# Massachusetts Department of Public Health
# Determination of Need
# Application Form

Version: 11-8-17

Application Type: Long Term Care Substantial Capital Expenditure

Application Date: 11/24/2017 2:38 pm

Applicant Name: SunBridge Healthcare, LLC

Mailing Address: 101D Sun Avenue NE

City: *Type first letter then scroll* State: New Mexico Zip Code: 87109

Contact Person: David A. Roush Title: Partner, Strategic Care Solutions, LLC

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## Facility Information

**List each facility affected and or included in Proposed Project**

1 Facility Name: Merrimack Valley Center

Facility Address: 55 Loon Hill Road

City: Dracut State: Massachusetts Zip Code: 01826

Facility type: Long Term Care Facility CMS Number: Secured upon completetion

Add additional Facility Delete this Facility

## 1. About the Applicant

1.1 Type of organization (of the Applicant): for profit

1.2 Applicant's Business Type: ○ Corporation ○ Limited Partnership ○ Partnership ○ Trust ◉ LLC ○ Other

1.3 What is the acronym used by the Applicant's Organization? NA

1.4 Is Applicant a registered provider organization as the term is used in the HPC/CHIA RPO program? ○ Yes ◉ No

1.5 Is Applicant or any affiliated entity an HPC-certified ACO? ○ Yes ◉ No

1.6 Is Applicant or any affiliate thereof subject to M.G.L. c. 6D, § 13 and 958 CMR 7.00 (filing of Notice of Material Change to the Health Policy Commission)? ○ Yes ◉ No

1.7 Does the Proposed Project also require the filing of a MCN with the HPC? ○ Yes ◉ No

1.8 Has the Applicant or any subsidiary thereof been notified pursuant to M.G.L. c. 12C, § 16 that it is exceeding the health care cost growth benchmark established under M.G.L. c. 6D, § 9 and is thus, pursuant to M.G.L. c. 6D, §10 required to file a performance improvement plan with CHIA? ○ Yes ◉ No

1.9 Complete the Affiliated Parties Form

## 2. Project Description

2.1 Provide a brief description of the scope of the project.

The Applicant:

SunBridge Healthcare, LLC, a subsidiary of Genesis Healthcare, d/b/a Merrimack Valley Center ("Merrimack"), the Applicant, ("Applicant") proposes to construct a new hybrid skilled nursing facility at 55 Loon Hill Road, Dracut, MA 01826.

Genesis Healthcare, Inc. (“Genesis”) is a holding company with subsidiaries that, on a combined basis, comprise one of the nation's largest post-acute care providers with approximately 450 skilled nursing centers and senior living communities in 29 states nationwide. Genesis subsidiaries also supply rehabilitation therapy to approximately 1,700 locations in 45 states and the District of Columbia. Genesis’ subsidiaries employ more than 70,000 people, each one dedicated to the delivery of high-quality, personalized health care to all patients and residents. Genesis has a significant presence in Massachusetts, operating 33 healthcare centers in the Commonwealth.

The Applicant was incorporated in New Mexico on December 7, 1988 as Sunrise Healthcare Corporation, amended the name on May 18, 1999 to SunBridge Healthcare Corporation and, on October 10, 2010, converted from a corporation to a Limited Liability Company ("LLC"). For further detail please refer to the Articles of Organization at Attachment 8.

On December 1, 2012 Genesis Healthcare acquired the Sun Healthcare Group, the parent of SunBridge Healthcare, LLC. The finding of Suitability for Genesis to assume the SunBridge Healthcare, LLC licenses, the Certificate of Merger and the list of acquired licenses and facilities is also included at Attachment 8.

Two of the SunBridge facilities were closed after the 2012 merger: Glenwood Care and Rehabilitation Center (101 beds), 557 Varnum Avenue, Lowell, MA 01851 and Colonial Heights Care and Rehabilitation Center (90 beds), 555 South Union Street, Lawrence, MA 01843. The licensed beds are currently approved as being out of service ("BOOS"). The Applicant proposes to activate the two BOOS, combine these two licenses which total 191 beds and to request a license to operate 120 beds at the new Merrimack Valley Center. The remaining 71 beds will be permanently removed from the Commonwealth's SNF bed supply. Copies of the current BOOS approvals are found at Attachment 8.

Site and Physical Plant:

For the past several years Genesis Healthcare had worked to successfully develop a parcel of land within the Hamilton Canal District in Lowell, however, the parties could not reach final agreement . Fortunately, the Applicant was able to secure a Purchase and Sale Agreement through a Genesis subsidiary, 101 Development Group, LLC, for the Dracut parcel which is less than four miles away from the Lowell site. Further, 101 Development Group, LLC and WS Property Group have entered into an agreement to form a joint venture entity for the purpose of developing and owning the proposed facility. Pursuant to an executed Agreement, the joint venture will lease the facility to the Applicant, SunBridge Healthcare, LLC. Detailed documentation of the Applicant's sufficient interest in the site is found at Attachment 5.

The facility will be comprised of 120 licensed beds in a four story building encompassing 78,621 gross square feet situated on over 3.5 acres. Three 40-bed nursing units will consist of all private rooms, 12 of the rooms will make up a highly skilled telemetry unit. There will be ample parking on site with 124 spaces available and multiple entrances for ease of access for staff and visitors.

The Proposed Project is adjacent to a planned 27,000 square feet of Lowell General Hospital ("LGH") Medical Office space at 9 Loon Hill Road. This Outpatient facility will offer Urgent Care, a Patient Service Center (including Phlebotomy, X-Ray and Ultrasound), a Diabetes Clinic, Endocrinology and Primary Care. Rounding out this future healthcare cluster is the Arbors Assisted Living at Dracut which opened in July 2017 and abuts the site.

The site is easily accessible from all parts of the Greater Lowell area and the entire Merrimack Valley. Major highways, routes 495, 93 and 3 are little more than 5 miles away. The Lowell Regional Transit Authority operates regular bus service to the area with the Village Square stop less than a quarter mile from the facility, a 4 minute walk along route 113 and Loon Hill Road where sidewalks are provided.

Partnership and Program Innovation:

The Proposed Project will not be exclusively the traditional long term care or even short term care program model. Partnering with the University of Massachusetts Lowell Zuckerberg College of Health Sciences ("UMA") where Genesis holds a position on the College of Health Advisory Board and Lowell General Hospital/Circle Health on whose Board of Governors Genesis sits, the Applicant has developed a new and innovative 'hybrid' teaching skilled nursing center. The centerpiece of this hybrid model is that highly complex care will be provided in an educational environment. A "cutting edge educational model" that according to UMA Dean of Health Sciences Shortie McKinney, "will help transform clinical education."

UMA has long been a leader in teaching, research and community service that spans many disciplines. Among its signature offerings is the nation's first Gerontological Nurse Practitioner program. Further, UMA has embraced the concept of Interprofessional Education ("IPE") advocated by the Institute of Medicine and the World Health Organization. Here, students from two or more health professions work together during all or part of their professional training. This real world experience can improve quality of patient care, lower costs, decrease length of stay and reduce medical errors. IPE accommodation has played an important role in the design of the Merrimack Valley Center.

Clinical partner LGH is the hospital serving the Greater Lowell Area and surrounding communities primarily from two inpatient campuses with Saints Medical Center as the companion inpatient site. LGH is the acute care component of the comprehensive community healthcare delivery system Circle Health ACO. Circle Health brings together providers across the healthcare continuum to ensure that individuals have access to quality care at every point along the spectrum. Circle Health/LGH has been involved in the development of an integrated team to focus on patients receiving cardiac rehabilitation services in the hospital. Clinically complex services provided at Merrimack Valley Center will be an extension of the Circle Health/LGH cardiac rehabilitation for those patients who are no longer in the acute phase of their program, but who continue to require skilled care and observation. With collaborative support from the hospital cardiac rehabilitation and cardiac management programs, the Applicant intends to build a unique skilled program to address the requirements of these patients. To that end Genesis has been working with LGH to develop the 12 bed cardiac care telemetry unit at Merrimack Valley Center to meet the hospital's need of creating an appropriate setting for patients able to move from the acute to a skilled setting. Monitoring for his unit will occur both on site and at LGH in order to keep the cardiology staff updated in real time.

Program design is underway with a focus on interprofessional learning and high level skilled patient needs. UMA Lowell students in all professions will serve a rotation through the center. Depending on the year of education and capabilities, a structured learning program and support system will be designed, to create experiences that support the care of the SNF patient of today and the future. The Circle Health ACO/LGH Clinical Team will identify members to participate in the care path development and the integration of high tech equipment into the care of the cardiac SNF level patient. Educational systems of all three entities, Genesis, UMA and LGH, will be integrated to provide the highest level of education and support for the students and licensed professionals.

In the following pages and the eleven Attachments, the Applicant intends to demonstrate that the Proposed Project is consistent with the needs of the Patient Panel, creates a hybrid skilled nursing center to address unmet need and meets goals of cost containment and innovative health delivery models as set by the Commonwealth and Determination of Need Program.

