is designed to improve overall health outcomes for patients with behavioral health conditions being seen in a primary care practice also to decrease the cost burden on the overall healthcare system.

PCBH grew its reach into seventeen primary care practices supported by eleven behavioral health clinicians and psychiatric consultation. Most recently, PCBH began to treat patients referred by endocrinologists, offering the opportunity for behavioral health interventions to impact physical health in patients with chronic medical conditions. The interdisciplinary, integrated approach offered by PCBH encourages collaboration between providers, clinicians, care managers, and psychiatrists to support the primary care provider in addressing behavioral health and overall health outcomes for patients.

PCBH is achieving positive outcomes, evidenced by a twenty-four percent decrease in emergency department (ED) utilization and a twenty-three percent decrease in hospital admissions among patients since its inception. In addition, patients have shown a thirty-one percent improvement in anxiety screening scores and a thirty-three percent improvement in depression screening scores.
Our Research Footprint

Through the Olin Neuropsychiatry Research Center at the Institute of Living, the Behavioral Health Network has established a strong research footprint. In FY 2018 alone, the Olin Center brought in almost $4.5 million in grant funding. In the last five years, the Olin Center has received more grant funding than any other department at HHC, with more than $16 million in funding awarded since 2013.

2018 research highlights include:

- Three million dollars in funding from the National Institute of Diabetes, Digestive, and Kidney Diseases to conduct a study using neuroimaging predictors to better understand and improve long-term weight loss outcomes following bariatric surgery. This research, led by Godfrey Pearlson, MD, director of the Olin Research Center and Pavlos Papasavas, MD, FACS, FASMBS, director of research, department of surgery at Hartford Hospital, has implications for identifying who will be a surgical success, and predicting even before surgery, which patients may need additional treatments such as add-on medication treatment.

- Dr. Pearlson is one of the principal investigators in the National Institute of Mental Health-funded Bipolar, and Schizophrenia Network for Intermediate Phenotypes (B-SNIP), a national network of researchers focused on developing biological markers to diagnose psychotic illnesses such as schizophrenia and bipolar disorder better. B-SNIP uses biological measurements like EEG and MRI to successfully identify new illness classes, which will be used to identify specific individualized treatment options for patients with serious mental illnesses.

- Several grants received from the National Institute on Drug Abuse and the National Highway and Traffic Safety Administration are examining how people drive when they are acutely intoxicated with marijuana and identifying high-tech roadside tests for “stoned” drivers. As more states legalize the drug for medical or recreational purposes, knowing how to correctly identify marijuana-impaired drivers is becoming a major public health problem.

- Michal Assaf, MD, recently completed a National Institute of Mental Health-funded study which showed significant overlaps in social and cognitive impairments between individuals with schizophrenia and high-functioning autism spectrum disorder (ASD). This finding identifies a potential mechanism to explain the wide clinical differences seen within patients with ASD and schizophrenia.

- Michael Stevens, Ph.D., recently found that attention-deficit/hyperactivity disorder (ADHD) is a collection of discrete disorders rather than one “disease.” This finding is a significant departure from views of ADHD as a single disorder with small variations and may, in turn, lead clinicians to rethink a one-size-fits-all approach to assessment and care of ADHD.

- Alecia Dager, Ph.D., a senior research scientist at the ONRC is completing a 4-year study funded by NIDA on brain chemistry related to memory impairment in young adults who use marijuana. She is finding significant differences between regular users and a healthy, non-marijuana-using control group.

- Jimmy Choi, PsyD, a senior scientist at the ONRC and director of cognitive rehabilitation services at The Institute of Living, conducts community-based research in psychosis, guided by neuroscience research that then translates directly into real-world clinical applications. Dr. Choi is currently conducting an NIMH-funded study using pupil-measurement based neurofeedback to improve thinking and social abilities in teenagers at risk for developing schizophrenia.
Reduction of Opioid Prescribing via the use of the Electronic Health Record

The Opioid Crisis has had a significant impact in the state of Connecticut – more than 1,000 of our citizens have died of opioids overdose during the past year. Recognizing that many individuals with Opioid Use Disorder get their first exposure to prescription drugs, HHC established an Opioid Council to address appropriate prescribing of opioids and addiction. HHC is using the Opioid Council to coordinate these efforts, involving physicians, nursing, behavioral health, Physical Therapy/Occupational Therapy), legal, education clinical informatics, information technology, quality and safety, pharmacy, and administration.

Technology and data are foundational to opioid stewardship programs. We have used the Electronic Health Record (EHR) – Epic to build dashboards to monitor prescribing habits, identify high-risk or at-risk patients, and build clinical decision support and guidance to assist clinicians. The focus of the Opioid Prescribing workgroup is to reduce the prescribing of opioids. Providers use improved EHR tools that allow them to make the correct decision in the circumstance presented.

Clinical Decision Support

Clinical Decision Support uses best Practice Alerts (BPAs), commonly known as pop-ups. BPAs use a set of defined criteria that evaluate the patient, order, and encounter characteristics to help direct providers to policies, guidelines, and standards of care. BPAs can: provide notification with clinical information, automatically store data in a patient chart, or result in a pop-up that can help to intervene while the physician is ordering the opioids. This approach, along with an educational program has resulted in a significant decrease in the number of opioids prescriptions, and a reduction of the number of pills prescribed. The EHR now assists the clinician in calculating the total dose being prescribed and identifying those patients who might be at risk for abuse, which has resulted in a dramatic reduction in the use of opioids.

