Gaylord Specialty Healthcare

Community Health Needs Assessment and Implementation Plan 2019

Approved and adopted by the Gaylord Specialty Healthcare/Gaylord Hospital

Board of Directors on August 27, 2019.

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ACRONYMS AND ABBREVIATIONS

ABI - Acquired brain injury
ACMA - American Case Management Association
ALS - Amyotrophic Lateral Sclerosis
BITS - Bioness Integrated Technology Systems
CARF - Commission for the Accreditation of Rehabilitation Facilities
CHEFA Grant - Connecticut Health and Educational Facilities Authority Grant
COPD - Chronic Obstructive Pulmonary Disease
CVA - Cerebrovascular accident/stroke
MARTTI - My Accessible Real Time Trusted Interpreter
MCI - Mild cognitive impairment
MS - Multiple sclerosis
SCI - Spinal cord injury
TBI - Traumatic brain injury
USOC - United States Olympic Committee

CHNA EXECUTIVE SUMMARY

The Community Health Needs Assessment (CHNA) is a part of the Patient Protection and Affordable Care Act that helps ensure that non-profit hospitals have the information needed to provide benefits to the communities they serve. Through data collection, the assessment and strategies developed help Gaylord to improve the coordination of community benefits with other efforts to improve community health, which is completed every three years.

Gaylord Specialty Healthcare is comprised of three components: Gaylord Hospital which is a 137-bed long-term acute care hospital (LTACH); Outpatient Services which offers over 40 programs for a variety of medical conditions; and Gaylord Physical Therapy which offers orthopedic rehab as a result of injury or surgery.

As an LTACH, Gaylord receives its patients directly from acute care hospitals. The key distinction of patients cared for in an LTACH is the multiplicity of diagnoses and problems leading to an aggregate of care needs that extends beyond the capabilities of a typical acute care hospital. Our comprehensive discharge process provides client and family planning guidance and education about resources and options available to help individuals with a catastrophic injury or illness to better address the psychosocial, educational, career and medical issues that may arise during the first year after their injury or illness.

In 2019, Gaylord contracted with Data Haven to compile the necessary assessments to evaluate the resources that would guide the implementation of services that best aligned with individuals in our service area. The assessment examined a variety of indicators, including barriers to receiving care, health conditions, and adaptive sports that could benefit individuals living with physical or visual disabilities.

Gaylord's mission is to enhance health, maximize function, and transform lives. Because of the unique needs of our patient population, our strategies are designed to support our patients as they transition in the broader community, improving community health through better care, improved access, and enhanced activities.

Community Health Needs Implementation Plan

Based on the feedback from our unique communities, Gaylord will focus on the following priorities over the next three-year cycle:

- Offering brain health and mild cognitive impairment (MCI) programming
- Expanding healthcare options for individuals involved in workplace injuries
- Providing pulmonary services, ventilator weaning, and caregiver teaching
- Delivering wellness lectures and access to adaptive sports opportunities

The final report of the CHNA was made public on September 19, 2019 and is found on the Gaylord website at www.gaylord.org. Paper copies are also available per request. The Gaylord Specialty Healthcare/Gaylord Hospital Board of Directors approved the CHNA on August 27, 2019.

ABOUT GAYLORD

Gaylord Specialty Healthcare is a rehabilitation-focused, non-profit health system that provides inpatient and outpatient care for people at every point in their journey from illness or injury to maximum recovery. The organization is comprised of three components: Gaylord Hospital which is a 137-bed long term acute care hospital (LTACH); Outpatient Services which offers over 40 programs for a variety of medical conditions; and Gaylord Physical Therapy which offers orthopedic rehab as a result of injury or surgery.

Gaylord Hospital provides medical rehabilitation for acute illnesses, accidents, and complex medical conditions. Licensed as a long-term acute care hospital, Gaylord Hospital fills a critical gap in the continuum of care by serving patients with complex medical needs who require hospitalization and rehabilitation for an extended period – on average 25+ days. Gaylord Outpatient Services offers nearly 40 programs for a wide range of conditions, focusing mainly on neurologic diagnoses, with specialized technology and staff with advanced training to meet the needs of these patients. Gaylord Physical Therapy provides orthopedic rehabilitation services for recovery from surgery, injury, sports-related injury, and other medical conditions.

Together, these entities deliver a complete continuum of rehabilitation care driven by technology, research, clinical experience, and human compassion. Headquartered in Wallingford, Connecticut, Gaylord serves a mix of local, regional, national, and international patients.

As a non-profit institution, Gaylord is governed by a Board of Directors, which meets six times a year and whose members are not compensated. There are several standing Board committees that oversee the operations of the system, including Budget & Finance, Audit, Nominating, Investment, Joint Conference, Development and Human Resources. Our Executive Committee annually assesses the performance of our Chief Executive Officer based upon her stated goals.

LOCATIONS

Gaylord Hospital
50 Gaylord Farm Road, Wallingford, CT 06492

Gaylord Outpatient Services
50 Gaylord Farm Road, Wallingford, CT 06492

Gaylord Physical Therapy
1154 Highland Avenue, Cheshire, CT 06492

Gaylord Physical Therapy
8 Devine Street, North Haven, CT 06473

ACCREDITATIONS AND EXPERTISE

Areas of expertise include:

• **Spinal Cord Injury** – We create a personalized treatment plan to maximize physical and emotional recovery and rehabilitation from spinal cord dysfunction caused by disease or injury.

• **Brain Injury** – We offer one of the most comprehensive brain injury treatment and rehabilitation programs in the Northeast. Our full range of care begins at inpatient, and follows through to an on-campus transitional living center, and on to outpatient services.

• **Stroke Recovery** – Our patients receive an individualized care plan to rehabilitate a wide range of impairments including partial paralysis, speech loss, swallowing and visual deficits. Survivors may participate in the transitional living center and utilize our extensive options in outpatient rehabilitation.

• **Neurological Rehabilitation** – Our specialized care team can treat patients suffering from many neurological disorders, some of them rare, including ALS, muscular dystrophy, Guillain Barré, Multiple Sclerosis and others.

• **Orthopedic Rehabilitation** – Our specialists treat musculoskeletal problems for patients following major multiple trauma, amputations, joint replacements, fractures and arthritis.

• **Pulmonary Program** – Our team, which is led by a board-certified pulmonologist, offers exceptional care to the many people suffering from a range of diseases, including COPD, the largest pulmonary diagnosis affecting Connecticut's population. Our specialists care for patients in need of ventilator weaning and offer an educational program for families that want to bring a loved one home who is still vent dependent. All respiratory patients who are seeking better overall health and enhanced mobility are provided a robust exercise program and disease specific education.

• **Complex Medical Conditions** – Patients who have had organ transplants, require extensive wound care, have experienced complications following surgery, or have congestive heart failure, or other cardiac complications can benefit from the hospitalist led medical team at Gaylord.

Gaylord is accredited by the Joint Commission, which includes a rigorous survey to maintain accreditation. Gaylord is the only Commission for the Accreditation of Rehabilitation Facilities (CARF) accredited facility in the state for inpatient and outpatient programs. Additionally, the hospital is one of only two in the country with three CARF subspecialty accreditations in stroke, traumatic brain injury, and spinal cord.