2.2 and 2.3 Complete the Change in Service Form

## 3. Delegated Review

3.1 Do you assert that this Application is eligible for Delegated Review? ○ Yes ◉ No

## 4. Conservation Project

4.1 Are you submitting this Application as a Conservation Project? ○ Yes ◉ No

## 5. DoN-Required Services and DoN-Required Equipment

5.1 Is this an application filed pursuant to 105 CMR 100.725: DoN-Required Equipment and DoN-Required Service? ○ Yes ◉ No

## 6. Transfer of Ownership

6.1 Is this an application filed pursuant to 105 CMR 100.735? ○ Yes ◉ No

## 7. Ambulatory Surgery

7.1 Is this an application filed pursuant to 105 CMR 100.740(A) for Ambulatory Surgery? ○ Yes ◉ No

## 8. Transfer of Site

8.1 Is this an application filed pursuant to 105 CMR 100.745? ○ Yes ◉ No

## 9. Research Exemption

9.1 Is this an application for a Research Exemption? ○ Yes ◉ No

## 10. Amendment

10.1 Is this an application for a Amendment? ○ Yes ◉ No

## 11. Emergency Application

11.1 Is this an application filed pursuant to 105 CMR 100.740(B)? ○ Yes ◉ No

## 12. Total Value and Filing Fee

Enter all currency in numbers only. No dollar signs or commas. Grayed fields will auto calculate depending upon answers above.

**Your project application is for:** Long Term Care Substantial Capital Expenditure

| | |
|---|---|
| 12.1 Total Value of this project: | $26,348,992.00 |
| 12.2 Total CHI commitment expressed in dollars: (calculated) | $790,469.76 |
| 12.3 Filing Fee: (calculated) | $52,697.98 |
| 12.4 Maximum Incremental Operating Expense resulting from the Proposed Project: | |
| 12.5 Total proposed Construction costs, specifically related to the Proposed Project, If any, which will be contracted out to local or minority, women, or veteran-owned businesses expressed in estimated total dollars. | |

## 13. Factors

Required Information and supporting documentation consistent with 105 CMR 100.210
Some Factors will not appear depending upon the type of license you are applying for.
Text fields will expand to fit your response.

## Factor 1: Applicant Patient Panel Need, Public Health Values and Operational Objectives

F1.a.i **Patient Panel:**
Describe your existing Patient Panel, including incidence or prevalence of disease or behavioral risk factors, acuity mix, noted health disparities, geographic breakdown expressed in zip codes or other appropriate measure, demographics including age, gender and sexual identity, race, ethnicity, socioeconomic status and other priority populations relevant to the Applicant's existing patient panel and payer mix.

Since the Applicant, a subsidiary of Genesis, is the holder of approved Beds Out of Service ("BOOS") and proposes to construct a new hybrid skilled facility, it does not currently have its own Patient Panel. As a result, it will rely on Patient Panel data from the Genesis Healthcare Greater Lowell cluster of skilled nursing centers; Heritage Nursing Care Center ("Heritage"), Lowell, MA, Willow Manor ("Willow"), Lowell, MA, Palm Skilled Nursing Care Center ("Palm"), Chelmsford, MA and Westford House ("Westford"), Westford, MA.

Over the latest 36 month period, 4,417 individuals have been served at these facilities, 59.04% have been women and 40.96% being men. These numbers are reasonably consistent with demographic community profiles published by the Massachusetts Healthy Aging Collaborative; Lowell 61.8% female, Chelmsford 57.9% and Westford 52.8% respectively.

Also, the demographic profile for the Patient Panel shows the average age of patients served as follows: Heritage 72, Willow 74, Palm 80 and Westford 79 years old.

Self reported statistics on race indicate that the Patient Panel is 89.97% Caucasian/White, 4.21% Asian/Native Hawaiian/Pacific Islander, 3.47% Hispanic/Latino and 1.24% Black/Not Hispanic. The little over 1% remaining declined to specify or their Race/Ethnicity could not be determined.

The diagnoses on Admission to Patient Panel facilities is consistent with discharge data reported by Circle Health/LGH, the primary referral source. Over 80% of the Patient Panel to whom skilled nursing services were provided reflected the top four hospital discharge diagnoses of General Medicine (44.13%), Orthopedics (13.85%), Pulmonary (13.29%) and Cardiology (9.09%). What is not included in this material is the acute care lengths of stay and that they could be shortened with the highly skilled services of Merrimack Valley Center in place, thereby reducing costs to the Commonwealth's healthcare system.

The socioeconomic status of the Patient Panel, those individuals admitted to skilled nursing facilities for post-acute care is widely distributed and consistent with urban market trends. In essence, they are no poorer or richer than the median senior population when compared against communities with similar urban/suburban footprint and population density.

Heritage, Willow, Palm and Westford provide care to patients and residents from over 115 zip codes primarily in Massachusetts and New Hampshire. Of that number of cities and towns, a full 70% reside in Lowell, Dracut, Chelmsford and Westford and another 12% are from the Merrimack Valley communities of Billerica, Tewksbury and Tyngsborough. Essentially, the majority of referrals live within 15 miles of the Genesis Care Center, almost all coming from areas within 10 miles of the primary referral source Circle Health/LGH.

The four core communities just mentioned above make up a significant portion of what is defined by the Executive Office of Health and Human Services as the Northeast Region. Projections published by the UMass Donahue Institute's Population Estimates Program ("PEP") reveal several statistics important to this part of the Commonwealth and to this Determination of Need request. To add broader context, Massachusetts as a whole had an annual percentage growth rate ten times greater that the entire Northeast United States and for the sixth consecutive year has been the fastest growing state in New England. The Northeast Region of which the Greater Lowell area is a primary urban area has been keeping pace with the growth reflected in the overall Massachusetts numbers. Since the 2010 U.S. census, this Region has been growing rapidly, in recent years producing an annualized growth rate of 1.02%. While projections suggest a slowing in that growth, what is important for the future is the age profile of the residents.

In addition to births and death statistics, population demographics are impacted by the domestic migration of residents. Again, according to the UMass Donahue Institute, the Northeast Region is a net importer of the elderly, especially those 80 and above. So, with the combination of an aging population and an elder in-migration net increase, the UMass Donahue Institute states, "Overall, the Northeast of the future will be notably older... Commensurate with the aging of the U.S. population, there will be a notable increase in the share of older and elderly residents, with 25% of the region's residents age 65 and older by 2035 - compared to 14% reported in the 2010 census."

Finally, at the outset it was noted that due to the new construction nature of the Proposed Project using beds currently out of service, the Applicant does not have an existing Patient Panel. Describing the Genesis Lowell Patient Panel is somewhat misleading to the

extent that these numbers represent the profile of a more traditional long term care setting as compared to the innovative hybrid SNF that is proposed for the Merrimack Valley Center.

While most demographic characteristics will be reasonably consistent, nowhere is the difference clearer than in comparing the existing Patient Panel payor mix and the payor mix projected for the Proposed Project. Over the last 36 months the average combined totals for the Patient Panel has been: Private - 9%; Medicare A - 9%; Managed Care - 7% and Medicaid - 75%. However, the projected payor mix for Merrimack Valley Center is: Private - 9%; Medicare A - 32%; Managed Care - 28% and Medicaid - 31%, reflecting the higher concentration of highly skilled patients.

F1.a.ii **Need by Patient Panel:**

Provide supporting data to demonstrate the need for the Proposed Project. Such data should demonstrate the disease burden, behavioral risk factors, acuity mix, health disparities, or other objective Patient Panel measures as noted in your response to Question F1.a.i that demonstrates the need that the Proposed Project is attempting to address. If an inequity or disparity is not identified as relating to the Proposed Project, provide information justifying the need. In your description of Need, consider the principles underlying Public Health Value (see instructions) and ensure that Need is addressed in that context as well.

The Applicant's decision to pursue the hybrid skilled nursing model was developed to serve the current Patient Panel, to fill a gap in the healthcare continuum as identified by Lowell General Hospital/Circle Health and other community sources and to anticipate and accommodate the projected increase in the volume of seniors.

The Proposed Project does not specifically address a health inequity or disparity given that the type of service currently envisioned is not available since it is missing from the local healthcare marketplace. What follows is justification of the need that is consistent with the underlying principles identified by the Institute of Medicine ("IOM"). According to the Medical Education Institute, "The IOM defines healthcare quality as the extent to which health services provided to individuals and patient populations improve desired health outcomes. The care should be based on the strongest clinical evidence and provided in a technically and culturally competent manner with good communication and shared decision making."

The Applicant approached the Clinical Leadership at LGH, sharing a desire to partner with the healthcare system and the community to develop clinical programming that would have a meaningful impact on patient outcomes and help to satisfy an unmet need of the Patient Panel. The team at Lowell General Hospital/Circle Health identified developing a skilled extension of cardiac care services integrated with the acute cardiac management and cardiac rehabilitation programs at the hospital as an area of need. Selecting this clinical service was due in great part to the fact that heart-related chronic diseases account for a sizable portion of the elder population and contribute significantly to re-hospitalization rate.