In addition to reducing the prescribing of opioids, the EHR can be used to identify patients at risk for overdose from either prescribed or illicit opioids. These patients should receive a prescription for naloxone, the antidote to opioids overdose.
The graph above shows the total number of Naloxone prescriptions written 2018-2019. BPA implementation in July 2018, reminded opioid prescribers that an order for the overdose antidote naloxone is warranted. Post the BPA implementation, the number of naloxone prescriptions more than tripled.
Infection Prevention

Healthcare associated infections (HAIs) remain a significant cause of preventable harm. These infections can originate from the healthcare environment (20%), health care workers (40%) and the patient’s microorganisms (40%). Invasive procedures, devices, and antibiotic overuse contribute to this risk. According to the Centers of Disease Control and Prevention, on any given day, one in thirty-one hospital patients has at least one HAI. At Hartford HealthCare 0.7% of our hospitalized patients developed a HAI in 2018.

HAI elimination is a high priority for our Infection Prevention and Quality departments. Each HAI is evaluated to determine if there is an opportunity for improvement. The bedside teams conduct analysis, and any identified opportunities are shared with all care teams to leverage development across the facility and system. Each facility has a HAI committee whose charge is to identify best practices and develop strategies to implement and operationalize this information in a meaningful and sustainable fashion. Evaluation of invasive devices such as urinary catheters and central intravascular lines happens every day for continued necessity. Each day that these devices are present increases a patient’s risk for an HAI. Antibiotic use is also reviewed – looking for opportunities to stop unnecessary treatment to switch from intravenous to oral antibiotics. These strategies have helped us achieve great success in HAI reduction. Across all our facilities we have reduced our incidence of Clostridium difficile infections by 33% and that of catheter associated urinary tract infections by 20% since 2016.

Preparing for Emerging High Impact Pathogens

The 2014 Ebola epidemic in West Africa led to an international call to arrange for Ebola and other emerging pathogens. Ebola has emerged again in the Democratic Republic of Congo with an outbreak that is increasing in severity leading to the threat that infected patients may cross the Atlantic.

Hartford Hospital rose to this challenge and developed protocols and a specialized BioSecure Unit to effectively and safely care for an Ebola patient. BioSecure Unit received an acknowledgment as a federally designated Ebola Treatment Facility after several federal agencies (including NIOSH, CDC, OSHA) and the Connecticut Department of Public Health (CT DPH) evaluated the BioSecure Unit. The CT DPH determined that Ebola readiness at all CT hospitals needed to be readdressed, especially around the safe use of personal protective equipment (PPE) used in the care of an Ebola patient. CT DPH reached out to Hartford Hospital and our Center for Simulation and Innovation (CESI) to provide PPE training for Connecticut hospitals. A total of 72 learners attended the courses led by infection prevention and infectious disease specialists, focused on the proper use of PPE specific to the care of an Ebola patient. The course successfully demonstrated an increase in learners’ knowledge about current Ebola PPE recommendations with 100% of participants expressing confidence post-training.
Pre and Post Ebola Training Survey

I am confident that I can properly don/doff appropriate PPE if I had to care for a patient with Ebola

I feel confident in understanding the current recommendations for the use of PPE if I had to care for a patient with Ebola
Measuring Outcomes to Improve Quality

The Hartford HealthCare Cancer Institute (HHC CI) accredited by the Commission on Cancer (CoC), a program of the American College of Surgeons that recognizes cancer care programs for their commitment to providing comprehensive, high-quality, and multidisciplinary patient-centered care. As an accredited cancer program, the HHC CI regularly submits data to the CoC to be benchmarked against like programs across the country. Twenty quality measures across nine different cancer types are tracked to establish standards of care and to promote continuous improvement. The HHC CI regularly reviews the data and assesses all cases that do not meet the standards. The organization determines the cause for not meeting the standard of care, then identifies if there is an opportunity for improvement. The quality measures for HHC CI are reported below. HHC CI’s performance met or exceeded both the nationally recognized National Cancer Database (NCDB) and Connecticut in 2016 (most recent data available) except recovery of lymph nodes in surgery for colorectal cancer – important for staging the extent of disease yet still exceeding the expected performance rate.

Colon Nodes
A minimum of 12 lymph nodes removed and examined pathologically for resected colon cancer is desirable to accurately determine the stage of disease. The expected performance rate is 85%.

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<th>2016 CT</th>
<th>2016 All acc. cancer programs</th>
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<tr>
<td>Colon Nodes</td>
<td>91.4%</td>
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Breast Radiation Therapy
Extensive evidence from randomized clinical trials has shown that radiation therapy following breast conservation therapy for eligible patients reduces the risk of local recurrence. The expected performance rate is 90%.

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<th>2016 HHC</th>
<th>2016 CT</th>
<th>2016 All acc. cancer programs</th>
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<tr>
<td>Breast Radiation Therapy</td>
<td>93.3%</td>
<td>92.2%</td>
<td>91.1%</td>
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Breast Hormone Therapy
Tamoxifen or third generation aromatase inhibitor is recommended or administered within 365 days of diagnosis for women with AJCCT1c or stage IB-III hormone receptor positive breast cancer. Extensive evidence suggests that hormone therapy reduces the risk of recurrence, contralateral breast cancer and death. The expected performance rate is 90%.

