Goal #1: Pulmonary/COPD: Address the growing epidemic of COPD through community partnerships, education, support and programming.

Strategies for implementation:

- **Educate** the Community about COPD
  - Partner with the Wallingford Department of Health and Masonicare in a project called *Healthy Wallingford 2020* to focus on COPD.
    - Create educational flyers and distribute to the public at Celebrate Wallingford Festival in October 2017.
    - Educate the community about pulmonary issues and services to help them. This includes presentations at senior centers and local YMCAs that include peak flow screening as well as providing information on support groups and smoking cessation classes.
    - Develop a video series on Gaylord pulmonary education class that would be uploaded to YouTube so that the community could have access to these classes at no cost and improve their health area.
  - On the inpatient side, Gaylord's care management department follows up pulmonary discharge 3 to 5 days later with a phone call to validate adherence and understanding of the patient's discharge plan and to ascertain if there are any issues. Issues are then referred back to the appropriate clinical liaison.

Anticipated Impact:

- Greater awareness in the community about COPD overall.
- Increased knowledge of services and support systems available to people with COPD.
- Increased quality of life post discharge.
- Will conduct one community presentation on COPD and survey post to determine if those in attendance report increased knowledge of COPD resources.
• Expand **Services** for COPD
  o Expand hours in the Gaylord outpatient Pulmonary Rehab program to offer more classes to the community.
  o Expand Gaylord’s outpatient Pulmonary Rehab class offerings and footprint to accommodate the increased number of community members who need services.

  **Anticipated Impact:**
  • Increased ability to provide education to more people because of expanded space.
  • Increased number of patients who can benefit from Pulmonary Rehab because of more open appointments. Previous to expansion we were able to accommodate 18 patients in classes per week. Expansion should allow for 24 patients.
  • Increased health and quality of life for those with COPD who have attended Gaylord Pulmonary Rehab program. Evidenced through pre- and post- CRQ survey which measures quality of life for those with COPD.

• Expand **Support** Groups
  o Expand Gaylord pulmonary support group called Better Breathers.
  o Expanding Gaylord’s COPD support group to a larger geographic area.

  **Anticipated Impact:**
  • Greater awareness in the community about COPD overall.
  • Increased opportunities for people to self-manage their disease and support one another through the Better Breathers support program. Program information shared with community resource organizations in Cheshire, Wallingford, Meriden, and North Haven. Re-registered with the American Lung Association as a listed certified Better Breathers support group.
  • Creating a larger support system for people with COPD who can have the opportunity to share their journey and health challenges.

2018 Update:
Gaylord staffs continue to provide community education programs annually. By allowing respiratory therapists to appear at health fairs and speaking engagements, our staff shares their knowledge of pulmonary disorders and illnesses and encourages at risk persons to know the signs, symptoms and to seek help. The director of respiratory services herself spoke at the Cheshire and Wallingford Senior Centers and brought spirometry units for interaction with seniors, who most at risk for COPD.
Gaylord has seen the expanded classes in outpatient pulmonary rehab at the Wallingford, CT campus remain full. The Better Breathers Support group has grown so large, that the coordinators are considering breaking the group into two sections so the attendees can get more out of each monthly meeting with clinical staff.

Surveying the graduates of Gaylord’s Outpatient Pulmonary Rehabilitation Program for 12 months in fiscal year 2018 demonstrated the importance of program expansion and the benefit to those who attend. Here is a sample of their outcomes:

Modified Medical Research Council (mMRC) Dyspnea Scale stratifies severity of dyspnea in respiratory diseases and measures a degree of lung impairment/shortness of breath. A lower score post program is desirable and shows shortness of breath improvement.
90% of patients remained stable or saw a decrease in their mMRC score post-program

Extertional Borg or Modified Borg Dyspnea Scale is most commonly used to assess symptoms of breathlessness. A lower number post program shows improvement in a patient’s exertional BORG (or shortness of breath) at the end of a 6 minute walk test.
82% of patients remained the same or saw a decrease in breathlessness following the 6 minute walk test

Chronic Respiratory Disease Questionnaire (CRQ) is an interviewer-administered questionnaire measuring both physical and emotional aspects of chronic respiratory disease. It’s most commonly used disease specific measurement tool to assess HRQL (health related quality of life) in patients with chronic respiratory disease. Gaylord measures the total score (CRQ is broken down into 4 categories: dyspnea, fatigue, emotion, mastery). The CRQ total score should increase post-program to reflect an overall improvement in the patient’s quality of life.
88% of patients remained stable or reported an increase in their health related quality of life.