Recent discussions with the Circle Health ACO/LGH leaders have identified opportunities with the fragile congestive heart failure ("CHF") population and the high level monitoring of diuresis management. This supportive service would lead towards reduced hospital admissions and readmissions as well as redirection from the Emergency Rooms ("ER") for those patients not in need of acute services, yet not appropriate to be sent home. In addition, Merrimack Valley Center would provide a solid connection with care transitions to the home care environment.

As was noted in describing the Patient Panel diagnoses, Cardiac Services currently ranks high on the list. Long-term population estimates previously discussed suggest significant increase in the elderly population, 25% of the region's residents in 2035 as compared to 14% in the 2010 census. As a result, Patient Panel members in need of these services will grow exponentially in the coming years. Confirming this fact is 2016 data regarding Circle Health/LGH Inpatient Service Lines. The acute care programmatic partner estimates a 12.8% growth in the Cardiac Service Line for male inpatients 65 or older and 9.1% growth for female inpatients of the same age cohort. In real numbers these ten year estimates mean a nearly 2,000 increase in annual volume for both male and female seniors in 2026.

Reinforcing the decision to develop a hybrid skilled nursing facility were the results of a community health needs assessment ("Assessment") released in 2016 by the Greater Lowell Health Alliance, ("GLHA"). GLHA, the local Community Health Network Area ("CHNA"), is a community based partnership of providers, consumers, area coalitions and local and state governments, all committed to continuous improvement of health. All three entities in the proposed programmatic collaboration, Genesis, LGH and UMA, are Community Partner Organizations of the Greater Lowell Health Alliance.

Lowell General Hospital commissioned researchers and students from the University of Massachusetts Lowell to conduct the Assessment to identify the unmet medical and public health needs within the Greater Lowell community. This Assessment involved primary data collection using 16 focus groups comprised of 167 participants and key informant interviews, as well as secondary data sources, such as the Massachusetts Department of Public Health MassCHIP database and the United States Census.

The study had two key objectives. The first was to fulfill state and federal requirements of Lowell General Hospital to conduct a Comprehensive Health Needs Assessment every three years. The second and ultimately more important objective for the Proposed Project was to generate a study that would provide a foundation for the GLHA and its partners to build consensus on the area's priority

health needs and develop action plans to improve the health of the area's residents.

The elderly were named by all focus group participants as a population at great risk and with unmet health related needs. The elderly tend to have poor access to needed healthcare for several reasons. Community groups and key informants acknowledged that healthcare is very hard to navigate for the elderly who often lack social support. Focus groups also acknowledged that the elderly can have difficulty finding caretakers within the family, difficulty understanding insurance issues and with personal costs associated with services, can be reluctant to use various services, hospitals, and preventive care.

In addition to the obstacles mentioned above, the Assessment cited an insufficient number of physicians to work with this population and a Key Recommendation was to increase the number of PCP's with geriatric experience. The interprofessional education component of the Proposed Project will help to build and strengthen a geriatric experienced support system of professionals for area physicians thereby helping to address this Key Recommendation.

Finally, of relevance to the Patient Panel need, the 2016 Greater Lowell Community Health Needs Assessment identified cardiovascular disease as one of the "indicators of health." Findings revealed that in 2012, emergency room visits for all circulatory system diseases were higher in Lowell and the CHNA than the Massachusetts rate. Also, the Assessment stated that emergency room visits for hypertension were trending upward.

Further justification of need is found in the Applicant's analysis of the area's existing short stay market. In the identified market, five year projections for long term care and short stay admissions with varying lengths-of-stay were reviewed and balanced against the existing short term bed supply. Data revealed that there would be SNF admissions that would support 240 short term stay beds. Currently, the existing bed supply of these short term beds is 82, leaving a significant deficit . It is the intention of the Applicant that the Proposed Project will address that need.

Summarizing this need analysis, the Applicant has built on the characteristics of the Patient Panel, feedback and data from LGH, long-term population projections from the UMass Donahue Institute, findings of the CHNA community needs assessment and short term stay bed need and market analytics in developing the Proposed Project. Creating this hybrid SNF with the planned IPE component is illustrative of improving outcomes, by providing clinically sophisticated services in a technologically state-of-the-art facility to all elders, thereby shortening acute care stays and reducing costs, all aspects of the IOM definition of quality and foundation for the concept of Public Health Value.

F1.a.iii **Competition:**

Provide evidence that the Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending. When responding to this question, please consider Factor 4, Financial Feasibility and Reasonableness of Costs.

The Merrimack Valley Center will be unique among it's licensed peer group and as a result will not compete directly due to the educational and clinical hybrid nature of this model which does not currently exist in the area.

Having said that, the "Financial Feasibility and Reasonableness of the Proposed Construction of a 120-bed Hybrid Skilled Nursing Facility in Dracut, Massachusetts" at Attachment 7 Independent CPA Analysis addresses a number of issues including revenues, payor mix, operating expenses and lease coverage all speaking to the feasibility of the construction and operation of Merrimack Valley Center. Conclusions include the fact that the revenues driven by a significant Medicare A and Managed Care census are reasonable in light of the clinically complex nature of the hybrid model. Wages and direct care staff hours were in line with state, national and county benchmarks as was the lease coverage ratio.

The Independent CPA Analysis did note that ancillary expenses were higher than a traditional SNF, but as has been discussed this is not a traditional nursing home and the likelihood of the diagnostic and therapeutic services required by larger numbers of skilled patients is the reason for this.

Also, the 655 gross square feet per room is reflective especially of the design to accommodate the educational aspect of this hybrid model. The size of the patients rooms is driven in part by the need for the UMA IPE students to meet with clinicians, patients and families. To reiterate, this provides the real world educational experience that can improve quality of patient care, lower costs, decrease and reduce medical errors.

Perhaps most importantly is the fact that with the services offered by Merrimack Valley Center in place, non-acute cardiac patients can be safely discharged from the hospital to a less costly setting of care. In general, acute care beds are far more costly than SNF beds, but one study has stated that a telemetry bed could cost an additional $200 or more per night above typical hospital inpatient bed.

Further, a study published in the Annals of Internal Medicine in 2012 using 14 years of data revealed that reducing a patient's acute care length of stay by even one day lowers their risk of readmission within 30 days because of diminished exposure to the possibility of

hospital acquired infection. Again discharge to the hybrid SNF would produce favorable outcomes and reduce 30 day readmission

Clearly, by providing the Proposed Project as another point on the healthcare continuum, health care spending will be reduced, with efficient operation resulting in reasonable provider costs and positive health outcomes. Finally, discharge of patients to Merrimack Valley Center will align with patient preferences of shorter hospital stays and increase patient satisfaction.

F1.b.i **Public Health Value /Evidence-Based:**
Provide information on the evidence-base for the Proposed Project. That is, how does the Proposed Project address the Need that Applicant has identified.

n general, the Proposed Project addresses the need for updated skilled nursing beds in the Greater Lowell area. With singular exception the bed supply of both long and short term licensed beds is more than 40 years old. This fact becomes more critical in the face of a rapidly growing elder population predicted to increase even more significantly in the years ahead.

For years, post-acute clinical care and rehabilitation have been successfully provided in the skilled nursing setting at reduced cost, primarily to Medicare A. in a 2011 fact sheet on SNF post acute care, the American Health Care Association ("AHCA") presents a compelling and concise assessment of the "State of Post-Acute Care." Summarizing, in the 21st Century, the integration of post-acute care has transformed America's skilled nursing community. 2011 data suggests that SNF's are the largest provider of post-acute care and that over 50% of Medicare beneficiaries in need of this specialized care after a hospital stay are discharged to nursing facilities and that 39% of those patients are discharged to home well within 100 days of admission. The percentage of those successfully discharged to home has increased each year since 2003. Looking to the future of post-acute care, AHCA predicted in 2011 that many SNF's will take "giant leaps" to develop new and transformative models of care to meet the post-acute care needs of today's patient. It is just that sort of "giant leap" in clinical programming that the Applicant proposes here.

Also, understanding the specific need as expressed by programmatic partner LGH and bolstered through objective data and community input, the Applicant expects to develop with LGH clinical leadership and cardiologists an integrated cardiac management extension program. While other clinical specialties and general medicine patients will receive care it is the cardiac focus and the educational component that make the Proposed Project truly innovative.

The Applicant plans to develop a 12 bed unit featuring cardiac telemetry in a skilled environment. Nationally, there are instances where off-site central monitoring units ("CMU") are operational treating non-critically ill patients. It is early in the discussions to suggest that Merrimack Valley Center will be defined as a CMU and ongoing conversations and care planning, especially with cardiologists, will dictate exactly the direction taken by the Applicant at the hybrid SNF.

Cardiac telemetry is a proven technology that was first introduced into hospitals in the 1960's and for decades has greatly advanced patient care in patients who are acutely or non-acutely ill. It is the continuous monitoring of a patient's heart rate and rhythm that takes place classically at a nursing station in a special unit of the hospital. This service is offered to patients recovering from heart events, those who may be at risk of heart events, and individuals experiencing ongoing heart problems. Some hospitals have specialized wards for cardiac telemetry, recognizing how common heart problems are, while others may offer it as part of an array of telemetry services or as part of the standard of care in intensive and critical care units.