Needle Biopsy
Image or palpation-guided needle biopsy to primary site is the recommended approach to establish a diagnosis of breast cancer. The expected performance rate is 80%.
Patient Education Impacts Quality of Care and Overall Patient Experience

In alignment with HHC’s #123 initiative, Cancer Institute leaders have used quality, safety, and patient experience metrics to focus their improvement efforts in patient care and outcomes, as well as performance on the rating for “Care given at this facility.” One of the top areas of opportunity identified for patient experience improvement is related to the “Treatment plan explained in words the patient could understand.”

MidState Medical Center (MidState) historically performed well in this area. Patients diagnosed with cancer commonly experience high levels of anxiety, which often affects their ability to retain information about their disease, treatment, and management. At MidState, all patients with new chemotherapy treatment plans have an option to book a teaching appointment with either a Registered Nurse or an Advanced Practice Registered Nurse before the first chemotherapy treatment appointment. Also, East Region providers volunteered to offer teach sessions before their patient’s first chemotherapy appointment.

At Hartford Hospital’s Helen and Harry Gray Cancer Center, performance on the treatment plan metric fell to the lowest percentile in November 2018. Learning from the other care models used across the system, the nursing staff within the infusion department collaborated on a patient-centric “teach” appointment before a patient’s first treatment. In the past, patient education took place on the day of the treatment.

The chemotherapy teaches appointment was set up to cover key topics such as medication review, what to expect during treatment, side effects, and resources that are available to patients. Through the use of teaching tools, patients now have an improved understanding of their care plan. Nurses provide a folder to each patient with both standardized information and content related to patient-specific disease and needs.

After implementing this new teach appointment, patient experience scores increased from a percentile rank of one to ninety-nine. Survey item measures patient experience scores, “Treatment plan was explained in words you can understand,” on the Survey for Outpatient Services.

Percentage of Patients Receiving Chemotherapy Teach Sessions in HH Infusion

Set Goal = Greater than or equal to 75% of new patients will receive chemotherapy teach sessions
Next steps involve continued collaboration to standardize chemotherapy teach sessions throughout HHC CI to improve experience scores system-wide. For example, in an effort to further improve patient experience scores from “good” to “very good” on the PG survey item “Treatment plan was explained in words you can understand,” MidState is now piloting a checklist for the teaching appointment that ensures all points, as set by nationally-recognized standard-setting organizations, are a part of the teaching session. After having implemented this checklist, the total weighted average patient experience score for this particular survey item improved from 72.9% to 86.5% in May to October 2018. Continued multidisciplinary workgroup efforts in infusion will focus on adjusting the chemotherapy sessions and teaching tools as more patient feedback is received and the organization reviews evidence-based practices.

**Patient Story**

**Aggressive Treatment and Bone Marrow Transplant Help MidState Medical Center Patient Beat Leukemia**

For months, Tracy Seguljic hadn’t been feeling well. She had recently lost her husband to glioblastoma—an aggressive form of brain cancer—and believed she was just suffering from exhaustion, brought on by her grief and the months spent caring for her husband and two teenage sons. After experiencing shortness of breath, Seguljic, a Berlin resident, went to the emergency department at MidState Medical Center where a bone marrow biopsy confirmed that she had acute myeloid leukemia (AML). “I was told to prepare for a month in the hospital. But at no point did I ever think I was going to die,” Seguljic said. From the emergency department, oncologist Dr. Susan Alsamarai quickly began to develop a strategy for Seguljic’s care which included an aggressive form of chemotherapy and a bone marrow transplant in partnership with Memorial Sloan Kettering Cancer Center. “We needed to get things started quickly. We worked with pathology to get the results so we would know what the right course of treatment should be. We needed to know what form of leukemia she had and what mutations she might have,” said Dr. Alsamarai. Seguljic had a mutation known as FLT3 which makes the cancer even more aggressive. Luckily for Seguljic her treatment worked, and within two months her cancer went into remission. The next step was for Seguljic to have a bone marrow transplant. Thanks to the Hartford HealthCare Cancer Institute’s membership in the Memorial Sloan Kettering (MSK) Cancer Alliance, Seguljic’s transplant was seamlessly coordinated by her providers at MidState and the world renowned specialists at MSK. “It was very smooth getting her [to MSK in New York City] and expediting the transplant. This was 2015 and we had just begun our relationship with MSK. It was a good prototype of how we should carry out this relationship,” said Alsamarai.

Seguljic’s transplant, made possible through a marrow donation from her sister, was a success. Four years into the partnership with MSK, the Cancer Institute now employs a bone marrow coordinator who facilitates transplants like Seguljic’s. Seguljic credits the quick thinking by the team at MidState and the expertise of MSK in helping her beat leukemia. But, it’s her faith that has guided her emotionally through some pretty dark days, she said. “This is just a bump in the road. You lean on God and don’t sweat the little things,” she said.
Using Clinical Councils to Improve Care and Enhance Patient Experience

The Hartford HealthCare (HHC) Tallwood Urology & Kidney Institute is a system-wide institute, formed in 2015. Tallwood’s clinical councils serve as the foundation of the institute model bringing providers together to review evidence-based medicine, establish standards of care, improve quality and enhance the patient experience. Robotic Surgery and Men’s Health are two of Tallwood’s clinical councils.