Initiatives from 2016-17 were all implemented and continue with the exception of the YouTube Video series. Recent requests of the clinical staff at Gaylord Specialty Healthcare, those working with the prospective patients and referral sources located at several acute care hospitals across Connecticut, requested videos that would serve a different purpose. A need was identified for family members of ventilator dependent patients who would benefit from having educational materials outlining what is involved in taking care of someone on a ventilator at home. After researching to determine whether this information is available from a trusted healthcare resource, Gaylord determined that no such tools exist. This initiative is being addressed in the future.
**Goal #2: Stroke:** Improve inpatient direct care and educate patients and providers about the continuum of care.

**Strategies for implementation:**

- **Delivery of Care**
  
  - Reorganize Gaylord's patient care units to allow stroke patients to be cohoverted on one unit which would reflect clinical best practices.
  
  - Create a plan for investigating and investing in technology that will assist the patient in their therapy sessions. (An example is BITS.) Increase the number of people accessing BITS and other technology by 10%.
  
  - Expand telemetry into more patient care areas so that clinicians can more closely monitor cardiac function, utilize referring hospital protocols and insufce the best outcomes for stroke patients. Expand telemetry to one additional patient care unit.
  
  - Educate patients and families about all the resources available to them to insufce the best outcome. Track CVA education post test scores and increase from baseline.
  
  - Collaborate with Yale Neurology to improve clinical synergies in one of their areas (i.e. MS Clinic) to help improve patient outcomes.

**Anticipated Impact:**

- More coordinated continuum of care for stroke patients
- Increased level of expertise and evidence-based practice in the care and outcomes of this growing patient population
- Create synergies and collaboration among clinicians for the benefit of the patient from the acute care hospital setting through the outpatient services.

- **Education of patients and providers**
  
  - Host the community providers group monthly at Gaylord Hospital. The community providers group is comprised of home health agencies including skilled nursing facility and durable medical equipment providers that cover the state of Connecticut and provide services post discharge.
  
  - Hold an educational session at Gaylord for members of ACMA to learn more about CVA.
  
  - Educate referral sources on the continuum of care from acute care to LTACH to IRU to community to outpatient to tune-up clinic and then long-term follow-up by Gaylord hospital physicians.
o Educate community on CVA prevention/treatment including sharing the Gaylord CVA manual by placing it on the website as a free resource.
o Host monthly support group.
o Grow Peer Mentor program; expand inpatient coverage and introduce into outpatient program.
o Expand marketing of Gaylord’s CVA Tune-Up Clinic to serve persons post care and help them maintain optimum health.
o Hold two CEU events
o Expand Peer Support program to include Traurig House
o Update the CVA educational manual with the most up-to-date resources and education by fiscal 2018 year end.

**Anticipated Impact:**

- Expand the awareness, education and support for patients, providers and referral sources through multiple avenues.
- Newly affected stroke patients will have peers in the community to help guide their recovery journey.

**2018 Update:**

Supporting stroke patients was identified as a priority area since stroke prevalence is on the rise. Gaylord’s director of inpatient rehabilitation Alyse Sicklick, MD conducted research for education offered to therapists, nurses, psychology teams and additional clinical audiences when she presented to over 140 healthcare providers at Gaylord. Her research cited the following:

Hospitalizations for acute ischemic stroke has increased significantly for both males and females aged 18-54 (JAMA Neurol 2017)

Projections show that by 2030 an additional 3.4 million US adults aged ≥ 18 years will have had a stroke. This represents 3.9% of the US population and a 20.5% increase in prevalence from 2012 (Circulation, 2019)

The following initiatives were successfully implemented by Gaylord to achieve a two-pronged approach for improving direct care and educating patients and providers.
Delivery of care was improved in the following ways.

- Between 2017 and 2018, Gaylord’s patient care units were reorganized, allowing stroke patients to be cohorted on one unit — a change reflective of clinical best practices and resulting in a more coordinated continuum of care.