In telemetry, data is collected in one location and transmitted to another. In the case of cardiac monitoring, the patient wears electrodes on the chest that are attached to leads and a telemetry transmitter. The transmitter sends signals to a monitoring station, where they can be watched by nurses and cardiologists. Wearing a portable transmitter allows patients to be mobile, as long as the signal stays in range of the monitoring station, again traditionally at a nurses station.

When a patient is admitted to the hospital with heart problems, cardiac telemetry may be recommended as part of the standard of care. Using telemetry, patients can be monitored continuously and unobtrusively by nurses. If a patient develops problems, the monitoring staff can respond quickly, and abnormalities and arrhythmias can also be be noted and brought to the attention of a cardiologist, who will use this information in diagnosis and treatment.

Yet, according to Dr. Marwan M. Mohammad in an article published in September 2016 titled Cardiac Telemetry 2016: An Overview of Guidelines and Clinical Practice, he states, "With the increasing number of elderly and critically ill patients, the utility of cardiac telemetry has increased in a manner that can often strain hospital resources and create bottlenecks in the telemetry unit." Responding to this issue hospitals are seeking ways to ease the bottleneck and reduce costs without compromising patient care. In 2004, the American Heart Association ("AHA") also recognized the issue of pervasive monitoring and released guidelines for telemetry use based on patient risk. Dr. Mohammad asserts that the AHA guidelines have benefited hospitals through cost reduction and increased efficiency, but he concludes that physicians should not be bound by arbitrary indicators, that each patient presents a unique case and medical management decisions should be guided by other factors including the physician's experience.

It is just the conundrum described by Dr. Mohammad that is facing the clinical leadership at Circle Health/LGH. As discussions and clinical planning progresses among the programmatic partners, Merrimack Valley Center hopes to present a safe and less costly

alternative for many non-critically patients who do not have to remain in an acute care setting to benefit from continuous cardiac monitoring services, yet cannot be discharged to home.

F1.b.ii **Public Health Value /Outcome-Oriented:**

Describe the impact of the Proposed Project and how the Applicant will assess such impact. Provide projections demonstrating how the Proposed Project will improve health outcomes, quality of life, or health equity. Only measures that can be tracked and reported over time should be utilized.

Overall, once established and integrated with the clinical resources of Circle Health/LGH and the educational assets of the Interprofessional Program, the services offered by the Merrimack Valley Center will have direct and positive impact on health outcomes and quality of life. To confirm the desired outcomes of the Proposed Project, the Applicant will use a number of tools to assess quality performance including re-hospitalizations, plus patient and provider satisfaction.

In all the skilled nursing facilities operated by the Applicant a number of internal analytics and metrics are employed. Publicly reported Quality Measures are used to track and manage performance that will improve health outcomes. These tools will be incorporated into the operations of the Merrimack Valley Center.

All clinical and satisfaction measures are compiled into reports posted to Quality Assurance and Performance Improvement ("QAPI") Folders and the most important measures are trended monthly on the Genesis Performance Scorecard. According to CMS, "QAPI is the coordinated application of two mutually-reinforcing aspects of a quality management system: Quality Assurance ("QA") and Performance Improvement ("PI").

QA is the specification of standards for quality of service and outcomes, and a process throughout the organization for assuring that care is maintained at acceptable levels in relation to those standards. QA is on-going, both anticipatory and retrospective in its efforts to identify how the organization is performing, including where and why facility performance is at risk or has failed to meet standards.

PI (also called Quality Improvement - QI) is the continuous study and improvement of processes with the intent to better services or outcomes, and prevent or decrease the likelihood of problems, by identifying areas of opportunity and testing new approaches to fix underlying causes of persistent/systemic problems or barriers to improvement. PI in nursing homes aims to improve processes involved in health care delivery and resident quality of life. PI can make good quality even better. Effective QAPI is critical to the goals set by the Applicant to improve care for individuals and improve health for populations, while reducing per capita costs in the healthcare delivery system. These goals can be accomplished with the aid of QAPI tools and the establishment of an effective QAPI foundation."

The Genesis QAPI process, which will be employed by the Applicant, is led by the Executive Director of each skilled nursing and rehabilitation center ("Center"). QAPI meetings are held at least ten times a year. The Center's Medical Director attends at least quarterly; the Nurse Executive and other Department Managers attend all ten annual meetings. Each Center sets individual annual targets for performance within the four Pillars of Excellence: Customers, Staff, Clinical and Business. Genesis provides ongoing trend reports to track the progress. Minimum annual targets are set as part of the strategic planning process and these targets are incorporated into the QAPI Performance Plan for each Center. Participation in the QAPI process involves all staff and incorporates routine processes such as focused rounds, clinical huddles and Interdisciplinary Team ("IDT") meetings to assure quality and identify areas for improvement.

Center QAPI teams use problem solving tools such as Plan-Do-Study-Act ("PDSA") and Lean Six Sigma DMAIC to enhance targeted areas. The PDSA cycle is part of the Institute for Healthcare Improvement Model for Improvement, a tool aimed at accelerating quality improvement. The four part process plans a change, implements that change, observes the outcome of the change then refines and incorporate the quality improvement measure. This is an action oriented strategy that allows the organization to measure and rapidly adjust to changing circumstances and outcomes to ensure compliance with stated QAPI goals. The companion tool of Lean Six Sigma DMAIC allows the IDT to not only: Define, Measure, Analyze and Improve the problem, but importantly to "C" Control or maintain the improvement. In essence, these tools facilitate the Applicant's ability to identify, implement and sustain improvement in outcomes for the Patient Panel and Center cost containment goals.

Each Genesis Center shares a number of focus areas:

1. Reducing Re-hospitalizations - In this area, INTERACT Tools and the PointRight Pro 30 Re-hospitalization Measure ("PointRight") are used to continue to improve care and improve health. INTERACT is a publicly available program that focuses and enhancing the identification, evaluation and management of acute changes in the condition of skilled nursing facility residents. Effective implementation of INTERACT has produced substantial reductions in hospitalizations of SNF residents with resulting health benefits and potential significant savings for the Medicare and Medicaid programs. Genesis produces a 30 day re-hospitalization report as its primary operational measure and supplements that with the PointRight Pro 30 Re-hospitalization data. The PointRight metric has become an industry standard for managing and improving re-hospitalization and is available as part of the Long Term Care Trend Tracker developed by the American Health Care Association.

2. Reducing Anti-psychotic Use - Centers combine a dose reduction approach with behavioral interventions and measure with the CMS definition of anti psychotic use without diagnosis.

3. Maintaining Skin Integrity - Genesis Skin Integrity protocol and internal clinical reporting program track in-house acquired pressure ulcers stage 2 or greater.

4. Minimizing Falls with Injury - This is achieved by using a risk assessment and clinical reasoning approach to QAPI.

5. Infection Prevention and Control - Using internal infection Prevention and Control Protocol and internal tracking of Health Associated Infections/Urinary Tract Infections ("HAI UTI"), resident health and safety is maximized.

6. Employee Engagement and Enablement - A 'people plan' is driven and implemented through results from an annual all-staff survey that assesses engagement and enablement.

7. 5-Star Performance - By using a peer review process and acuity driven staffing, a detailed 5-Star analysis is tracked for overall performance. The 5-Star Quality Rating System was developed by CMS in 2008 to assist with performance assessment of skilled nursing facilities. It incorporates information on Health Inspections, Staffing and eleven (11) different Quality Measures. Results from this qualitative metric appear on the CMS Nursing Home Compare website and offer clear quantitative evidence of the impact of performance and patient health outcomes.

8. Discharge Customer Satisfaction - This is determined by using a 48 to 72 hour pre-discharge IDT meeting to begin planning and an external satisfaction survey sent within two weeks of discharge.

9. Family and Resident Satisfaction - Building on ongoing family and resident involvement in person-centered care, individual family and resident satisfaction surveys are distributed.

More detail about the four distinct tools used to administer numbers 8 and 9 above may be found in Attachment 9. In essence, the Applicant measures customer satisfaction throughout the year using an external research company, ServiceTrac based in Scottsdale, Arizona.

1. Patients who are discharged home are sent a survey within 10 days.
2. An Annual resident survey is personalized and distributed to residents by Center staff.
3. An Annual personalized family survey is either mailed or distributed by Center staff.
4. A Family Experience at End of life survey is administered by phone 60-80 days a resident dies in a nursing center.

As with all the Genesis Centers, each of the performance measures described above will be continuously and fully implemented in the Merrimack Valley Center.

While no specific projections exist due to the fact that the hybrid model will be completely new to the area, collaborative partner Circle Health/LGH and the Applicant believe that an earlier discharge from the hospital will produce positive health outcomes and most certainly enhance the patient quality of life.

The development process is not static and will be sustained with ongoing involvement through meetings and discussions. Continual monitoring and evaluation between the collaborative partners, primary care physicians and other providers will ensure the desired patient outcomes.

F1.b.iii **Public Health Value /Health Equity-Focused:**

For Proposed Projects addressing health inequities identified within the Applicant's description of the Proposed Project's need-base, please justify how the Proposed Project will reduce the health inequity, including the operational components (e.g. culturally competent staffing). For Proposed Projects not specifically addressing a health disparity or inequity, please provide information about specific actions the Applicant is and will take to ensure equal access to the health benefits created by the Proposed Project and how these actions will promote health equity.