Low Complication Rates for Tallwood Robotics Surgeries

The FDA approved the first surgical robot in 2000. The da Vinci™ Surgical System offers precise, minimally-invasive procedures that can reduce trauma, blood loss and hospital time for the patient. The robotic-assisted surgical device essentially translates hand motions directed by the surgeon at a control console. Unlike the robots of science fiction, the da Vinci™ Surgical System can’t make decisions on its own nor can it be pre-programmed to perform surgery without a surgeon’s control. The da Vinci™ robot scales and translates the surgeon’s hand movements for precise manipulations of tiny instruments in the body. The da Vinci™ System enhances surgical capabilities by enabling the surgeon to perform complex surgeries through small surgical incisions.

HHC was first in Connecticut to introduce the surgical robot. In 2003, Dr. Joseph Wagner, Director of Tallwood Robotics, performed the first robotic-assisted prostatectomy in the state. Robotic surgery has now become the standard of care for prostatectomies. In addition to prostatectomies, Tallwood urologists and urogynecologists perform several other robotic operations such as removal of the bladder, kidney, and other complicated procedures.

A report published in The Journal of Urology noted nationwide, seventy percent of robotic prostatectomy surgeries are performed at low volume institutions (defined as institutions performing fewer than thirty cases per year) even though data reflects that shorter hospital stays and fewer complications are associated with high volume centers. Further studies have demonstrated that higher surgical volume centers are associated with improved outcomes for radical prostatectomy.

The Tallwood Urology & Kidney Institute supports these findings. With Tallwood surgeons performing more than 500 robotic surgeries annually, we have better than expected outcomes for robotic-assisted procedures in all HHC hospitals. Our 2018 complication rate demonstrates our exceptional results as a high volume system.

Tallwood surgeons receive hours of training at HHC’s Center for Education, Simulation, and Innovation (CESI). Physicians practice several skill-building exercises under a variety of scenarios specifically designed to help surgeons improve their proficiency with the console controls, combining the same surgeon console used in the operating room with a virtual reality environment. Surgeon performance is measured in every task, providing detailed scoring and feedback when the case concludes. After simulation training, surgeons must demonstrate proficiency in the live environment under the direction of a highly-trained proctor before being credentialed on the device. Surgeons must continue to demonstrate their skills being evaluated on surgical outcomes and case volume, to remain credentialed. Since 2015, the Tallwood Urology & Kidney Institute robotically trained surgeons effectively reduced variation across all HHC hospitals achieving complication rates that are nationally better than expected. HHC and Tallwood surgeons continue to be leaders in the field. Robotic surgery is available at Backus Hospital, The Hospital of Central Connecticut, MidState Medical Center and Hartford Hospital.
Tallwood Men’s Health: Engaging Men to Advocate for Their Health

In September 2018, HHC launched Tallwood Men’s Health in Farmington, Connecticut. Tallwood Men’s Health provides access to specialists who care about issues men face and coordinates care with primary care physicians via a nurse coordinator. If a man does not have a primary care provider, the nurse coordinator will make a connection to a provider in the man’s community. The team approach provides a supportive coordinated experience that addresses risks factor impacting men and engages men in advocating for their health.

Urologists in the HHC Tallwood Urology & Kidney Institute hold recognition as regional and national physician leaders in nearly every sub-specialty including general urology, kidney stone disease, pelvic health and incontinence, urologic cancer, and andrology (male fertility and sexual function). Our physicians, who deliver expertise in a wide range of conditions and treatments, are dedicated to providing high-quality, effective, and cohesive care.

Consistent with HHC’s mission to improve the health of our communities, the Tallwood Urology & Kidney Institute recognized the need for improved men’s health care. According to current national statistics, men are nearly 1.4 times as likely as women to die from almost every chronic medical condition and, as a result, men live five years less than women on average in the US. There is room for improvement, though, with low preventative healthcare utilization rates among men and more frequent risky behaviors such as alcohol, smoking, and illicit drug use.

The paradigm needs to shift to treating the whole man to begin addressing these disheartening statistics. Tallwood Men’s Health was created in this vision to provide leading-edge multidisciplinary care to men in a comfortable and accessible physical setting. We have partnered with other HHC specialists and community providers with an understanding of male-specific disease processes. Our comprehensive service line includes experts in bariatric medicine and surgery, behavioral health, cardiology, endocrinology, and urology. Patient navigators will ensure up-to-date preventative health screenings and engage other members of the team to address linked medical conditions in a timely and efficient manner.

We believe Connecticut men deserve the highest level of care and HHC Tallwood Men’s Health is doing just that – in a big way!
Patient Story

Expertise, Coordinated Care Turn Patient’s Life Around

Jonathan Savino recalls the fear that set in six years ago when his doctor called him back into the office after a routine annual PSA test for prostate cancer.

“You hear about cancer everywhere and you just hope you don’t get it,” the Windsor Locks resident said. “I remember thinking that the only thing I could do was keep checking on things, and here I was getting called back.”

Savino – who, at age 64, has faced more than his share of medical challenges with diabetes and high cholesterol, bouts with atrial fibrillation, several cardiac ablations and eventually the installation of a pacemaker – said what became a life-altering journey started with an appointment at Tallwood Urology & Kidney Institute with urologist Dr. Stuart Kesler.