Gaylord is a member site of the Model Spinal Cord System, of which there are only 14 in the nation. Gaylord is also one of only 19 locations in the US to have the Ekso bionic exoskeleton, which enables people who are paralyzed to walk. We are one of only 14 facilities nationwide to be designated a Center of Excellence for the Passy-Muir speaking valve, which allows patients with a tracheostomy tube to speak. Gaylord was the first in the nation to be designated a Center of Excellence for our expertise in using the Vapotherm technology, which delivers heated humidified air to our vent-dependent patients, which improves outcomes. We are the flagship

hospital for this program and are working with Vapotherm to set the standards for designation of other hospitals as a Center of Excellence.

MISSION, VISION AND VALUES

- Mission – To enhance health, maximize function and transform lives.
- Vision – To be a recognized and acknowledged destination for rehabilitation and complex medical care providing high-quality, patient-centered, compassionate, team-based healing at every point in the journey from illness or injury to maximum recovery.
- Values – Clinical excellence, compassion, integrity, respect, accountability and a commitment to safety.

INVENTORY OF SERVICES

Pulmonary rehabilitation

Pulmonary rehabilitation is designed to help individuals with pulmonary complications or diseases to develop new strategies for monitoring and controlling their symptoms so that they can lead a more active life. Under the supervision of our pulmonary specialists, individuals acquire the knowledge and skills needed to increase their strength and endurance and decrease their need for hospitalization and episodes of shortness of breath. The program is open to individuals who are diagnosed with diseases such as emphysema, chronic asthma, chronic bronchitis, pulmonary fibrosis, cystic fibrosis, and other pulmonary conditions such as being pre-lung transplant.

Ventilator weaning

Gaylord's Ventilator Weaning Program is designed to help patients who have been dependent on a ventilator learn how to breathe again on their own. The program uses the latest research and technologies to help patients successfully transition from being on a ventilator to breathing independence. Each patient receives a thorough assessment before he or she arrives at Gaylord so that any special needs can be determined early in the process. Upon arrival at our facility, the entire care team sees the patient and develops an individualized plan of care.

Some patients – those with certain spinal cord injuries or progressive neuromuscular diseases – may be unable to be weaned from the ventilator. When that is the case, we work with the family to determine the best course of care after discharge from Gaylord. If the patient is cared for at home, we will train the patient and his or her family in tracheostomy care, suctioning, home ventilator operation, and emergency care. Gaylord also helps families select a home health company, check the home environment, and assist in making sure the environment is optimal for patient comfort and safety.

Traurig House- Transitional living center

The Louis D. Traurig House is the only transitional living center for people with acquired brain injury in Connecticut. Located in Wallingford on the campus of Gaylord Specialty Healthcare Traurig House is an 8-bed, co-ed facility offering a supervised setting for community re-entry. Typically, residents come to Traurig House after they have completed their inpatient rehabilitation but are not quite ready to go home because of language, physical, or cognitive problems. Traurig House provides the necessary transition to ease the patient from hospital to home. Residents participate in the day treatment program at Gaylord Outpatient Rehabilitation.

Aphasia/Cognitive Day Treatment

Our day treatment programs offer an intensive outpatient program for people with cognitive deficits following an acquired brain injury such as traumatic brain injury, stroke, or other neurologic disorder. Cognitive impairments result in difficulties with orientation, attention, memory, reasoning, problem solving, planning, and organization. These difficulties often affect auditory comprehension, verbal expression, reading comprehension, writing, and social communication skills.

Wheelchair Assessment Services

Mobility is crucial to our total wellbeing, especially for individuals who require assistive devices such as wheelchairs, walkers, or artificial limbs. Over time mobility can be compromised, and having a well-prescribed wheelchair or assistive device can mean the difference between independence and being dependent on others. Gaylord's Wheelchair Assessment Service can improve mobility through the proper recommendation of customized wheelchairs and other assistive devices.

Wheelchair Assessment Service is coordinated by registered physical therapists who are certified Assistive Technology Providers (ATP) with advanced training in seating and positioning. Rehab Technology Suppliers (RTS) are present at evaluations to assist in equipment selection and to provide the equipment to clients.

A proper evaluation and prescription can reduce costs associated with preventable complications that result from ill-fitting equipment such as:

- Orthopedic deformity
- Loss of skin integrity
- Chronic pain syndromes
- Depression

Assistive Device Assessment

As patients with spinal cord injuries and other diagnoses continue their journey to independence, Gaylord offers a full complement of assistive technologies that enable greater independence. Assistive technology is available for phone access, computer access, and various environmental controls, and these technologies are used through a computer, a switch, or via voice activation.

Center for Concussion Care

Gaylord's Center for Concussion Care is a comprehensive program for teens and adults. Each plan of care is customized using resources at the Wallingford, North Haven, or Cheshire locations. Gaylord's team draws upon a long and successful history of treating brain injuries. The collaborative center consists of physiatrists, neuropsychologists, orthopedic physical therapists, and vestibular/balance physical therapists. In some cases, specialty treatment options may include occupational or speech therapists, all with advanced training in neurological disorders to maximize recovery.

Aquatic Exercise Program

Gaylord's 75-by-25 foot therapeutic pool on the Wallingford campus is specially designed for people with disabilities. Aquatic therapy – therapeutic exercise in water with a physical or occupational therapist – provides a soothing, efficient method of exercise for achieving movement. The water, which is maintained at a temperature between 88 and 90 degrees in Gaylord's therapeutic pool, provides a cushioning effect that protects the body from any pounding, jarring movements. The North Haven location also offers aquatic physical therapy.

ThinkFirst Program

Gaylord Specialty Healthcare and the National Spinal Cord Injury Association, Connecticut Chapter, sponsor the ThinkFirst program. ThinkFirst is an injury prevention program that is offered free to schools (grades K-12) and community groups such as clubs, scout troops, and health fairs, etc. The program is taught by a physical therapist from Gaylord Hospital and addresses the ways to prevent injury when participating in age-specific activities, such as bicycle safety for elementary students and drinking and driving for high school students. An important focus is on helping students understand the impact of brain and spinal cord injuries on their lives and how they can be prevented.

Sports Association

Gaylord Hospital Sports Association supports disabled sports teams and clubs throughout Connecticut. The Sports Association encourages people with physical disabilities to participate in sports and experience new sports activities and is a member of the Disabled Member of Disabled Sports, USA, and Paralympic Chapter as designated by the USOC. The association underwrites three competitive teams in wheelchair rugby, wheelchair tennis, and sled hockey.

Support Groups

Each month, Gaylord provides space and resources for over 40 hours of various support groups on the Wallingford campus. A few are listed here:

- Amputee Success Group
- Better Breathers
- Community Stroke Support Group

- Spinal Cord Injury Support Group
- National Spinal Cord Injury Association, CT Chapter Board Meeting
- Family & Caregiver Support Group for ABI
- Cardiac Support Group (Co-hosted with Wallingford Senior Center)

SERVICE COMMUNITY

Long-Term Acute Care Hospital definition

Medicare defines Gaylord as a long-term acute care (LTACH) hospital. LTACHs are part of the post-acute care continuum. Many of the patients treated at Gaylord are transferred from an acute care hospital's intensive or critical care unit. As an LTACH, Gaylord focuses on patients who require extended medical and rehabilitation care for individuals with clinically complex problems, such as multiple acute or chronic conditions, that need a hospital-level of care for relatively extended periods (25 days).