- Since 2016-17, Gaylord has increased access to assistive technology. Three BITS (Bioness Integrated Technology Systems) were purchased to help patients regain important skills like hand-eye coordination, visual reaction time and memory. An overhead gait system called ZeroG purchased and installed in the inpatient rehab gymnasium. This tech allows patients to relearn gait patterns earlier that using traditional therapy models. Gaylord made the investment into three AlterG (anti-gravity) treadmills which were purchased and have been installed in each of our three outpatient locations. These treadmills allow staff to off weight patients to facilitate safer and earlier walking. All technology investments involve the clinical staff in the evaluation stage and require evidence-based research and successful clinical trials in order to be considered for purchase. Many in-services are presented to decision makers in order to consider a broad number of technology options before any purchase is made since the impact on treatment for patients to relearn to walk and working on increasing their activities of daily learning needs to be made either easier, safer or less painful.

- Telemetry was expanded into two more patient care areas so that clinicians can more closely monitor cardiac function, utilizing referring hospital protocols and insuring the best outcomes for stroke patients.

- In a close synergy with Yale Neurology and the MS Clinic, a digital MS resource tool for patients and staff was created. A Gaylord staff therapist was also trialed at the Yale location to see if the need for a Gaylord therapist could facilitate better patient care, but the immediate need on the side of the Yale location did not justify the need for a full-time resource.

- Finally, Gaylord maintained their CARF accreditation, updated every three years, for their inpatient and outpatient programs. Gaylord also applies for and maintains an additional accreditation for its Stroke Program, and is the only hospital in the state with this specialty accreditation for stroke.

Gaylord educated patients and providers in various ways.

- Gaylord continues to host the community providers group, comprised of home health agencies, skilled nursing facilities and durable medical equipment providers that cover the state of Connecticut and provide services post-discharge.
Gaylord provided space free of charge to the Stroke Coordinators group, which are clinical staff from across the state which collaborate on best practice for healthcare systems that specialize in stroke care.

Gaylord hosted a continuing education event for members of the American Care Managers Association, who choose to learn about spinal cord rehabilitation, although a program dedicated to stroke was offered.

Gaylord gave 50 presentations about the continuum of care, helping healthcare providers navigate the many levels of care and where Gaylord is able to offer assistance. Presentations followed patients through the continuum from acute care -> long-term acute care ->independent rehab units -> community -> outpatient -> tune-up clinic -> long term follow-up by Gaylord hospital physicians) This number also included professional associations of case managers, therapists and physicians.

Additionally, Gaylord educated the community on stroke prevention and treatment by sharing our updated stroke manual on our website as a free resource.

We continue to hold monthly support groups for patients and their caregivers, which served over 150 people.

Peer Mentoring has been expanded to include outpatient coverage for patients at the Traurig House, the states only transitional living center which is housed on Gaylord’s Wallingford Campus.

Gaylord’s CVA (stroke) Tune-Up Clinic is slowly gaining popularity as patients are beginning to call for services post discharge.

Gaylord provides a 14-week specialist certification course annually to increase knowledge, not just among providers at Gaylord but to providers throughout the community. Topics include, acquired brain injury (including stroke), spinal cord injury and a medically complex series.

**Goal #3: Wellness:** Being proactive in getting the screenings and/or therapy needed can improve one’s quality of life and lessen personal healthcare costs down the road. Gaylord seeks to educate patients and community members about clinical services that will allow them to maintain or increase function and improve quality of life. Focus will be on Physical Therapy and involvement in adaptive sports.

**Strategies for implementation:**

**Screenings and Education**

- Develop a schedule so that Gaylord Physical Therapy Orthopedics and Sports Medicine program can partner with more community events and activities such as races, walks and runs.
- At these events our Physical Therapists would seek to educate participants on proper stretching, form and do on the spot injury screenings and speak to injury prevention.
- Increase awareness of direct access to Physical Therapy and cost savings to the consumer.
  - Partner with local senior centers and YMCAs to offer falls/balance screenings.
  - Offer community lectures on healthy aging and issues they may encounter such as dysphagia.
  - Market Gaylord’s community programs such as Aquasize and PREP (Post Rehab Exercise Program) which take place in both Wallingford and North Haven.
  - Expand education for teens regarding concussion prevention and expand frequency of our risk avoidance program ThinkFirst in the local school system.