A biopsy revealed Savino had prostate cancer and Dr. Kesler recommended robotic prostatectomy, a procedure that offers outstanding patient outcomes, shorter recovery time and less risk.

“When you first hear the ‘C’ word, your heart just drops. You know from that first call that they found something,” he said.

Dr. Kesler performed the robotic procedure at Hartford Hospital. He remembered waiting with his wife in the recovery room to learn if all the cancer was successfully removed when Dr. Kesler walked in.

“I saw the biggest smile I’ve ever seen on a doctor’s face!” Savino laughed. “He said, ‘I gave you the worst case scenario and it was the best case scenario. We got it all.’”

Six years later, Savino continues to receive coordinated, comprehensive care through Tallwood Men’s Health and Hartford Hospital. While robotic surgery was one component of Savino’s care (Tallwood has some of the lowest complication rates in the nation), he needed support well beyond the operating room. Tallwood’s coordinated system of care and focus on preventive health were crucial to his improved quality of life.
“The strength of Tallwood Men’s Health is that we can easily coordinate the care of complex male patients,” Dr. Kesler said. “With the help of a Nurse Coordinator and other resources, I can now connect my patient whom I’ve treated for cancer, with other caregivers to tackle very serious additional medical issues they may be struggling with such as weight loss, cardiac disease, anxiety and depression. This makes a real difference in people’s lives – it’s powerful stuff.”

A former customer service representative with a major airline, Savino has been disabled since 2016 due to chronic heart failure. His doctors urged him to shed some of the weight on his 6-foot, 4-inch frame, which, at one point, carried almost 400 pounds.

“It was a challenge for Dr. Kesler to operate,” he admitted.

Now, thanks in part to the guidance he receives from the Tallwood team, he has turned his life around.

He now goes to cardiac rehabilitation three times a week, working on the stationary bicycle, treadmill and weights. In addition, Tallwood Men’s Health Nurse Coordinator, Kimberly Diamond, connected him to Dr. Devika Umashanker, a medical weight loss specialist at the Hartford HealthCare Centers for Medical & Surgical Weight Loss, who also sees patients at the Tallwood Men’s Health location in Farmington, along with specialists in urology, cardiology, behavioral health and endocrinology.

Dr. Umashanker helped Savino embrace a new eating style focused on lean proteins, fruits and vegetables.

“I’m so happy with everybody – they’re keeping me on the straight and narrow. I wanted some pizza the other day and I made myself one piece with veggies on top. In the old days, I could go through a whole pizza!” exclaimed the Red Sox season ticket holder who now arrives at Fenway equipped with water and a protein bar. “The cancer has changed my life dramatically.

About his cancer diagnosis, he remained philosophical.

“I thank my lucky stars that someone was looking out for me. If I hadn’t gotten it done then, a year later I wouldn’t have been here. I just tell people to get tested.”
Society of Thoracic Surgeons (STS) recognized HH as a center of excellence for cardiac valve surgery. Valve replacement for repair of the mitral and aortic valves represent the second most common cardiac surgical procedure. Since the recruitment of Dr. Sabet Hashim as Physician-in-Chief of the Heart and Vascular Institute (HVI) in 2016, Mitral Valve Replacement/ Repair Surgery has more than doubled in volume from 2015 to 2018.

In 2018, HH received the prestigious 3 STAR rating for both “Isolated Mitral Valve Repair and Replacement (MVRR)” and for combined “MVRR and Coronary Artery Bypass Surgery (CABG)” placing HH at 10.71% and 5.48%, respectively, of hospitals in the United States.

The miracle of modern cardiac surgery is possible because of cardiopulmonary bypass (CPB), which allows a machine to temporarily take over the work of the heart and lungs while the surgeon repairs the damaged heart. CPB is arguably a cardiac surgeon’s most important tool that is inherently pathologic and produces a generalized inflammatory state, the shortest practical duration of the bypass desired for optimal outcomes. Dr. Hashim performed the first mitral valve repair in New England, and since then, he has the most extensive mitral valve practice in Connecticut. He has performed over a 1,000 mitral valve repairs and is internationally known as an innovator in his field. Journal of Thoracic Surgeons published his novel technique for the treatment of ischemic mitral regurgitation. His methodical and precise approach has resulted in his outstanding outcomes.

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Hartford Cardiac Surgeons Exceed STS Benchmarks in All Cardiac Surgery Categories

In 2018, HH cardiac surgeons achieved clinical outcomes that exceeded national STS benchmarks in all surgical categories.

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<tr>
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<td>Renal Failure</td>
<td>1.9%</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Isolated Aortic Valve Replacement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td>1.6%</td>
<td>0%</td>
</tr>
<tr>
<td>Prolonged Ventilation</td>
<td>5.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Re-operation</td>
<td>2.7%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Renal Failure</td>
<td>1.5%</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>Isolated Mitral Valve Replacement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortality</td>
<td>3.3%</td>
<td>0%</td>
</tr>
<tr>
<td>Prolonged Ventilation</td>
<td>15.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Re-operation</td>
<td>4.4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Renal Failure</td>
<td>3.4%</td>
<td>0%</td>
</tr>
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</table>

Source: STS Registry
Structural Heart Physicians Perform the 1,000th TAVR Procedure

Aortic stenosis affects about 2.5 million Americans over the age of 75. It’s caused by progressive calcification or scarring that narrows the aortic valve opening, restricting its ability to fully open and preventing the heart from pumping blood throughout the body. Individuals with severe aortic stenosis need valve replacement. Half of those who fail to have the valve replaced die within two years; 80 percent within five years.