According to Medicare data, LTACH patients have an overall severity of illness that is greater than those in any other post-acute care setting. Gaylord Hospital's patients require frequent physician oversight and advanced nursing care. Research suggests that patients who receive post-acute care following a major health episode see more significant and more rapid clinical improvements compared to patients discharged to their homes without follow-up. There is evidence from national studies that some patients do better in LTACHs when compared to traditional acute hospital care. Patients are weaned from ventilators earlier and have longer survivability after discharge from an LTACH than from traditional acute care alone. This phenomenon is most evident with patients who have been ventilator dependent.[1]

[1] Gage, B., Bartosch, W., & Green, J. (2005). Long-Term Acute Care Hospital (LTCH) Project Approach. Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/LongTermCareHospitalPPS/Downloads/RTI_phaseI.pdf

LTACH's and Medicare

Gaylord conducted a study using Medicare claims data from 2016-2018 to look at post-acute level of care outcomes in the most severely ill patients. The hypothesis was that severely ill patients achieve better outcomes in long-term acute care hospitals (LTACH's), which the study did confirm for these patient populations. For the complete study, please contact Gaylord Specialty Healthcare, Public Relations Department at (203) 284-2881.

Study Methodology

Gaylord analyzed the complete set of Medicare fee-for service claims data for 2016 to capture STACH discharges by first discharge destination and stratify them by 3M Severity of Illness (SOI)* and Risk of Mortality (ROM) levels. Data included hospital inpatient, outpatient, IRF, SNF, and Home Health Agency, Other (Home w/o Home Care, Hospice, and Assisted Living) for one year of beneficiary experience.

Overview

Long Term Acute Care Hospitals (LTACH's) care for the most severely ill patients discharged from Short Term Acute Care Hospitals (STACHs). Comparing the SOI 4 (highest acuity) patients discharged to LTACH's vs those discharged to IRF's, SNF's or Home Health Agencies, patients in LTACH's have:

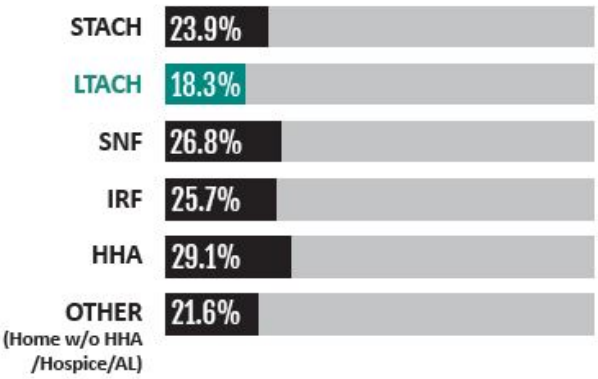
- A higher average number of comorbidities (both CC and MCC), 9.8 (LTACH) vs 7.8 (IRF's), 7.4 (SNF) and 6.7 (HHA)
- A higher proportion of patients with at least a 3-day length of stay in an ICU, 84.5% (LTACH) vs 75.3% (IRF's), 59.6% (SNF) and 56.5% (HHA)
- A higher percentage of high Risk of Mortality patients (ROM 4), 77.9% (LTACH) vs 70% (SNF) and 58% (HHA)

The focus of the analysis was on the total episode of care. Using the data set, we constructed 30, 90, and 180-day episodes of care, starting with the discharge from a STACH. Only Medicare FFS patients (not including behavioral health) discharged alive from a STACH were used in the analysis. An episode was defined as LTACH, IRF, SNF, HHA, if a patient was discharged from the index STACH on day N, and admitted to the LTACH, IRF, SNF, HHA on day N or thru N + 3. The maximum period measured from the STACH index discharge (the start of an episode) is 180 days.

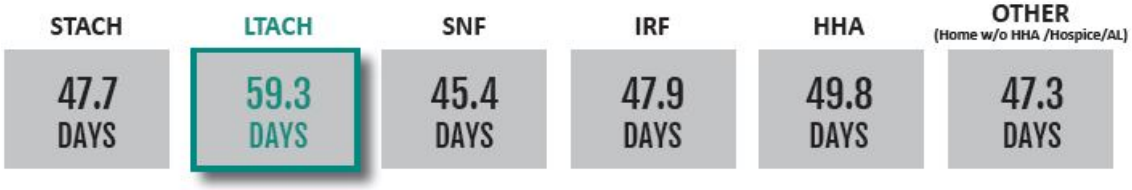
Readmission Rates for SOI 4 Patients, All-DRG, Across Post- Acute Settings — Lower is Better

# SOI 4 STACH Discharges:		30 DAY	90 DAY	180 DAY
STACH	1,011,248	22.2%	36.5%	44.7%
LTACH	64,290	13.0%	35.7%	45.4%
SNF	307,520	26.6%	42.2%	50.9%
IRF	50,525	25.5%	41.8%	51.4%
HHA	102,012	25.1%	40.8%	51.2%
OTHER (Home w/o HHA /Hospice/AL)	487,552	19.7%	31.4%	38.7%

OP Emergency Department Use for SOI 4 Patients, All DRG, Across Post-Acute Settings - 90 Days — Lower is Better



Mean Time to 1st Readmission for SOI 4 Patients, All DRG, Across Post-Acute Settings - 90 Days — Longer is Better



Conclusion

High acuity patients (SOI 3 and SOI 4) discharged by the STACH directly to the LTACH have significantly fewer readmissions and significantly less utilization of the ED at 90 and 180 days than patients discharged to other post-acute care (PAC) settings as well as significantly longer mean time to first readmission.

Benefits of discharging to Gaylord

1. Excellent clinical outcomes (↓ Readmission rates, ↓ OP ED Utilization, ↑ Mean time to 1st Readmission)

2. Decrease STACH LOS and expense (in Critical Care, Step Down/Intermediate ICU's and M/S beds) due to direct critical care/SD discharge to Gaylord.

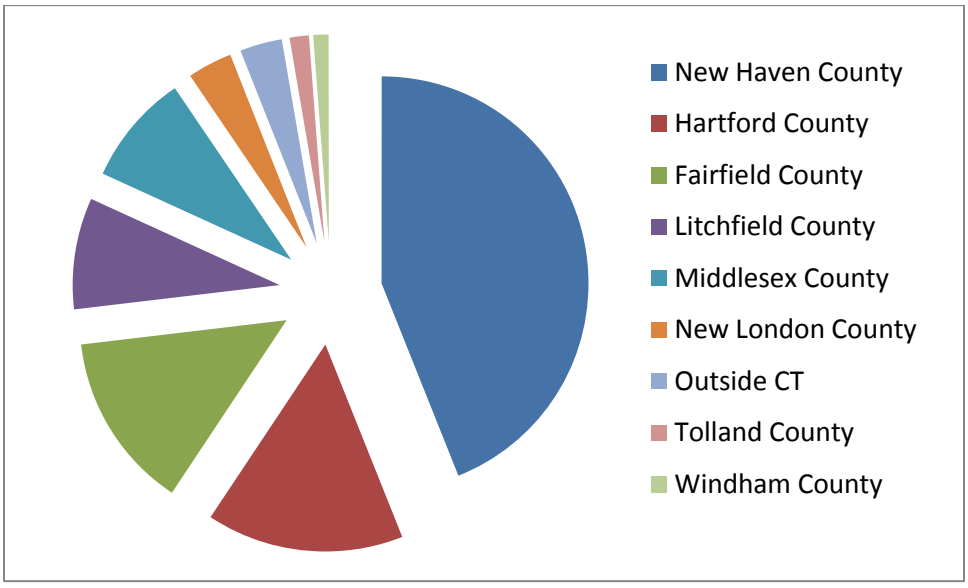
3. High (46%) rate of discharge to home vs. another PAC facility level.