In the Massachusetts Healthy Aging Report: Community Profiles 2014 ("Report") issued by the Massachusetts Health Aging Collaborative, the Northeast Region, EOHHS Region 3, and the area from which the broader Patient Panel is drawn is described in part as follows:

"The Northeast region has both older industrial cities and sparsely populated coastal towns with differing population health." and, "Lowell and Lawrence are urban communities in the Northeast region, and both cities have challenges related to social determinants of health. Poverty, immigrant populations, and crime that contribute to the challenges observed here (in the referenced Report). Lowell

and Lawrence are higher than the state average for the percentage of older residents who are dually eligible for Medicare and Medicaid, an indicator of poverty. Lowell has a higher percentage of older persons reporting fair or poor health and more physically unhealthy days compared to the state average." In fact, of the 100 indicators considered, Lowell ranked below the state average on 19 measures ranking fifth on a list of "Communities with Challenges in Healthy Aging."

The more recent edition of the Massachusetts Healthy Aging Report: Community Profiles 2015 presented a new composite measure, Serious Complex Chronic Disease to better understand the health of Massachusetts senior population. Using this measure, Lowell, with 37% geographic representation in the Patient Panel, was deemed one of the least healthy large communities in the Commonwealth. Clearly, the social determinants of health pointed out in the 2014 Report have not been mitigated with time and continue to challenge the Applicant and other providers along the healthcare continuum to enhance the health status of area elders.

Recognizing the health disparity that exists and to ensure that health equity is provided to the area population, the Applicant will continue the Genesis policy of non-discrimination for any reason and provide access to service to the dually eligible, potentially underserved population.

While the Patient Panel at present does not present significant racial or ethic diversity, statistics above show a higher than state average immigrant representation in the community's general older population with demographic trends suggesting these number will grow. The Applicant understands and adheres to the principles of offering Culturally and Linguistically Appropriate Services ("CLAS"). Every effort will be made to hire culturally competent staff and to train others in this area.

Recognizing the need to sensitively provide services, definitive policies have been developed to guide staff and are currently in place. Those policies address: Communication with Persons with Limited English Proficiency including a Quick Reference Sheet for the Language Line and an Interpreter Request Form and Auxiliary Aids and Services for Persons with Disabilities. These policies in full are found at Attachment 9.

Of course, the Applicant understands and will comply with the obligations of an approved Determination of Need Holder as set forth in CMR 100.310 (N), (O) and (P) to submit a detailed development and improvement Plan to the Office of Health Equity, to maintain the current interpretive services policies and to arrange for ongoing staff training in effectively utilizing services available.

F1.b.iv Provide additional information to demonstrate that the Proposed Project will result in improved health outcomes and quality of life of the Applicant's existing Patient Panel, while providing reasonable assurances of health equity.

The primary goals of the entire Proposed Project are to improve health outcomes and quality of life of the Patient Panel, at the same time being cognizant of and making provisions to assure health equity and contain costs. Numerous external and internal measurements of quality outcomes have been described in Question F1.b.ii, but what needs to be mentioned here is the integration into the program of sophisticated health information technology. Today, Genesis employs internal electronic health records ("EHR") that monitor patient medication and can access lab results. Soon, the EHR's will incorporate physicians orders into the record. These systems will be utilized at the Merrimack Valley Center.

Further, as it regards Merrimack specific discussions have taken place regarding high level electronic connections including real time monitoring between the hybrid SNF's high level cardiac unit and hospital staff. This real time communication with Cardiologists expedites the ability of clinicians to take corrective action as required by the patient situation.

Enhancing the Genesis portfolio regarding electronic health records is the Applicant's leadership in this emerging technology by the Applicant's participation on a high level provider committee of the Massachusetts Electronic Health Information Exchange ("HIE").

HIE's are operative across the country covering widely differing geographic regions and many are supported with grants awarded from the Office of the National Coordinator for Health Information Technology, a division of the U.S. Department of Health and Human Services. Typically the HIE operates as follows:

The Exchange allows health care providers and patients to appropriately access and securely share a patient’s vital medical information electronically—improving the speed, quality, safety and cost of patient care. Appropriate, timely sharing of vital patient information can better inform decision making at the point of care and allow providers to: avoid readmissions, avoid medication errors, improve diagnoses and decrease duplicate testing. Many benefits exist with information exchange regardless of the means of which is it transferred. However, the value of electronically exchanging is the standardization of data.

There are currently three key forms of health information exchange:

Directed Exchange – ability to send and receive secure information electronically between care providers to support

coordinated care.

Query-based Exchange – ability for providers to find and/or request information on a patient from other providers, often used for unplanned care

Consumer Mediated Exchange – ability for patients to aggregate and control the use of their health information among providers

The Applicant intends that the Proposed Project will employ leading edge technology to efficiently manage clinically complex patients in order to enhance the Patient Panel health outcomes and quality of life.

F1.c Provide evidence that the Proposed Project will operate efficiently and effectively by furthering and improving continuity and coordination of care for the Applicant's Patient Panel, including, how the Proposed Project will create or ensure appropriate linkages to patients' primary care services.

is the intention of the Applicant's care team is to integrate the continuum of care providers into the patient care coordination and transition plan. Collaborative programmatic partner Circle Health/LGH is a key supporter of the Proposed Project and is working with Genesis and the University of Massachusetts Lowell in developing care paths and services to meet the needs of the patient, support community reintegration and reduce re-hospitalizations. The primary care physician groups will be informed of the developing programs early in the planning process and included in the care development process.

Independent from, but complimentary to the collaborative care planning activities is the Genesis Transitions of Care Program which will be a part of effectively coordinating patient care. This existing Transitions of Care Program is initiated for all patients prior to admission to one of the centers and is further described as follows:

Effective management of transitions in care within and between settings is a critical element in achieving the Triple Aim of healthcare: improved patient experience, better health of populations, and reduced per capita cost. Genesis has made a commitment to organization-wide implementation of 3 core Transitions in Care Best Practice Standards to support consistent, predictable outcomes and an effective inter-professional process for patients transitioning within the continuum of care.

• The center inter-professional team is established and operational which is led by the Center Executive Director

o Each team member will understand what it means to be part of an inter-professional team
o Each team member will understand his/her role and the role of other team members

• The Risk for Readmission Evaluation Tool (and Risk for Readmission Care Plan based on Evaluation Tool score) will be utilized for all patients. The Risk for Readmission Evaluation Tool is initiated by the Clinical Admissions Director in the field and then completed by the inter-professional team once admitted. This establishes the likelihood for re-hospitalization and patient engagement. The Risk for Readmission Care Plan is triggered after the assessment is complete. This allows the inter-professional team to focus on key areas.

• A post-admission patient/family conference will be conducted and documented for all patients according to established policy within 72 hours of admission. This meeting identifies patient goals, the inter-professional teams goals and what services if any were utilized prior to admission. This meeting assists in identifying VNA agencies early on in the admission process.

Critical to and present throughout this process is communication with the patient's primary care physician. Whether confirming and carrying out PCP orders, reconciling medications or even setting up post-discharge appointments, the Genesis staff rely heavily on physician input.

F1.d Provide evidence of consultation, both prior to and after the Filing Date, with all Government Agencies with relevant licensure, certification, or other regulatory oversight of the Applicant or the Proposed Project.

n the light of the significant revision of the Determination of Need Process and regulations 105 CMR 100.000 that was approved by the Public Health Council on January 11, 2017, the Applicant engaged in a consultative process with individuals at a number of regulatory agencies about the Proposed Project. Those individuals are:

Nora Mann, Esq., Director, Determination of Need Program, Department of Public Health
Lynn Conover, Analyst, Determination of Need Program
Lucy Clarke, Analyst, Determination of Need Program
Ben Wood, MPH, Director, Office of Health Planning and Engagement
Samuel Louis, MPH, Coordinator, Health Care Interpreter Services
Elizabeth Maffei, Department of Public Health

Stephen Davis, MBA, LNHA, Division of Healthcare Facility Licensure & Certification, Department of Public Health
Daniel Gent, Project Engineer, Plan Review Manager, Department of Public Health

F1.e.i Process for Determining Need/Evidence of Community Engagement: For assistance in responding to this portion of the Application, Applicant is encouraged to review *Community Engagement Standards for Community Health Planning Guideline.* With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

Community Health Initiatives ("CHI") requirements for a long-term care project will be fulfilled by contributing CHI resources to a CHI Healthy Aging Fund. According to the Determination of Need Community-Based Health Initiative Planning Guideline, "The CHI Healthy Aging Fund will support the development of AgeFriendly communities following the eight (8) elements of an age-friendly community as defined by the WHO and AARP and/or CHI Healthy Aging Fund will be consistent with the strategic efforts of Healthy Aging in Action (HAIA): Advancing the National Prevention Strategy11. The HAIA is designed to:

o Support prevention efforts to enable older adults to remain active, independent, and involved in their community;

o Highlight innovative and evidence-based programs from National Prevention Council departments, agencies, and local communities that address the challenges related to physical, mental, emotional, and social well-being that are often encountered in later life; and

o Inform future multisector efforts to promote and facilitate healthy aging in communities."