Until recently, all valve replacements were open-heart surgery. Beginning with a first patient in 2002, a technique called transcatheter aortic valve replacement (TAVR). TAVR is a minimally invasive procedure to replace a narrowed aortic valve that fails to open correctly in patients diagnosed with aortic stenosis. United States Food and Drug Administration (FDA) approved TAVR in 2012, since then Hartford Hospital physicians performed more than 1,000 TAVR procedures in aortic stenosis patients, whom otherwise had an increased risk of undergoing traditional surgical valve replacement. Current clinical outcomes as published by the national STS/American College of Cardiology Transcatheter Valve Therapy Registry (ACC TVT) rank HH among the top performing hospitals in the United States of America.

HH structural heart physicians are leaders in establishing the routine use of sedation rather than general anesthesia as an effective TAVR technique used in many patients. Also, HH physicians pioneered everyday use of the transcarotid approach as an alternative-access TAVR procedure and designated HH as a regional teaching center for this technique. Recently, the team has pioneered the use of cerebral protection with the Sentinel device to avoid procedure-related strokes.

Hartford Hospital Participates in National Landmark Structural Heart Research Trials

HH physicians served as principal investigators for multiple multicenter national trials documenting the safety and efficacy of TAVR and led to FDA approval for TAVR use in high-risk aortic stenosis patients. In 2018, HH was also a significant contributor to the ground-breaking PARTNER 3 Trial documenting the safe and efficacious use of TAVR in low-risk aortic stenosis patients. Presented at ACC 2019 Scientific Sessions, the results of the trial are expected to lead to regulatory approval for TAVR to expand into a large population. While awaiting FDA approval for low-risk TAVR cases, HH is allowed as one of only thirty-five hospitals in the United States allowed performing TAVR in low-risk patients with aortic stenosis.

HH is a leader in the use of the MitraClip device as a percutaneous technique for repairing leaky mitral valves in high-risk patients, to treat mitral regurgitation. Since the FDA approval for MitraClip in 2013, HH physicians performed over sixty MitraClip procedures in patients with intractable congestive heart failure.
Patient Story

Ken Corey | On the Road Again Thanks to TAVR Surgery

There’s nothing Ken Corey likes more than sliding onto the leather seat of his motorcycle, his wife snuggled behind him, and heading onto the road for an adventure.

The couple has an elaborately mapped out “bike-it” list they’re pursuing and have logged more than 6,000 miles – 1,800 in the past year alone – criss-crossing the nation’s roadways.

When his energy level bottomed out in 2017, though, the 70-year-old Putnam resident worried he might have to park the trike. “It was around Christmas and I was getting short of breath just shoveling,” he remembered.

After a visit to his doctor and specialists, Corey was diagnosed with “severe aortic stenosis,” which meant his aortic valve, the body’s largest, was not working properly. To compensate, his heart had to pump harder in order to keep him going.

At one time, severe aortic stenosis would require an arduous open heart surgery to repair. Luckily, however, Corey was deemed a good candidate for a research trial through the Hartford HealthCare Heart & Vascular Institute (HVI). The trial allowed Drs. Raymond McKay, co-director of the HVI Structural Heart Program, and Robert Hagberg, chief of cardiac surgery at Hartford Hospital, to perform a Transcatheter Aortic Valve Replacement (TAVR) procedure with a catheter inserted through the large artery in Corey’s leg.

“Hartford Hospital has been chosen as one of 35 hospitals in the United States where TAVR can be performed in otherwise healthy patients who do not wish to undergo aortic valve replacement with open-heart surgery,” Dr. McKay said. “In Mr. Corey’s case, the TAVR procedure went very well and allowed him to return to his regular activities rather quickly.”

Corey was discharged just two days after the TAVR procedure in February 2017 and says he was walking six to seven miles a day on his treadmill at home by the end of that first week. In a short time, as weather improved, he climbed back on the motorcycle for his first ride. With his wife behind him, he resumed the pursuit of the “bike-it” list by riding along roadways in various parts of the country.

“(On the motorcycle), you can see and smell America,” he said.
Hartford Hospital STEMI Treatment Times Rank in the Top 10% of US Hospitals Nationwide

ST Segment Elevation Myocardial Infarction (STEMI), is a type of heart-attack when heart’s arteries supplying oxygen and nutrient-rich blood to the heart muscle gets blocked. According to the ACC and the American Heart Association (AHA), state hospitals treating patients with STEMI with emergency percutaneous coronary interventions (PCI), should reliably achieve a door-to-balloon time (DTB) of ninety minutes or less. DTB is the time between the moment patients with STEMI enters the emergency department, and he/she undergoes PCI. In the past, studies demonstrated an association between time to primary PCI and in-hospital mortality. Also, the AHA recommends that all STEMI patients be transported directly to a primary PCI facility and first medical contact (FMC) to the device also be ninety minutes or less.

To achieve best practice and improve outcomes for STEMI patients, the cardiac catheterization laboratory at HH in collaboration with the Emergency Department and Emergency Medical Service launched a quality initiative to reduce DTB and FMC. The initiative began in 2017 and included workflow evaluation and process improvements. Since the launch of the action, the organization observed a continuous enhancement in both DTB and FMC.