4. Potentially eliminate or reduce readmission penalties by sending the most acutely and chronically ill patients with the highest risk of readmission, to a setting where re-admissions are reduced.

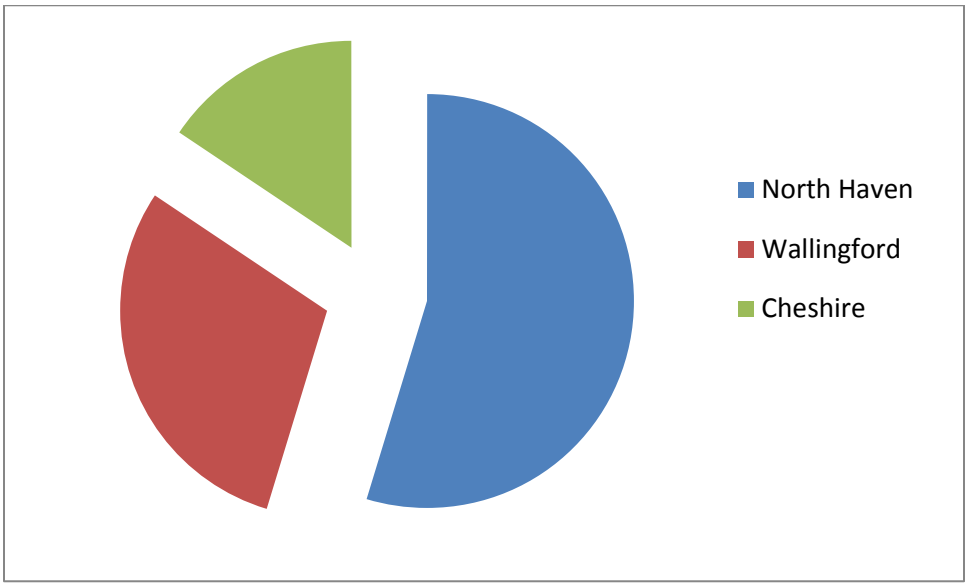
5. For organizations participating in bundles, capitation and ACO's, this offers a significant opportunity to reduce readmissions and ED utilization and the associated costs for the patients most likely to incur this utilization.

THE COMMUNITY GAYLORD SERVES

The community served by an LTACH has multifaceted medical, nursing, rehabilitation, and mental healthcare needs. Patients have primary diagnoses, including traumatic brain, spinal cord injuries, complex stroke, serious respiratory conditions, extensive wounds, resistant infectious diseases, neurological disorders, orthopedic problems, and multisystem complications. The key distinction of patients who are cared for in an LTACH is the multiplicity of diagnoses and problems leading to an aggregate of care needs that extends beyond the capabilities of a typical acute care hospital. Gaylord accepts admissions from acute care hospitals from across the Connecticut as well as from out of the area, approximately 1,500 admissions per year. New Haven and Hartford counties account for the greatest number of admissions to Gaylord.



For the 6,000 unique outpatients we serve annually, the highest population comes from New Haven County. A few patients travel to outpatient from other New England states to receive the specialized services they need to reach their objectives. The patients who are served at the Wallingford location require more than one type of service. These patients often receive a combination of physical, occupational, and speech therapy. The patients served in Cheshire, and North Haven benefit from orthopedic physical therapy and tend to have a lower number of visits to achieve their goals.



2019 COMMUNITY HEALTH NEEDS ASSESSMENT

Community Health Needs Assessment rationale

In March 2010, the U.S. Congress passed the Patient Protection and Affordable Care Act that included new requirements for private not-for-profit hospitals. For tax years beginning March 2012, each hospital must:

- Conduct a Community Needs Assessment once every three years, including public health and community input. The Community Needs Assessment is a systematic, data-driven way to identify and analyze community health needs and prioritize these needs.
- Develop action plans to address community needs by adopting an implementation strategy which must be approved by the Board of Directors.
- Report the process and plan to the community and on IRS Form 990.

Research process

Beginning in January 2019, Gaylord conducted several phases of primary research for assessing community need. The research consisted of a focus group with key Gaylord staff members, as well as a six-item qualitative survey developed and disseminated via SurveyMonkey, an online survey platform. The research also included the gathering of national and regional data about various health topics such as mild cognitive impairment, workplace injuries, and patient populations who live with the support of a ventilator. These data are obtained from a variety of sources, all of which are available in the references.

Methodology for obtaining feedback

Feedback was gathered from patients and community stakeholders to understand better the strategies they currently use to maintain their health, their experiences with accessing healthcare services, barriers to care, and their perceptions of gaps in care. Surveys were sent to the following groups:

- Referral sources and discharge planners from referring hospitals
- Sports Association participants
- Advocacy groups such as the Brain Injury Association of Connecticut and United Spinal, Connecticut Chapter members
- Attendees of Gaylord support groups, including Amputee Success Group, Better Breathers, Community Stroke Support Group
- Wallingford Health Department and Chesprocott Health District

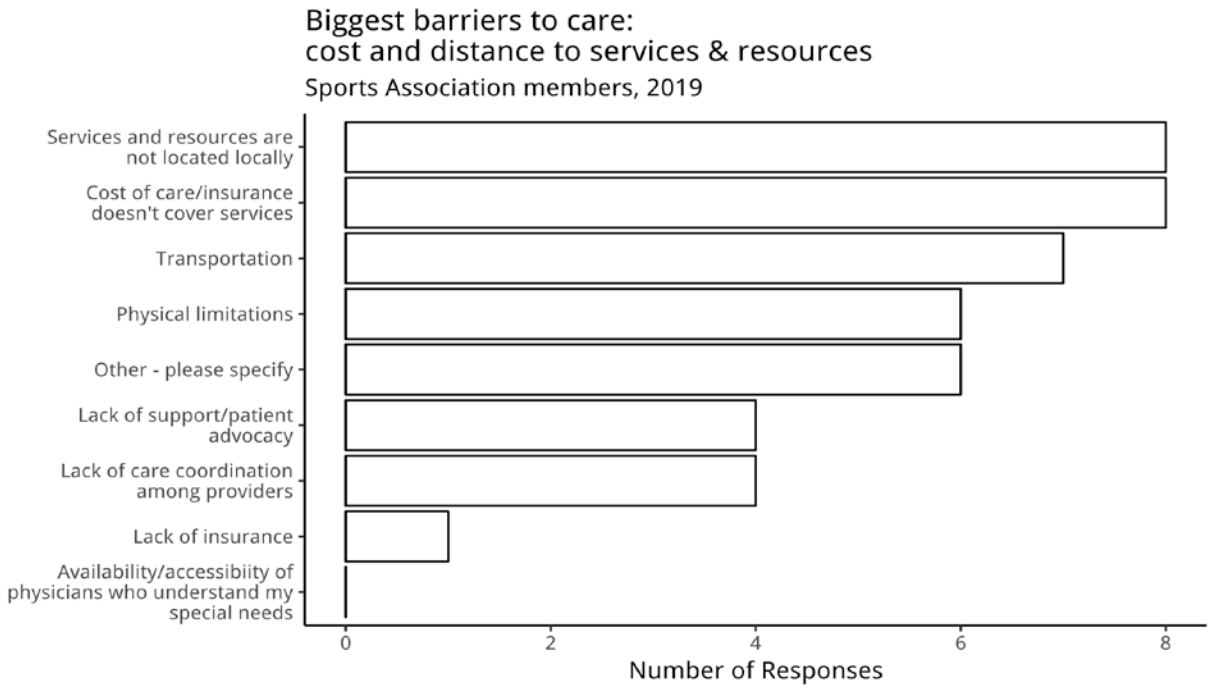
Survey Findings

Fifty-six completed surveys were returned and analyzed. Survey respondents were asked to identify any barriers that exist in the community and at Gaylord Specialty Healthcare in accessing the care needed to maintain health; to identify areas of unmet need or services that are not currently available and to identify key improvements to provide better health care to the communities it serves.