Projected to be one of the earliest contributors, the Applicant is actively monitoring the efforts on the part of the Department of Public Health and the Executive Office of Elder Affairs to establish the CHI Healthy Aging Fund Advisory Committee, the fiscal agency and the criteria and priorities for a annual funding plan.

The Applicant recognizes that contributing to the CHI Health Aging Fund does not absolve the organization from employing significant community planning in the development of the Proposed Project. Genesis has participated in a multi-year process that encompasses involvement of community leadership. Discussions regarding a collaborative project to address the needs of the Patient Panel and all area seniors were initiated in 2015 between Genesis and UMA. Shortie McKinney, Dean of College of Health Sciences at University of Massachusetts Lowell has been highly involved in the development of the connectivity of UMA to the project. She has been and intends to continue working closely on the development of curriculum that integrates nursing students, nurse practitioners, therapy students, social services students and others into what is hoped will be a “Teaching Skilled Nursing Facility, with a focus on Interprofessional Learning.” There has even been a proposal for a joint appointment, a University/Facility Nurse Educator position that links the operations of the Teaching SNF with the education program.

In early 2016 Circle Health ACO/LGH was brought into the conversation when Amy Hoey, COO Lowell General Hospital was engaged in the planning . She has been involved in the development of an integrated team with the Circle Health ACO, to focus on those patients who have completed their acute care program of cardiac rehabilitation and would be appropriate placements in the cardiac "extension" skilled services at the new facility.

As noted above, the talking and planning has gone on for over two years during which time regularly scheduled meetings have been held with a wide range of innovative agenda items. To ensure Genesis clinical involvement at the highest levels, Michelle Costa, Vice President of Clinical Operations Northeast Division has participated in the process.

Strengthening the consensus decision to develop a hybrid skilled nursing facility were the results of a community health needs assessment ("Assessment") released in 2016 by the Greater Lowell Health Alliance, ("GLHA"). GLHA, the local Community Health Network Area. Discussion of this Assessment has been included in detail in Question F1.a.ii Need by Patient Panel. Suffice to repeat here that results of the Assessment identified the elderly as a population at great risk and with unmet health related needs.

In addition, the Assessment cited an insufficient number of physicians to work with this population and a Key Recommendation was to increase the number of PCP's with geriatric experience. The interprofessional education component of the Proposed Project will help to build and strengthen a geriatric experienced support system for area physicians thereby making progress towards this Key Recommendation.

F1.e.ii Please provide evidence of sound Community Engagement and consultation throughout the development of the Proposed Project. A successful Applicant will, at a minimum, describe the process whereby the "Public Health Value" of the Proposed Project was considered, and will describe the Community Engagement process as it occurred and is occurring currently in, at least, the following contexts: Identification of Patient Panel Need; Design/selection of DoN Project in response to "Patient Panel" need; and Linking the Proposed Project to "Public Health Value".

The Applicant believes that the Proposed Project meets the Public Health Value as defined by the IOM, by addressing the need of the Patient Panel with proven technology and services, objectively measuring the outcomes and assuring health equity through access and the provision of a culturally competent staff. Each aspect of the Public Health Value of the Proposed Project has been detailed earlier.

Engaging representatives of the Patient Panel and community healthcare leadership in the planning process has been a hallmark of the design of the Merrimack Valley Center. The Continuum of Community Engagement as adapted from the International Association for Public Participation offers a number of opportunities for stakeholders to help shape the proposal through the planning process and the Applicant has actively solicited input through the mechanisms identified along the Continuum.

Informing the community has been accomplished in a number of ways most notably through a series of press stories about the planning of the Project Project. Consultation has been a major part of the decision making process. Feedback from community focus groups and key informant interviews have been utilized. Discussions with the Lowell Community Health Center, physician and pharmacy groups took place early in the process.

Involvement and the higher level of collaboration have been the foundation for the now 30 month planning process. Numerous meetings have been held since 2015, discussing and refining the innovative aspects of the Proposed Project and the Applicant serves on advisory bodies for both programmatic partners.

Significantly, the Town of Dracut has overwhelmingly embraced the concept of the construction of a new hybrid SNF. For example, when a Special Town Meeting was required to rezone a small portion of the parcel in late June, over 600 residents turned out when a quorum of 250 registered voters was required. With no discussion the participants approved the needed modification by an overwhelming voice vote in a five minute session. In his comments at that time, Town Manager Jim Duggan told the Lowell Sun, "I'm thrilled. I'm speechless with the support that the residents of this community have shown, by their volunteer efforts and coming out for a special vote for this (the Proposed Project). It's amazing to me."

The June vote in Dracut is merely one of the latest instances where the Applicant has reached out to the community for support and feedback. The multi-year planning and development process undertaken by the Applicant for the Proposed Project has engaged the community at a number of levels, specifically they have informed, consulted, involved and collaborated. As has been noted, the general public has been informed through several newspaper articles most appearing in the Lowell Sun. Consultation with community providers, consumers and local and state officials though the Greater Lowell Health Alliance has affirmed the needs of the elder population. Most importantly, Advisory Group participation with programmatic partners the University of Massachusetts Lowell and Circle Health ACO/Lowell General Hospital has resulted in the innovative hybrid skilled nursing facility model. Letters of support and relevant newspaper articles can be found at Attachment 9.

## Factor 2: Health Priorities

Addresses the impact of the Proposed Project on health more broadly (that is, beyond the Patient Panel) requiring that the Applicant demonstrate that the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation.

F2.a **Cost Containment:**

Using objective data, please describe, for each new or expanded service, how the Proposed Project will meaningfully contribute to the Commonwealth's goals for cost containment.

Due to the fact that the Applicant serves a discreet elder patient population, its focus is necessarily upon that Patient Panel. However, the Commonwealth's goals of cost containment, improved public health outcomes and delivery system transformation figured significantly in the design of the Proposed Project.

At the outset and as part of the Genesis ongoing strategic planning process, the Applicant deliberated as to the most efficient and cost effective project that could be established that would enhance the health outcomes of the patients treated. The fact that the Applicant held active BOOS presented a compelling case for construction of a brand new facility with these existing beds. A new state-of-the-art facility would operate in the most efficient manner using modern "green" physical plant systems as well a technologically advanced equipment utilized to treat residents/patients. The age of the bed supply of the Lowell Cluster of SNF's is 40 years or more and renovation of any facility would be a costly investment that would not be cost effective as it would not remedy all the physical plant issues, not to mention the disruption that would be caused to residents. As for the cost of new construction, the Independent CPA Analysis conducted suggests that the all construction and operating costs are reasonable and that the feasibility of the project is sound.

Very important to the containing costs is the proposed and previously discussed creation of a high level cardiac unit at Merrimack Valley Center. Presumably, the existence of this unit operated in an integrated manner with programmatic partner LGH, would allow earlier, yet safe, discharges from the acute care setting to the SNF. As has been mentioned earlier, data shows that services received in a skilled setting have lower payment rates than those paid for an acute care bed and, further, acute care telemetry beds may cost an additional $200 per day.

Longer range and ongoing cost containment is projected to be achieved by inclusion of the innovative educational model into the program and design. Here, University of Massachusetts Lowell students will have space to meet with patients, clinicians and other students in the advancement of the goal of developing healthcare professionals of the future with geriatric experience. This experience can improve quality of patient care, lower costs, decrease length of stay and reduce medical errors. The healthcare professionals in training will have significant impact, not just on the existing Patient Panel, but on other elder patients in the years ahead.

F2.b **Public Health Outcomes:**

Describe, as relevant, for each new or expanded service, how the Proposed Project will improve public health outcomes.

The Commonwealth through the Executive Office of Health and Human Services and the Department of Health have identified four "Focus Issues" based on statewide trends. Included in that foursome is Chronic Disease with a focus on Cancer, Heart Disease and Diabetes. Consistent with that priority focus are the local statistics showing that ranking fourth in discharges from LGH are patients with cardiac diagnoses. LGH Inpatient data provides estimates of a 12.8% growth in the Cardiac Service Line for male inpatients 65 or older and 9.1% growth for female inpatients of the same age cohort. In real numbers these ten year estimates mean a nearly 2,000 increase in annual volume for both male and female seniors in 2026.

The decision to pursue an enhanced Cardiac program was made to serve both the needs of the local community and accommodate an issue identified by LGH which the Applicant believed could be met. The team at Circle Health ACO/LGH indicated that Cardiac and Cardiac Rehabilitation were areas of opportunity to positively impact public health. Heart related chronic diseases impact a sizable portion of the elder population and contribute significantly to their re-hospitalization rates. Creating supportive services at Merrimack Valley Center would result in reduced hospital admissions and readmissions as well as redirection from the Emergency Room for those patients in need of acute services, yet not appropriate to be sent home.

F2.c **Delivery System Transformation:**

Because the integration of social services and community-based expertise is central to goal of delivery system transformation, discuss how the needs of their patient panel have been assessed and linkages to social services organizations have been created and how the social determinants of health have been incorporated into care planning.