### Door-to-Balloon Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Median (min)</th>
<th>NCDR 50th Percentile</th>
<th>NCDR 90th Percentile</th>
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<tbody>
<tr>
<td>2016</td>
<td>66</td>
<td>57</td>
<td>49</td>
</tr>
<tr>
<td>2017</td>
<td>57</td>
<td>49</td>
<td>60</td>
</tr>
<tr>
<td>2018</td>
<td>49</td>
<td>60</td>
<td>49</td>
</tr>
</tbody>
</table>

Source: NCDR
Source: AHA Mission Lifeline
The Hartford HealthCare Bone & Joint Institute Welcomes Theodore Blaine, MD as the New Physician-in-Chief

The BJI celebrated its second year in the new building and the introduction of Theodore Blaine, MD as the second Physician-in-Chief.

BJI recognized several improvements over the past year:

• Increase in volume by 15% over FY 2017
• Addition of five surgeons
• Reduction in length of stay from 2.8 to 1.7 days for elective Total Joint Replacement patients

HHC Bone & Joint Institute Surgical Volume

continued on next page >>
Quality Metrics and Outcomes

The BJI conducts a comprehensive Quality Improvement program supported by an Orthopedic Surgery patient registry. The Research and Quality staff and Volunteers conduct sixty-day post-operative patient calls which allow for the capture of complications, emergency department visits, readmissions, and other quality data.

The Joint Commission awarded Disease-Specific Certification for Total Knee Arthroplasty (TKA), Total Hip Arthroplasty (THA), Total Shoulder Arthroplasty, and Spine Surgery. There are sixteen performance measures specific to these certifications, measured and reported monthly to BJI staff.

BJI Key Performance Indicators (KPI) reported monthly via Control Charts to staff, leaders, and annually at the Hartford Hospital QAPIC. KPI’s include: thirty-day post-operative Venous Thromboembolism and Readmission and ninety-day post-operative Deep Surgical Site Infections for TKA, THA, Orthopedic Trauma, and Orthopedic Spine patients. Below is the summary of the KPI data for fiscal year (FY) 2017:

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**Total Knee Arthroplasty Complication Rates**

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTE</td>
<td>0.33%</td>
<td>0.31%</td>
<td>0.21%</td>
</tr>
<tr>
<td>SSI</td>
<td>0.41%</td>
<td>0.13%</td>
<td>0.28%</td>
</tr>
<tr>
<td>Readmission</td>
<td>3.23%</td>
<td>2.20%</td>
<td>2.40%</td>
</tr>
</tbody>
</table>

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**Total Hip Arthroplasty Complication Rates**

<table>
<thead>
<tr>
<th></th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTE</td>
<td>0.77%</td>
<td>0.28%</td>
<td>0.13%</td>
</tr>
<tr>
<td>SSI</td>
<td>0.77%</td>
<td>0.58%</td>
<td>0.05%</td>
</tr>
<tr>
<td>Readmission</td>
<td>3.20%</td>
<td>1.05%</td>
<td>2.64%</td>
</tr>
</tbody>
</table>

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Additional metrics include

Transition to Skilled Nursing Facility vs. Home for elective surgery patients. For Total Joint Arthroplasty, FY18: 82.86% of patients transitioned home compared to FY17: 76.75%

This is a significant improvement considering that more elective total joint replacements take place as outpatient surgery, and the inpatient’s at BJI is higher risk based on age and comorbidities.
The Epilepsy Center at Ayer Neuroscience Institute

More than 2 million Americans will have a seizure at some point, but only one or two out of hundred have epilepsy. The correct diagnosis is crucial: to get the most effective treatment.

The Epilepsy Center at Hartford HealthCare’s (HHC) Ayer Neuroscience Institute offers cutting-edge care for people of all ages with all forms of epilepsy. The first step, however, is an accurate diagnosis. Several conditions can mimic epilepsy. Over 1,500 patients present to an HHC emergency department annually with a diagnosis of epilepsy or seizure.

The Epilepsy Center provides care from diagnosis to treatment to control seizures and maintain quality of life. The interdisciplinary team uses state of the art methods to assess the personal impact epilepsy is causing. In the diagnostic phase, the team uses advanced electrophysiologic techniques and imaging studies to make a precise diagnosis. An inpatient epilepsy monitoring unit at Hartford Hospital facilitates diagnosis of patients.

At first, seizure results in great anxiety for the patient and family – as a result, prompt access to care is crucial. The First Seizure Clinic is a referral pathway built to achieve the goal of rapid access to a neurologist. Ayer Neuroscience Institute strives to see all such referrals within two weeks and work with colleagues in emergency settings to help reduce the need for acute admission by providing rapid outpatient service.

Figure 1: number of patients seen in an emergency setting for primary diagnosis of seizure or epilepsy in FY2018 (above data are calendar year FY2018 and need to be updated)
Post-hospital stay referrals: Seizures may occur during a hospital stay, often as a result of systemic medical problems. After transition home, it is important to ensure the treatment plan is based on the patient’s needs. The goal of post-hospital referral pathway is to ensure patients have an appointment with a seizure specialist within four weeks of leaving the hospital, helping them manage this crucial time of transition.