"Please indicate what barriers exist, if any, to accessing care you need to maintain your health. Check all that apply."

The most common barriers among Sports Association members – cost of care and distance to services and resources – are illustrated below in Figure 1.

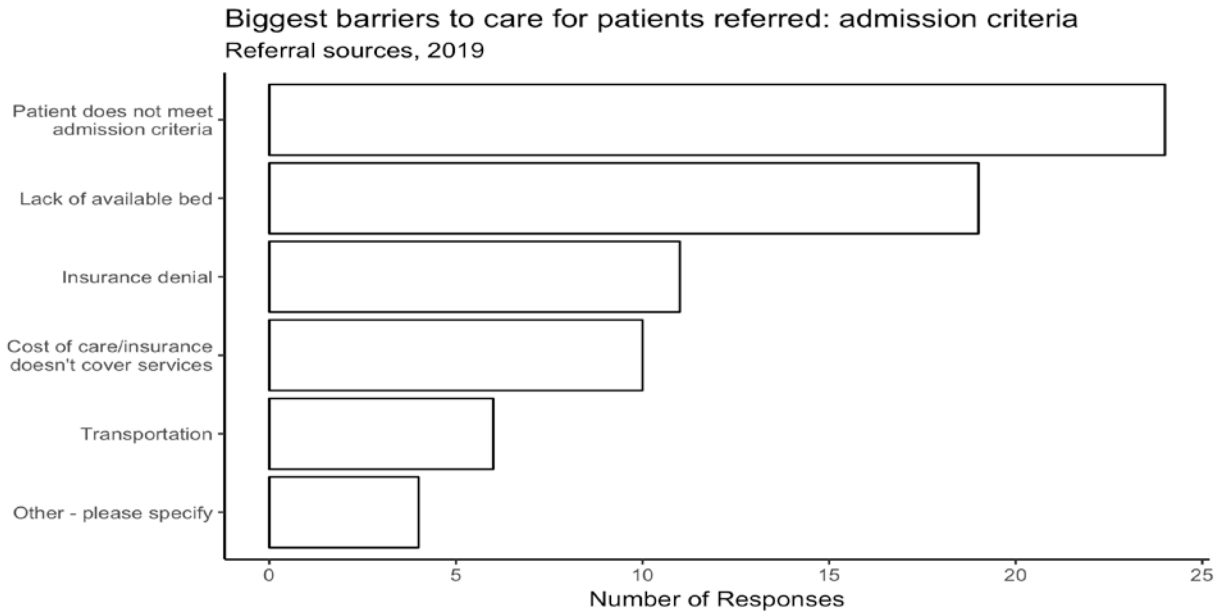
Figure 1.



Some of the other barriers listed were:

- "Offices that are hard/difficult to access due to mobility issues; providers who cannot accommodate patients with mobility issues (small treatment rooms, fixed height examination tables that are too high and/or too narrow for safe transfers)."
- "Barriers to insurance limits (10-20 visits) and understanding individual needs for PT/OT."
- "None. I am fortunate to have, insurance, transportation, means of communication, and work."
- "Offices not always wheelchair accessible".
- "The possibility of tolls."
- "Please indicate what barriers exist, if any, to accessing care for your patients that you refer to Gaylord. Check all that apply."
- Most referral sources feel that admission criteria are the biggest barrier for referred patients.

Figure 2.



Some of the other barriers offered were:

- "Many oncology patients would benefit however treatment and chemo costs make it a challenge."
- "Lack of Medicare and Medicaid beds/ongoing oncology treatment (radiation/chemo)."
- "Limited Medicaid acceptance and dialysis bed availability."
- "Transportation for family/reluctance to travel."

"What would you say are the greatest unmet needs of the communities for whom Gaylord provides services?"

Most unmet needs pertain to limited access and availability to inclusive care. The responses are thematically listed in the table below.

Table 1. Greatest unmet needs

Theme	Response
Programming	Long-term, activity-based therapy
	Mental health
	Private affordable weekly group therapy for stroke patients to maintain a healthy lifestyle and for routine maintenance and motivation

Table 1. Greatest unmet needs (con't)

Theme	Response
Facility	Community room for outpatients between appointments and visitor/patient's families
	Can't think of anything except I wish the facility was closer to me
	Not enough beds to accommodate needs
	Acceptance to facility
Marketing	Get the word out about the activities for disabled athletes, such as archery and wheelchair basketball more effectively
	Knowing what resources are available within the state
Access/affordability	Affordable transportation, access to "specialty" services outside general practice
	Gaylord is a wonderful facility. Insurance does not always help.
	Insurance coverage for DME and special needs for accessibility
	Availability of specialty services within local community and cost of specialized equipment
	Grants for the physically disabled
	Accessible transportation
Care	Minimal acceptance of Medicaid patients
	Hemodialysis, Medicaid, and uninsured
	Medicaid and dialysis patients
	Patients on Medicaid insurance
	Dual diagnosis patients i.e. TBI w/ substance abuse or behavioral health diagnoses; methadone; Medicaid
	Needs to accept more T19 patients, and non-weaning Medicaid patients
	Not weaning Medicaid patients
Other	Do not know any
	Nothing. I don't think there's any.

"What are one or two key improvements that you feel are needed for Gaylord to provide better healthcare for our communities?"

Most survey responders would like to see improvements related to increased access to the services that Gaylord provides. The responses are listed in the table below.

Table 2. Key improvements

Theme	Response
Access	More clarity in accepting or denying a patient
	Not having to have an ICU admit
	More beds and less restrictions
	More T19 and HD beds
	More dialysis beds
	Expand
	Outpatient therapy hours outside 9 to 5
	Outreach
	Expand to be able to care for more individuals. Ease up on your criteria of acceptance.
	Access to information about available services, assistance finding providers with appropriate accommodations
	More outpatient locations and more staffing
	Free healthcare
	Expand to pediatrics
Insurance	Contracts with all insurance providers
	More resources for the underinsured
	More dialysis capabilities please more Medicaid acceptance please
Care	Equipment & therapy focusing on regenerating neuropathways

Programming	Would love to see more frequent activities like boccia, seated yoga or stretching exercises, pool walking/stretching that do not require too many volunteers. 2 times per month. Patients could benefit from monthly support groups to come together and get support from one another
Other	None I feel that Gaylord does a wonderful job I can offer none at this time, my workflow to Gaylord is seamless and efficient

"Are there adaptive sports or recreational activities that you would like to see offered which currently are not offered?"