The area social determinants of health play a large role in the lives of the citizens residing in the communities comprising the Lowell CHNA. Underscoring the effect on public health is the following information brought forth in the Massachusetts Healthy Aging Report: Community Profiles 2014 ("Report") issued by the Massachusetts Health Aging Collaborative.

The Northeast Region, EOHHS Region 3, and the area from which the broader Patient Panel is drawn is described in part in the Report as follows: "The Northeast region has both older industrial cities and sparsely populated coastal towns with differing population health." and, "Lowell and Lawrence are urban communities in the Northeast region, and both cities have challenges related to social

determinants of health. Poverty, immigrant populations, and crime that contribute to the challenges observed here (Report). Lowell and Lawrence are higher than the state average for the percentage of older residents who are dually eligible for Medicare and Medicaid, an indicator of poverty. Lowell has a higher percentage of older persons reporting fair or poor health and more physically unhealthy days compared to the state average." In fact, of the 100 indicators considered, Lowell ranked below the state average on 19 measures ranking fifth on a list of "Communities with Challenges in Healthy Aging."

When isolating incidence of stroke, hypertension, heart attack ,hospital stays and emergency room visits to name but a few indicators, Lowell residents are shown to be significantly worse off than the state percentages for these diagnoses.

The more recent edition of the Massachusetts Healthy Aging Report: Community Profiles 2015 presented a new composite measure, Serious Complex Chronic Disease to better understand the health of Massachusetts senior population. Using this measure, Lowell, with 37% geographic representation in the Patient Panel, was deemed one of the least healthy large communities in the Commonwealth. Clearly, the social determinants of health pointed out in the 2014 Report have not been mitigated with time and continue to challenge the Applicant and other providers along the healthcare continuum to enhance the health status of area elders.

The Applicant's care team integrates the social service providers into the patient care coordination and transition plan. Collaborative programmatic partner Circle Health/LGH is a key supporter of the Proposed Project and is working with Genesis and the University of Massachusetts Lowell in developing care paths and services to meet the needs of the patient, support community reintegration and reduce re-hospitalizations.

Independent from, but complimentary to the collaborative care planning activities is the Genesis Transitions of Care Program which will be a part of effectively coordinating patient care. This existing Transitions of Care Program is initiated for all patients prior to admission to one of the centers and is further described as follows:

Effective management of transitions in care within and between settings is a critical element in achieving the Triple Aim of healthcare: improved patient experience, better health of populations, and reduced per capita cost. Genesis has made a commitment to organization-wide implementation of 3 core Transitions in Care Best Practice Standards to support consistent, predictable outcomes and an effective inter-professional process for patients transitioning within the continuum of care.

One of the positive results of the creation of the hybrid nursing facility that was mentioned in the question on Public Health Outcomes was redirection from the Emergency Room. By diverting patients from the ER, there is an early and solid connection with care transitions to the home environment supported by the Genesis transitions of Care Program.

Cognizant of the challenges facing the Patient Panel, the Applicant will endeavor to enhance those delivery systems currently in place and looks forward to the establishment of the CHI Healthy Aging Programs to assist with the amelioration of the negative social determinants of health complicating the public health outcomes of the area.

## Factor 3: Compliance

Applicant certifies, by virtue of submitting this Application that it is in compliance and good standing with federal, state, and local laws and regulations, including, but not limited to M.G.L. c. 30, §§ 61 through 62H and the applicable regulations thereunder, and in compliance with all previously issued notices of Determination of Need and the terms and conditions attached therein .

F3.a Please list all previously issued Notices of Determination of Need

| Add/Del Rows | Project Number | Date Approved | Type of Notification | Facility Name |
|---|---|---|---|---|
| + - | | | | |

## Factor 4: Financial Feasibility and Reasonableness of Expenditures and Costs

Applicant has provided (as an attachment) a certification, by an independent certified public accountant (CPA) as to the availability of sufficient funds for capital and ongoing operating costs necessary to support the Proposed Project without negative impacts or consequences to the Applicant's existing Patient Panel.

F4.a.i **Capital Costs Chart:**

For each Functional Area document the square footage and costs for New Construction and/or Renovations.

| | | Present Square Footage | | Square Footage Involved in Project | | | | Resulting Square Footage | | Total Cost | | Cost/Square Footage | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | New Construction | | Renovation | | | | | | | |
| Add/Del Rows | Functional Areas | Net | Gross | Net | Gross | Net | Gross | Net | Gross | New Construction | Renovation | New Construction | Renovation |
| + - | Patient Rooms | | | 34,604 | 36,500 | 0 | 0 | 34,604 | 36,500 | $9,343,100.00 | $0.00 | $270.00 | $0.00 |
| + - | Physical Therapy | | | 3,437 | 3,629 | 0 | 0 | 3,437 | 3,629 | $955,486.00 | $0.00 | $278.00 | $0.00 |
| + - | Bistro | | | 2,520 | 3,342 | 0 | 0 | 2,520 | 3,342 | $700,513.00 | $0.00 | $278.00 | $0.00 |
| + - | Kitchen | | | 1,750 | 1,848 | 0 | 0 | 1,750 | 1,848 | $486,500.00 | $0.00 | $278.00 | $0.00 |
| + - | Laundry | | | 651 | 687 | 0 | 0 | 651 | 687 | $170,562.00 | $0.00 | $262.00 | $0.00 |
| + - | Spa | | | 495 | 522 | 0 | 0 | 495 | 522 | $128,700.00 | $0.00 | $260.00 | $0.00 |
| + - | Corridors | | | 11,136 | 11,198 | 0 | 0 | 11,136 | 11,198 | $2,895,360.00 | $0.00 | $260.00 | $0.00 |
| + - | Non-resident Bathrooms | | | 744 | 785 | 0 | 0 | 744 | 785 | $193,440.00 | $0.00 | $260.00 | $0.00 |
| + - | Nurse Stations | | | 1,380 | 2,189 | 0 | 0 | 1,380 | 2,189 | $383,640.00 | $0.00 | $278.00 | $0.00 |
| + - | Office/Conference Room | | | 4,024 | 6,258 | 0 | 0 | 4,024 | 6,258 | $1,046,240.00 | $0.00 | $260.00 | $0.00 |
| + - | Resident Space | | | 3,118 | 4,860 | 0 | 0 | 3,118 | 4,860 | $810,680.00 | $0.00 | $260.00 | $0.00 |
| + - | Storage (Including O2 Storage) | | | 2,023 | 3,092 | 0 | 0 | 2,023 | 3,092 | $525,980.00 | $0.00 | $260.00 | $0.00 |
| + - | Utility (Soiled and Clean | | | 1,385 | 1,462 | 0 | 0 | 1,385 | 1,462 | $360,100.00 | $0.00 | $260.00 | $0.00 |
| + - | Med Rooms | | | 234 | 247 | 0 | 0 | 234 | 247 | $65,520.00 | $0.00 | $280.00 | $0.00 |
| + - | Medical Records Storage | | | 239 | 252 | 0 | 0 | 239 | 252 | $62,140.00 | $0.00 | $260.00 | $0.00 |
| + - | Staff Breakroom | | | 419 | 442 | 0 | 0 | 419 | 442 | $113,537.00 | $0.00 | $271.00 | $0.00 |
| + - | Mechanical & Electrical Rooms | | | 879 | 925 | 0 | 0 | 879 | 925 | $225,100.00 | $0.00 | $256.00 | $0.00 |
| + - | Suction Room | | | 36 | 38 | 0 | 0 | 36 | 38 | $9,360.00 | $0.00 | $260.00 | $0.00 |
| + - | Elevators | | | 200 | 211 | 0 | 0 | 200 | 211 | $157,200.00 | $0.00 | $786.00 | $0.00 |
| + - | Janitors Closet | | | 126 | 134 | 0 | 0 | 126 | 134 | $32,760.00 | $0.00 | $260.00 | $0.00 |
| + - | | | | | | | | | | | | | |

F4.a.ii For each Category of Expenditure document New Construction and/or Renovation Costs.

| | Category of Expenditure | New Construction | Renovation | Total (calculated) |
|---|---|---|---|---|
| | **Land Costs** | | | |
| | Land Acquisition Cost | $475000. | | $475000. |
| | Site Survey and Soil Investigation | $37758. | | $37758. |
| | Other Non-Depreciable Land Development | $42485. | | $42485. |
| | Total Land Costs | $555243. | | $555243. |
| | **Construction Contract (including bonding cost)** | | | |
| | Depreciable Land Development Cost | $730300. | | $730300. |
| | Building Acquisition Cost | $0. | | $0. |
| | Construction Contract (including bonding cost) | $18665918. | | $18665918. |
| | Fixed Equipment Not in Contract | $615785. | | $615785. |
| | Architectural Cost (Including fee, Printing, supervision etc.) and Engineering Cost | $845000. | | $845000. |
| | Pre-filing Planning and Development Costs | $241426. | | $241426. |
| | Post-filing Planning and Development Costs | $915857. | | $915857. |
| Add/Del Rows | Other (specify) | | | |
| + - | Other: Hard cost contingency, ground breaking, signage) | $825787. | | $825787. |
| | Net Interest Expensed During Construction | $1063292. | | $1063292. |
| | Major Movable Equipment | $1541385. | | $1541385. |
| | Total Construction Costs | $25444750. | | $25444750. |
| | **Financing Costs:** | | | |
| | Cost of Securing Financing (legal, administrative, feasibility studies, mortgage insurance, printing, etc | $301400. | | $301400. |
| | Bond Discount | | | |
| Add/Del Rows | Other (specify | | | |
| + - | Other: Builders Risk | $47599. | | $47599. |
| | Total Financing Costs | $348999. | | $348999. |
| | **Estimated Total Capital Expenditure** | $26348992. | | $26348992. |

## Factor 5: Relative Merit

F5.a.i Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

**Proposal:**

The Applicant, proposes to construct a new 120 bed hybrid skilled nursing facility on over 3.5 acres at 55 Loon Hill Road, Dracut, MA 01826. The Proposed Project will be licensed through the activation of a portion of approved Beds Out of Service from the former Glenwood Care and Rehabilitation Center (101 beds), 557 Varnum Avenue, Lowell, MA 01851 and Colonial Heights Care and Rehabilitation Center (90 beds), 555 South Union Street, Lawrence, MA 01843. There will be a four story building encompassing 78,621 gross square feet housing three 40-bed nursing units on floors 2, 3 and 4. Ample parking is available complimented with multiple entrances for ease of access for staff and visitors.