Although most patients with epilepsy can be managed successfully with medications, certain patients require surgery. A comprehensive evaluation of surgical patients happens before a recommendation for surgery is made.
The Hartford Hospital Stroke Center was established in May 2001 and became the first Comprehensive Stroke Center (CSC) in New England, in 2013.

It remains one of the largest stroke centers in New England treating over 1100 patients annually as of 2018.

Some of the highlights over the last year include:

- A multidisciplinary (ED, neurology, radiology) Kaizen was done from June 18-22, 2018, to improve ED throughput to IV tPA and interventional radiology treatment in the care of stroke patients. This Kaizen resulted in several improvements in the care of stroke patients, as noted below:
  - Before Kaizen, door to puncture time was an average of 126.3 minutes. After the Kaizen, this average time dropped to 107.3 minutes, which is a 12.8% improvement.
  - Developed a stroke simulation training program for both neurology and ED residents using CESI. An abstract was published at the 2019 International Stroke Conference in Hawaii, https://www.ahajournals.org/doi/abs/10.1161/str.50.suppl_1.TP311.
  - Awarded the American Heart Association/American Stroke Association Gold Plus, Target: Stroke Honor Roll Elite Plus award for 2018 for >50% of patients receiving IV tPA within 45 minutes of arrival. This is the highest designated award for stroke programs by the AHA.

- Improved system triage process through stroke council to identify patients with large vessel occlusion stroke that would benefit from neuro-interventional treatment vs. those who did not qualify for treatment and could be treated at their local hospital. By using advanced clinical and imaging paradigms, 75% of screened patients avoided an unnecessary transfer. Results were published and presented at the 2019 ISC, https://www.ahajournals.org/doi/10.1161/str.50.suppl_1.WP291.

- In collaboration with MIT, HHC is working to develop a stroke risk prediction tool using deep learning machine. The manuscript is currently under review, and once published, the plan is to deploy a prospective study to evaluate the efficacy of the tool in personalizing stroke prevention care.

To continue to be a distinguished Stroke Center, our team members are constantly looking at Best Practice models, measuring performance metrics, and improving the overall patient experience. This extensive and important work has included 45 active approved research protocols, several active clinical trials, and 17 publications since June 2017.
Awards & Recognition

Backus Hospital
• Received an "A" for patient safety from The Leapfrog Group, a national nonprofit healthcare rating organization.
• For the second consecutive year, Backus Hospital was recognized for achieving meritorious outcomes for surgical patient care by the American College of Surgeons through its National Surgical Quality Improvement Program.
• The Backus Hospital Breast Cancer Program earned a three-year re-accreditation from the American College of Surgeons’ National Accreditation Program for Breast Centers.
• Recently earned The Joint Commission’s Gold Seal of Approval® and the American Heart Association/American Stroke Association’s Heart-Check mark for Advanced Certification for Primary Stroke Centers.

Charlotte Hungerford Hospital
• Improved hospital quality measures including achieving top decile performance for immunization in 2018. Through the efforts of a multidisciplinary team, including nursing, education, informatics, pharmacy and quality, daily audits show the hospital was at 100 percent on October 1, 2018.
• Reduced hospital acquired pressure injuries to below 1.0, exceeding 2018 target with daily patient surveillance by a Certified Wound and Ostomy nursing team.
• Adopted a web-based emergency communications system used in the event of local or regional disasters and participated in the first Hartford HealthCare system-wide emergency management drill in September.

Hartford Hospital
• Again ranked #1 in the Hartford metro area and among the best in Connecticut in the 2018-2019 U.S. News & World Report annual ranking of hospitals.
• Introduced a new LIFE STAR helicopter to launch the only air ambulance service in western Massachusetts, helping patients quickly get to tertiary care centers, including Hartford Hospital.
• Debuted a new dedicated suite for advanced gastrointestinal procedures, where physicians use endoscopy to treat early cancers and other disorders while reducing complications and avoiding conventional surgery risks.
• Opened a fifth cardiac catheterization lab, adding extra space to accommodate one of the state’s busiest programs with over 1,500 advanced diagnostic and interventional procedures performed each year.

The Hospital of Central Connecticut
• Recognized by Healthgrades as a 2018 Distinguished Hospital for Clinical Excellence, ranking The Hospital of Central Connecticut among the top 5 percent in the nation for quality care. The hospital also received a Healthgrades Pulmonary Care Excellence Award.
• Received the Get With The Guidelines-Stroke Gold Plus award and a Target: Stroke Elite Plus award from the American Heart Association and American Stroke Association for stroke services.
• Became the first hospital in the Northeast to use the Globus ExcelsiusGPS® robotic spine technology.

MidState Medical Center
• Received a clinical excellence award from Healogics, the nation’s leading and largest wound-care management company.
• Received the Get With The Guidelines-Stroke Silver award and a Target: Stroke Elite Plus award from the American Heart Association and American Stroke Association for stroke care services.
• Awarded Comprehensive Center accreditation from the American College of Surgeons Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program, in partnership with the American Society for Metabolic and Bariatric Surgery.

Windham Hospital
• Began offering the Globus ExcelsiusGPS® surgical robot to perform spine surgery. The technology results in greater precision and faster recovery time.

Ayer Neuroscience Institute
• A new stroke protocol was implemented across HHC, extending the treatment window for ischemic stroke patients from 6 to 24 hours after onset of stroke symptoms, potentially resulting in less disability and better outcomes.