This question was directed to the Sports Association community members. Ten out of 20 respondents to this question felt the programs offerings are currently sufficient. The activities offered by the other respondents are listed below. Some requested activities are already offered at Gaylord like Aquacize, for example.

Table 3. Desired adaptive sports and recreational activities

Responses
Aquacize* or pool activities, bridge club or other table games to improve dexterity/coordination
Swimming. You have a 25-yard pool. You have the GHO, the obstacle run, wheelchair teams. Why not have a swimming meet on a Sunday. The pool is closed on Sunday.
Not-seated yoga; cycling*; mini golf; bowling
I would like to see some kind of social activities as some of the Gaylord outpatients have difficulty with social activities.
Being a former tennis player, I am curious if wheelchair tennis* is or can be made available. What about water sports like polo?
Wilderness trips, ATV or snowmobile tours/trips. Sailing.

Maybe gymnastics
Axe throwing
Cross country skiing, more weekend options
I would love to see a swim team be developed through Gaylord

*Activity is already offered at Gaylord.

Limitations

A major limitation of this research is that the surveys were all conducted online. Members of the community with limited or no internet access might not have been able to participate. If the person was attending a support group during the survey period, hard copy surveys were available.

Methodology of how priorities were selected

The following questions were considered in the process of determining the priority health areas based on the survey findings:

- Impact: Does this affect or exacerbate quality of life and health related issues?
- Magnitude: How many people are affected? Does the problem lead to death, disability, impairment, quality of life?
- Feasibility: Can we make a difference? What is the ability of Gaylord Specialty Healthcare to impact the issue given available resources?

Gaylord examined the community needs of our service population with health data from a variety of sources. Then the hospital reviewed its existing programs and outreach vehicles, its human and financial resources and the potential for community partnerships. Due to limited resources and the extraordinary cost of helping individuals with disabilities, Gaylord's implementation strategy and plan is focused on levering its existing programs, services, partnerships and resources to assist the target populations.

Ultimately, Gaylord decided to prioritize the four following areas:

1. **Brain health** and Mild Cognitive Impairment (MCI) programming
2. Expanding healthcare options for those involved in **work place injuries**
3. Access to **pulmonary** services, ventilator weaning and care giver **teaching**
4. Wellness lectures and access to **adaptive sports** opportunities

Please see Appendix A for a list of resources potentially available to address the significant health needs identified.

2019 COMMUNITY HEALTH NEEDS IMPLEMENTATION PLAN

Due to limited resources and the extraordinary cost of helping individuals with disabilities, Gaylord's implementation strategy and plan is focused on leveraging its existing programs, services, partnerships and resources to assist the target populations.

Priority 1: Brain Health and Mild Cognitive Impairment programming

Mild cognitive impairment (MCI), a neurological disease, is mainly characterized by the noticeable deterioration in memory, language, thinking and judgement capabilities.[2] The older adult population is most vulnerable since age is the most significant risk factor. As the United States population ages, mild cognitive impairment prevalence is likely to increase as well (Luo, Yu, & Wu, 2018). According to a national study of about 155,600 adults ages 60 and older, the estimated prevalence for cognitive impairment raised from 5.1 percent in 1997 to 6.7 percent in 2015 (Luo et al., 2018). Since the findings are based on self-reported cognitive impairment, it is likely that the actual rates are higher as some might be undiagnosed and attribute forgetfulness to normal age-related changes. Other studies estimate that the prevalence of mild cognitive disorder is up to 20 percent for adults over the age of 65 (Busse et al., 2006, Petersen, 2011, Plassman et al., 2008).

In 2016, 6.5 percent of adults in CT between the ages of 50 and 54, compared to 8.4 percent of adults 65 and older, experienced more frequent or worsening cognitive decline in the past year (Centers, 2019). Older adults in CT fare slightly better than those throughout the northeast region as 9.3 percent of adults 50-54 years old and 9.6 percent of adults 65 and older reported experiencing cognitive decline in the same time frame (Centers, 2019).

Brain health refers to the ability to remember, learn, play, concentrate and maintain a clear, active mind. It's being able to draw on the strengths of your brain—information management, logic, judgement, perspective and wisdom. Brain health is all about making the most of your brain and helping reduce some risks to it as you age.[3]

By offering a robust neuropsychological complement of care, Gaylord is helping to address brain health. Specialty programs for concussion, job-related safety, and return to work scenarios are vital to keeping the population we serve as healthy as possible.

Strategies for implementation:

- Gaylord is beginning to foster a relationship with the Mayo Clinic for the HABIT program. We are going to send a neuropsychologist out to the Mayo Clinic to receive MCI training. This training will expand the types of patients that Gaylord serves from those with major concussions or brain injuries to those with precursional dementia. This program will also have physical activity as well as nutrition components.
- Investigate and look to implement additional screening evaluations and programming for patients who are required to, or voluntarily wish to, gather more information about their mental capacity.

[2] https://www.mayoclinic.org/diseases-conditions/mild-cognitive-impairment/symptoms-causes/syc-20354578
[3] https://brainhealth.nia.nih.gov/

- Increase the availability for pediatric and adult neuropsychology services to meet the demand in the community.

Anticipated impact:

- Establish additional programs for better patient care.
- Share the information with referring providers for more coordinated care.
- Increase the number of patients utilizing the psychology department each year.

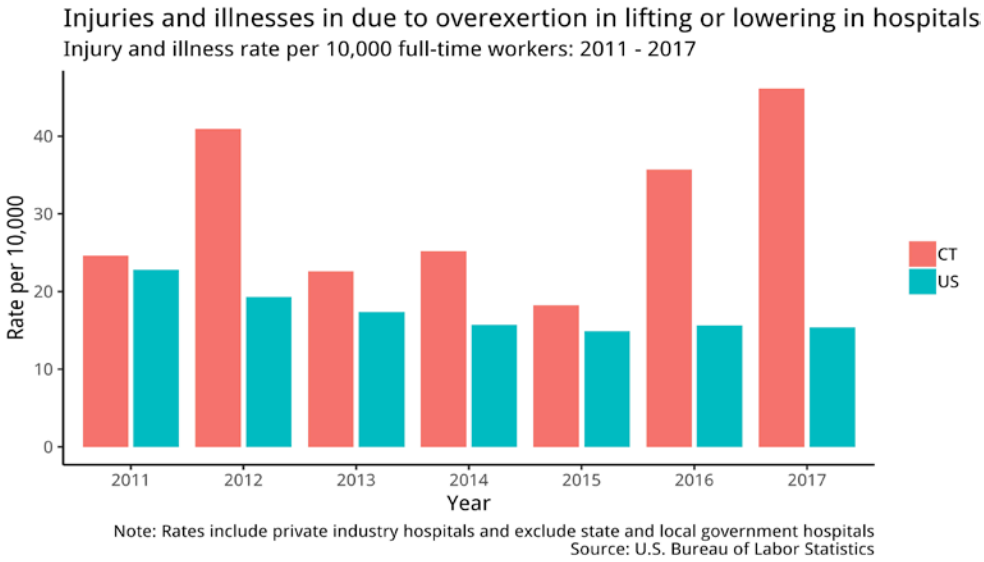
Priority 2: Expand healthcare options for those involved in work place injuries

OSHA defines work place injuries as injuries and illnesses that occur while an employee is working at home, including work in a home office, will be considered work-related if the injury or illness occurs while the employee is performing work for pay or compensation in the home, and the injury or illness is directly related to the performance of work rather than to the general home environment or setting. Statics on the costs of loss of production and rehabilitation and recovery from a work place injury are staggering.