**Anticipated Impact:**
- Decrease incidence of risky behavior by teens because of the ThinkFirst education.
- Increase the knowledge within the community of the availability of effective, evidence-based treatment for orthopedic conditions.
- Increase demand from patients for the PREP program

**Sports Association expansion**
- Expand the Gaylord Sports Association so that a larger geographic area is aware of the recreation and adaptive sport programs available to them.
- Develop a marketing plan to advertise adaptive sport offerings
- Partner with other adaptive sport providers in the area.
- Offer one (1) new program a year
- Increase focus on coach growth and development through funding and encouraging training opportunities.

**Anticipated Impact:**
- Increase the number of individuals with a disability served by Gaylord Sports Association by 10%.
- 70% of individuals who participate in the Sports Association will report increase physical benefits, social opportunities, and skill enhancement through the annual survey.
2019 Update:
We developed a schedule to enable collaboration between Gaylord Physical Therapy Orthopedics and Sports Medicine and different community events such as races, walks and runs. Generally, at these events, our Physical Therapists seek to educate participants on proper stretching, form and do on-the-spot injury screenings and speak to injury prevention. This led to an increased engagement with members of the community from attending these events

- Gaylord held numerous community lectures addressing pulmonary health, the benefits of aquatics, osteoporosis, proper ergonomics, back health and screenings for falls and balance issues as the result of partnerships with local senior centers, YMCAs and a relationship with Chesprocott Health District. The staff from outpatient presented at 12 locations and the staff from physical therapy spoke at 14 locations, helping over 500+ attendees. This does not include 10 health fairs when clinical staff attended to answer questions and increase awareness on the topics Gaylord are experts in.
- In additional, physical therapy staff was present at four road races where they stretched racers and provided injury screenings for at least 200+ athletes.
- Gaylord has begun to explain Direct Access to the community by including the language on educational flyers, advertisements and our website. The benefit for residents of Connecticut is an option to better utilize their physical therapy benefit without requiring a visit to another provider first. Direct Access is appropriate for use when a visit to a referring physician is not clinically needed prior to a therapist providing an evaluation and initial intervention/treatment, when determined appropriate and valuable.
- Gaylord’s aquatics programs have increased in scope and the aquatics coordinator has been out in the community marketing programs at least three times in 2018. Gaylord always offered outpatients Aquacize and physical therapy in the water, but now also offers occupational therapy in the pool as well.
- The ThinkFirst program, designed to educate youth about injury prevention, has been regularly providing education sessions from kindergarten through grade 12. On average, 40 programs are presented with over 1,000 children in attendance annually.
- Gaylord’s Gynecology Clinic for Women with Disabilities provided specialized care for over 100 women who would normally have a difficult time transferring to a standard exam table in the community.
- Gaylord’s Sports Association Program, the largest adaptive sports program in the state, has seen much growth these past couple of years. The program markets to a large geographic area via social media posts, flyers, about 10 newsletters each year (previously 6 per year) and is currently developing a comprehensive outreach
plan. There are about 1,600 people on the mailing lists that receive notices. Special posts announcing ski trips, yoga classes and surveys are sent out to the community as well. Billboards with digital messages have been shown in Waterbury, Hartford and in New Haven which has expanded the program’s reach.

- The Sports Association saw 234 unique individuals in 2018 and offered 221 opportunities, an increase of 40% over the past five years.
- The Sports Association has partnered with many groups and providers in the area including Southern Connecticut State University and Chapter 126, an adaptive gym in Bristol. Our association partners with Connecticut Bass Nation for fishing trips, Ti-Trikes and other cycling organizations to run the annual Adaptive Cycle Clinic.
- The association has offered several new programs including three new Veterans Adaptive Archery Clinics on the Gaylord campus, the inaugural SMASH BOWL Wheelchair Rugby Tournament, and two first-timer rides for newcomers to adaptive cycling.
- Finally, in terms of coach growth, almost all the coaches have at least level one certification in their respective sports.
- As a result of these efforts, almost 70 percent of people who participate in the Sports Association programs reported an increase in physical benefits, social opportunities, and skill enhancement. Almost 88 percent of participants reported increase quality of life. To see the annual report of the Sports Association visit www.gaylord.org.