The Proposed Project is adjacent to a planned 27,000 square feet of Lowell General Hospital ("LGH") Medical Office space at 9 Loon Hill Road. This Outpatient facility will offer Urgent Care, a Patient Service Center (including Phlebotomy, X-Ray and Ultrasound), a Diabetes Clinic, Endocrinology and Primary Care. Rounding out this future healthcare cluster is the Arbors Assisted Living at Dracut which opened in July 2017 and abuts the site.

The Dracut site is easily accessible from all parts of the Greater Lowell area and the entire Merrimack Valley. Major highways, routes 495, 93 and 3 are little more than 5 miles away. The Lowell Regional Transit Authority operates regular bus service to the area with the Village Square stop less than a quarter mile from the facility.

The Proposed Project will not be exclusively the traditional long term care or even short term care program model. Partnering with the University of Massachusetts Lowell Zuckerberg College of Health Sciences ("UMA") where Genesis holds a position on the College of Health Advisory Board and Lowell General Hospital/Circle Health on whose Board of Governors Genesis sits, the Applicant has developed a new and innovative 'hybrid' teaching skilled nursing center. The centerpiece of this hybrid model is that highly complex care will be provided in an educational environment. A "cutting edge educational model" that according to UMA Dean of Health Sciences Shortie McKinney, "will help transform clinical education."

Circle Health/LGH has been involved in the development of an integrated team to focus on patients receiving cardiac rehabilitation services in the hospital. Clinically complex services provided at Merrimack Valley Center will be an extension of the Circle Health/LGH cardiac rehabilitation for those patients who are no longer in the acute phase of their program, but who continue to require skilled care and observation. With collaborative support from the hospital cardiac rehabilitation and cardiac management programs, the Applicant intends to build a unique skilled program to address the requirements of these patients. To that end Genesis has been working with LGH to develop a12 bed cardiac care telemetry unit at Merrimack Valley Center to meet the hospital's need of creating an appropriate setting for patients able to move from the acute to a skilled setting.

**Quality:**

Conversations about healthcare workforce needs, value based care, and reducing re-hospitalizations, brought the University of Massachusetts Lowell Zuckerberg College of Health Sciences and Circle Health ACO/Lowell General Hospital to the table. with the Applicant resulting in an extraordinary planning effort. The programmatic partners have developed this educational, highly skilled hybrid model producing an innovative program for the Patient Panel and the community that will enhance the healthcare continuum of services offered to seniors. The proximity to the planned LGH Outpatient space makes this location and the Proposed Project even more attractive.

**Efficiency:**

The over 3.5 acre site in Dracut offers the architectural team great flexibility in design. As a result, the optimal 40-bed nursing unit will be replicated on each of three separate floors. Also, the size of the private rooms allows for the collaboration space required by clinicians, families, patients and the UMA students. All ancillary and support services can be adequately accommodated for maximum operational efficiency.

**Capital Expense:**

The total value of the Proposed Project is $26,348,992.00.

**Operating Costs:**

he Independent CPA Analysis supporting Factor 4 concluded that the operating expenses including salaries, benefits and other expenses reviewed were determined to be reasonable relative to industry, state and local standards.

List alternative options for the Proposed Project:

**Alternative Proposal:**

An alternative to the 120 bed hybrid SNF in Dracut was a plan to replicate a similar program through demolition and new construction at one of the existing facilities in the Genesis Lowell Cluster. This proposal would have entailed building a 120-bed SNF, adding a 2 level 106 space underground garage and incorporating 15,000 gross square feet of retail space in a five story building of 159,670 gross square feet that includes the parking garage.

**Alternative Quality:**

The educational hybrid highly skilled model, was intended for this alternative, so to some extent services might have been similar. However, the restrictive site and building placed hardships on the design team in efforts to fully incorporate the innovative programming and state-of-the-art technologies.

**Alternative Efficiency:**

Due to the severe site constraints planners had a difficult time designing this alternative option. Reconfiguring four nursing units over 4 floors, three floors of 35-beds and one floor with 15- beds made this an inefficient model requiring a non-traditional staffing pattern. Typically, nursing units of 40 beds are considered most efficient and the preferred option as reflected in the design of the Dracut facility. Surface parking would be limited to just 8 spaces. Also, this designed lacked a loading dock or loading area.

**Alternative Capital Expense:**

The alternative option cost at $34,654,250.00 was considerably higher that the preferred option of Merrimack Valley Center in Dracut. Included in this total is $3,710,000.00 for the parking garage, $750,000.00 for Asbestos remediation and building demolition, $1,875,000.00 to create 15,000 gross square feet of unfinished retail space and $28,229,250.00 for resident rooms, ancillary services and support space.

**Alternative Operating Costs:**

Development costs and building inefficiencies effectively eliminated this alternative from consideration. As a result, specific operating costs are not available for this option, although it would be logical to conclude that at least direct care costs would be higher based on a staffing pattern that was required to cover 4 not 3 floors for less than optimal nursing units.

Add additional Alternative Project | Delete this Alternative Project

F5.a.ii Describe the process of analysis and the conclusion that the Proposed Project, on balance, is superior to alternative and substitute methods for meeting the existing Patient Panel needs as those have been identified by the Applicant pursuant to 105 CMR 100.210(A)(1). When conducting this evaluation and articulating the relative merit determination, Applicant shall take into account, at a minimum, the quality, efficiency, and capital and operating costs of the Proposed Project relative to potential alternatives or substitutes, including alternative evidence-based strategies and public health interventions.

At the outset, the Applicant was considering a Proposed Project of all short stay patients. However, the Applicant's commitment to long term care, to health equity in providing access to care for potentially underserved populations and the area need for a more up to date, high clinical capacity with state-of-the- art, modern equipment and amenities, became the driver leading to the selection of the hybrid model. Once the new construction decision had been made it was a question of (1) whether to demolish and rebuild an existing area SNF on a difficult site resulting in a more costly and inefficient design, the "Alternative," or (2) to secure a "clean" accessible site to fully allow for the requirements of the proposed program, operational efficiency and lower capital investment. Given the two options, it seems abundantly clear that, for all the right reasons, to build the hybrid model in Dracut is the superior option for the Patient Panel's current and future need and to meet the healthcare goals of the Commonwealth.

## Factor 6: Community Based Health Initiatives

F6 Does your existing CHNA/CHIP meet the minimum standards outlined in the Community Engagement Standards for Community health Planning Guideline? ◯ Yes ◯ No

## Documentation Check List

The Check List below will assist you in keeping track of additional documentation needed for your application.

Once you have completed this Application Form the additional documents needed for your application will be on this list. E-mail the documents as an attachment to: DPH.DON@state.ma.us

- ☒ Copy of Notice of Intent
- ☒ Affidavit of Truthfulness Form
- ☒ Scanned copy of Application Fee Check
- ☒ Affiliated Parties Table Question 1.9
- ☒ Change in Service Tables Questions 2.2 and 2.3
- ☒ Certification from an independent Certified Public Accountant
- ☐ Current IRS Form, 990 Schedule H CHNA/CHIP and/or Current CHNA/CHIP submitted to Massachusetts AGO's Office
- ☐ Community Engagement Stakeholder Assessment form
- ☐ Community Engagement-Self Assessment form

## Document Ready for Filing

When document is complete click on "document is ready to file". This will lock in the responses and date and time stamp the form. To make changes to the document un-check the "document is ready to file" box. Edit document then lock file and submit Keep a copy for your records. Click on the "Save" button at the bottom of the page.

To submit the application electronically, click on the"E-mail submission to Determination of Need" button.

**This document is ready to file:** ☒ Date/time Stamp: 11/24/2017 2:38 pm

E-mail submission to Determination of Need

**Application Number: NA-17112414-LE**

**Use this number on all communications regarding this application.**

☐ Community Engagement-Self Assessment form