In 2017, non-governmental nursing and residential care facilities had among the highest incidence of nonfatal occupational injuries of all industries in the state, specifically, 8.8 injuries and illnesses per 100 full-time workers.[4] Almost half (3.5) of those cases were severe enough to result in days away from work.[5] A 2015 analysis by the United States Bureau of Labor Statistics explained that overexertion and bodily reaction (including lifting and moving patients) were the causes of about 45 percent of injuries requiring time off from work in non-governmental hospitals (Dressner, 2017). Overall, injuries from overexertion in lifting or lowering patients are decreasing throughout the nation, but not so much in the state (Figure 3).

[4] https://www.bls.gov/iif/oshstate.htm#CT
[5] https://www.bls.gov/iif/oshstate.htm#CT

Figure 3.



Gaylord has always been able to provide care to patients injured in a workplace incident. However, the volumes Gaylord has served have not been reflective of the data collected from the Bureau of Labor Statistics. Many injured workers could benefit from the technology and staff expertise already in place at Gaylord.

Strategies for implementation:

- Establish dedicated programs for inpatients and outpatients who require specialized resources to help them through the workers' compensation system.
- Have a physician specialist available to see injured workers
- Use a trained care manager to interact with the insurance companies, worker compensation liaisons/adjustors, lawyers, etc.
- Integrate the use of rehab technology to expedite the recovery of the patients using Gaylord's programs.
- Communicate the scope of the services to appropriate audiences.

Anticipated Impact:

- Increase the number of patients able to access rehab services for work related injuries.
- Help workers return to any type of work status, including full-time, part-time or per diem.
- Provide clinical speakers to interested audiences who have relationships with decisions makers in the worker's compensation fields to facilitate care options.

Priority 3: Pulmonary/COPD rehabilitation, ventilation weaning and care giver training

Supporting Gaylord's COPD patient population is important because COPD can limit physical activity leading to other health issues and potential social isolation. According to the Connecticut Department of Public Health, in 2014, adults with disabilities had more than four times the risk of COPD than those without a disability In 2017, the prevalence of COPD among adults in the state was 5.7 percent and the age-adjusted prevalence was 5.1 percent. While these values are slightly greater than the 2015 respective rates of 5.1 percent and 4.5 percent, the crude COPD prevalence is still lower than that of the nation (6.4 percent).

Gaylord has a strong history of providing pulmonary rehabilitation to those in need. We will continue to make the program available to as many patients as possible and will assess the strength of the program and its outcomes.

For many reasons and due to various illness and accidents, patients require the use of mechanical ventilation. Many patients can be weaned (or removed) from the vent in the acute care setting. However, many patients require support for a more extended period than their length of stay at acute care. Patients who require long-term mechanical ventilation are a significant proportion of Gaylord's community. The ideal location for long-term mechanical ventilation is the patient's home as opposed to the hospital, due to financial savings, preservation of quality of life, and the ability to maintain family connections. It is not possible to determine the exact number of people using mechanical ventilation at home because unlike other countries, the US lacks a national database of home mechanical ventilation use. The prevalence of home mechanical ventilation derived from studies from other countries is listed in the table below.

Table 4. Estimates of home mechanical ventilation use

Year	Location	Prevalence per 100,000
Early 2000s	Europe[6]	6.6
2012	Canada[7]	12.9
2013	Australia[8]	9.9
2013	New Zealand[9]	12

[6] Lloyd-Owen SJ, Donaldson GC, Ambrosino N, Escarabill J, Farre R, Fauroux B, Robert D, Schoenhofer B, Simonds AK, Wedzicha JA. Eur Respir J. 2005 Jun; 25(6):1025-31.

[7] Rose L, McKim DA, Katz SL, Leasa D, Nonoyama M, Pedersen C, Goldstein RS, Road JD, CANuVENT Group. Respir Care. 2015 May; 60(5):695-704.

[8] Garner DJ, Berlowitz DJ, Douglas J, Harkness N, Howard M, McArdle N, Naughton MT, Neill A, Piper A, Yeo A, Young A. Eur Respir J. 2013 Jan; 41(1):39-45.

[9] Garner DJ, Berlowitz DJ, Douglas J, Harkness N, Howard M, McArdle N, Naughton MT, Neill A, Piper A, Yeo A, Young A. Eur Respir J. 2013 Jan; 41(1):39-45.

The number of people using ventilators at home in the US was estimated to be about 20,000 people in 2010. This value is an extrapolation of the prevalence in Europe to the 2010 US population and is the closest estimate in published studies. [10]

According to a study conducted by the National Association of Long Term Hospitals, of which Gaylord is a member, between 2007 and 2013, NALTH member hospitals discharged about 17,300 vent-dependent patients who were admitted for weaning. On average, the patients were about 65 years old and were evenly split in gender. About two-thirds of the sample was Medicare. Weaning outcomes were reported for 15,724 patients in the sample after exclusion criteria were considered. Sixty-two percent of the sample was successfully weaned, meaning they were free of any invasive mechanical ventilation for at least one full day before discharge. Additionally, 23 percent were vent dependent upon discharge.[11] These are data from a national sample of long term hospitals. Ventilator weaning success rate is a measure of whether or not a patient will do well long term.

Gaylord has the expertise and resources to not only wean patients from the vent but to teach the patient's care givers how to care for them while on the vent. Our clinical staff has identified the need for a program to explain the magnitude of the responsibility of taking a loved one home on a vent. Gaylord will endeavor to create a video based program to teach caregivers about the various challenges of taking someone home on a vent and provide a realistic and helpful account of what is needed.

Historically, Gaylord Hospital cares for over 100 vent dependent patients annually. Over a dozen of these patients are discharged home dependent on the vent for some part or all of the day and night.

Strategies for implementation:

- In 2019, Gaylord applied for a grant from CHEFA to create a video about educating care givers on the responsibilities of caring for someone on a ventilator. The purpose of these videos will be to better prepare patients and family members that are considering being discharged on a ventilator. This is an underserved educational need.
- Gaylord will track the number of caregivers who watch the video.
- To improve general pulmonary care, Gaylord is continuing to investigate increasing outpatient space for the pulmonary program.
- Gaylord will continue to offer outpatient pulmonology and sleep medicine physicians onsite to see patients one day a week/twice a month.

[10] Long-Term Home Mechanical Ventilation in the United States. Angela C King. Respiratory Care Jun 2012, 57 (6) 921-932; DOI: 10.4187/respcare.01741

[11] Votto, J. J., Koenig, L., Kirby, T. F., & Dollard, J. (2017). Post-ICU Mechanical Ventilation: Weaning Outcomes In 15,724 Patients Reported From The National Association Of Long Term Hospitals (NALTH) Health Information System (NHIS). In *A51. CRITICAL CARE: RISK STRATIFICATION AND PROGNOSTICATION-FROM BEDSIDE TO BIG DATA* (pp. A1817-A1817). American Thoracic Society.

Anticipated impact:

- Gaylord will make the vent videos public and share them with other healthcare systems. The Admissions staff experience barriers when it comes to insurance case managers approving a Gaylord stay for vent dependent patients. These videos will be used to attempt to educate the insurance industry to the value of vent care giver teaching.
- All patients being considered for vent admissions will be given the opportunity to watch the video series as it was increase their knowledge about the methods used to care for their loved one while at Gaylord Hospital.

Priority #4: Provide wellness lectures and access to adaptive sports opportunities

As a non-profit healthcare system, Gaylord strives to provide educational opportunities and wellness programming to our community, from school-aged children through senior citizens. By arming the community with the latest research on health conditions and how to avoid risky behaviors, we hope to build a stronger, healthier tomorrow. Our communities members often reach out via our website "Contact Us" form looking for resources. By continuing to inform them where and when to seek help, we can build a stronger relationship. Educational opportunities include the ThinkFirst program, rehab technology updates, how to better exercise, avoid falls, increase balance, slow the process of osteoporosis, to name a few.

Strategies for implementation:

- Provide community lectures on topics related to Gaylord Outpatient Rehabilitation services.
- Partner with local YMCAs, community employers, Chamber of Commerce's, etc. to provide education.
- Build relationships with sport clubs, teams, schools, etc. to allow Gaylord Physical Therapy staff to interactive with the youth to encourage active living.
- Provide support to the Gaylord Hospital Sports Association for their programs to be expanded upon.

Anticipated impact:

- Maintain our relationship with the community as a trusted healthcare resource in central Connecticut.
- Increase the physical benefits, social opportunities, independence and skill enhancement for those we serve.

Study Resources and Appendices

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https://www.bls.gov/iif/oshstate.htm#CT

https://www.mayoclinic.org/diseases-conditions/mild-cognitive-impairment/symptoms-causes/syc-20354578

Appendix A – Resources

The list below is a starting point for users who are unfamiliar with websites or other resources intended for both the consumer and the health professional. Additional information can be found on the internet.

Brain injury
American Brain Tumor Association - https://www.abta.org
Brain Injury Association of America - https://www.biausa.org
Brain Injury Association of Connecticut - http://www.biact.org
National Resource Center for Traumatic Brain Injury - http://www.tbinrc.com
Traumatic Brain Injury - http://tbi.org

Disabled athlete
Adaptive Athletes - http://usadaptive.net/resources-for-adaptive-athletes
National Organization on Disability - https://www.nod.org

Workplace injury
https://www.osha.gov/workers/

Pulmonary
American Association of Cardiovascular and Pulmonary Rehabilitation -
https://www.aacvpr.org/Resources/Resources-for-Patients/Pulmonary-Rehab-Patient-Resources

Stroke
National Institute of Neurological Disorders and Stroke - https://www.ninds.nih.gov
National Stroke Association - http://www.stroke.org

Spinal cord injury
National Spinal Cord Injury Association - https://unitedspinal.org
National Spinal Cord Injury Association – Connecticut Chapter - http://www.sciact.org
Spinal Cord Injury Information Network - http://www.uab.edu/medicine/sci

Support groups at Gaylord Specialty Healthcare in Wallingford, CT

Acquired Brain Injury Patients Family & Caregiver Support Group
Open to all family and caregivers of current inpatients or recent Gaylord patients with an ABI
Call Dorene Scolnic, LCSW, CCTSW for schedule (203) 679-3506

Amputee Success Group at Gaylord
First Thursday of every month from 5:00 - 6:00 p.m. at Luscomb Inpatient Gym
Open to the community
For more information: Amputee Support Group (203) 741-3424

Better Breathers at Gaylord
First Thursday of every month from 1:00 - 2:00 p.m. at the Cullen Board Room in Chauncey Conference Center
Open to the community
For more information: Helen Young, BS, RRT-NPS, RPFT or Lou Levine, BS, RRT-NPS, RPFT at (203) 741-3351

Community Stroke Support Group
First Thursday of every month from 3:30 - 4:30 p.m. at Jackson Ground Floor Atrium
Intended for patients, families and peers
For more information: (203) 284-2875

Spinal Cord Injury Support Group
Fourth Monday of the month at 5:00 p.m. in the Luscomb Gym
For more information: (203) 284-2875

Additional programs and support groups are available for current inpatients at Gaylord Hospital. The Care Management team shares the appropriate resources with patient and families upon admissions and throughout their stay.

Appendix B – Survey questions

Sports Association Survey

1. Please indicate what barriers exist, if any, to accessing care you need to maintain your health. Check all that apply.

   - ☐ Transportation
   - ☐ Cost of care/insurance doesn't cover services
   - ☐ Lack of insurance
   - ☐ Availability/accessibility of physicians who understand my special needs
   - ☐ Physical limitations
   - ☐ Services and resources are not located locally
   - ☐ Lack of care coordination among providers
   - ☐ Lack of support/patient advocacy
   - ☐ Other (please specify)

2. What would you say are the greatest unmet needs of the communities for whom Gaylord provides services?
3. What are one or two key improvements that you feel are needed for Gaylord to provide better healthcare for our communities?
4. What is your vision of a healthy Gaylord community?
5. Are there adaptive sports or recreational activities that you would like to see offered which currently are not offered?
6. Additional comments?

Advocacy survey

1. Please indicate what barriers exist, if any, to accessing care you need for yourself or the population you advocate for. Check all that apply.

   - ☐ Transportation
   - ☐ Cost of care/insurance doesn't cover services
   - ☐ Lack of insurance
   - ☐ Availability/accessibility of physicians who understand the special needs of this community
   - ☐ Services and resources are not located locally
   - ☐ Lack of care coordination among providers
   - ☐ Lack of support/patient advocacy
   - ☐ Other (please specify)

2. What would you say are the greatest unmet needs of the communities for whom Gaylord provides services?
3. What are one or two key improvements that you feel are needed for Gaylord to provide better healthcare?
4. What do you find most valuable about the support group that you attend or have an affiliation with?
5. Additional comments?

Public health expert survey

1. What do you perceive to be the biggest barriers to accessing care for members of Gaylord's community?
2. In 2017, stroke, COPD, and wellness were identified as the top three priority areas for improvement. What current initiatives are being implemented in response to these three priority health areas? Please share any highlights and/or challenges that have risen from these efforts.
3. Are there unmet needs that still exist in the communities for whom Gaylord provides services? If so, please describe them.
4. What are one or two key improvements that you feel are needed for Gaylord to provide better healthcare for our communities?
5. What is your vision of a healthy Gaylord community?
6. Additional comments?

Referral sources survey

1. Please indicate what barriers exist, if any, to accessing care for your patients that you refer to Gaylord. Check all that apply.
2. What would you say are the greatest unmet needs of the communities for whom Gaylord provides services?
3. What are one or two key improvements that you feel are needed for Gaylord to provide better healthcare for our communities?
4. Additional comments?

Gaylord Specialty Healthcare is a rehabilitation-focused, nonprofit health system that provides inpatient and outpatient care for people at every point in their journey from illness or injury to maximum recovery.

Gaylord Specialty Healthcare is comprised of three components: Gaylord Hospital which is a 137-bed long term acute care hospital; Outpatient Services which offers over 40 programs for a variety of medical conditions; and Gaylord Physical Therapy which offers orthopedic rehab as a result of injury or surgery.

Together, these entities deliver a complete continuum of rehabilitation care driven by technology, research, clinical experience, and human compassion. Headquartered in Wallingford CT, Gaylord serves a mix of local, regional, national and international patients.

To learn more visit Gaylord.org.

Gaylord Specialty Healthcare