STAFF REPORT TO THE PUBLIC HEALTH COUNCIL
FOR THE DETERMINATION OF NEED

DoN Project Number	17112810
Applicant Name	Marquis Health Services, LLC on behalf of NEB Operator LLC
Applicant Address	70 Fulton Street, Boston, MA 02109
Date Received	November 28, 2017
Type of DoN Application	Long Term Care Substantial Capital Expenditure
Total Value	$6,182,921.00
Ten Taxpayer Group (TTG)	None
Public Hearing	None
Community Health Initiative (CHI)	$185,487.63 to the CHI Healthy Aging Fund
Staff Recommendation	Approval with conditions
Public Health Council (PHC) Meeting Date	April 4, 2018

PROJECT SUMMARY AND REGULATORY REVIEW

The Applicant is Marquis Health Services, LLC (Marquis). Marquis is the corporate parent of NEB Operator LLC (NEB). NEB took over the operation of an existing skilled nursing facility that is now known as the North End Rehabilitation and Healthcare Center (Facility) and located in the North End section of Boston. Marquis has applied for a Determination of Need (DoN) for a Substantial Capital Expenditure. The proposed project includes renovation of resident rooms, public and common areas, nursing stations, and dining areas; creation of a new rehabilitation gym; and equipment upgrades.

Applications for substantial capital expenditures are reviewed under the DoN regulation under which the Department must determine that need exists for a Proposed Project on the basis of material in the record where the Applicant makes a clear and convincing demonstration that the Proposed Project meets each of the six Determination of Need Factors set forth within 105 CMR 100.210.

This staff report addresses each of the six factors in turn.

Background

The North End Rehabilitation and Healthcare Center (Facility) has operated in the North End under several names since 1983, and it continues to be the only skilled nursing facility located in the North End of Boston. In March, 2017, the Applicant acquired the real estate and in November 2017, acquired the license to operate the Facility.[1] The Facility (which has been operating at about an 82% occupancy rate) has 100 licensed beds. Marquis currently operates the beds as approximately 50% each of long-term and short-term patients. Over time, Marquis proposes to adjust its patient panel until it has approximately 30% short-term and 70% long-term patients.[2]

Analysis

This analysis and recommendation reflects the purpose and objective of DoN, which is "to encourage competition and the development of innovative health delivery methods and population health strategies within the health care delivery system to ensure that resources will be made reasonably and equitably available to every person within the Commonwealth at the lowest reasonable aggregate cost advancing the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation" 105 CMR 100.001.

Factors 1 and 2

Factor 1 of the DoN regulation requires that the Applicant address patient panel need, and demonstrate that the project will add measurable public health value in terms of improved health outcomes and quality of life for the existing patient panel, while providing reasonable assurances of health equity. Under factor 2 of the regulation, the Applicant must demonstrate that the project will meaningfully contribute to the Commonwealth's goals for cost containment, improved public health outcomes, and delivery system transformation. This analysis will approach the requirements of factors 1 and 2 by describing each element of the proposed project and how each element complies with those parts of the regulation.

Patient Panel and Need

Patient Panel Demographics – Seventy-eight percent of the patient panel is 65 years and older and 65.7% is female. This gender difference is mirrored in research showing a greater need for

[1] FRC, Inc., a subsidiary of Spaulding Rehabilitation Network (SRN), operated the Spaulding North End as a 140 bed skilled nursing facility and an 80 bed skilled nursing facility in West Roxbury. In April 2017, FRC Inc., received approval for DoN Project Number 4-1606, to renovate a closed nursing facility in Brighton. FRC planned to relocate the Spaulding West Roxbury patients and some of the North End patients to the renovated facility in Brighton. The project included a reduction in beds at the Spaulding North End facility from 140 to 100. Sixty residents of the Spaulding North End facility did not relocate to the Brighton facility and remain at the Facility.

[2] Because they intend to increase the occupancy rate, they do not intend to decrease the number of long-term residents, only the percentage (see, page 3, below).

long-term care among women.[3] The majority of the patient panel that was willing to self-report race do so mostly as White (35.2%), followed by Black or African-American (6.6%) and Asian (2.2%). The Applicant reports that 56% of patients did not self-report their race. The majority of the patient panel is from Boston or has a family member or primary contact working or residing in Boston. Fifty percent of patients come from the North End.

Marquis asserts that improvements to the patient spaces will promote visitation from friends and family which, the Applicant argues, enhances recovery of patients and increases transition back home and to the community. The Applicant intends to decrease the length of stay and increase discharges to the community.

Clinically Complex Patients

Marquis reports that 15% of the current patient population is clinically complex and estimates that number will increase to 25-30% of the patient panel after the construction. This projection is based upon information provided to the Applicant from local referring hospitals. In meetings with the local referring hospitals, Marquis identified an increasing need for non-acute care for complex patients, and asserts that this increasing need has guided the Facility renovation plans, which will enable the Facility to better serve complex patients.

Marquis maintains that the Facility will meet the needs of these more complex patients at a lower cost than the alternative Long Term Acute Care Hospitals (LTACH). It is the intent of this proposed project to provide the capacity to accept clinically complex patients either directly from an acute care hospital or from a shorter LTACH stay. Data indicate that LTACHs are reimbursed at 3-to 12-fold higher rates than SNFs for equivalent diagnoses.[4] The Applicant asserts that the proposed project will reduce the reliance on both LTACHs and acute care hospitals, and thus reduce the cost of care for these patients. Specifically, the Applicant states that changes to Centers for Medicare and Medicaid Services (CMS) reimbursement criteria and admission requirements for LTACHs make placement in these facilities more difficult.

Payer Mix and Occupancy Rate

Sixty-two percent of the current patient panel is covered through Medicaid.

Payer Mix (based on 82 patients)

Medicaid	Medicare A	Private Pay	Other Insurance
62%	21%	15%	2%

[3] Mudrazija, S., Thomeer, M. B., & Angel, J. L. (2015). Gender Differences in Institutional Long-Term Care Transitions. *Women's Health Issues,* 441-449. Retrieved January, 2018, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4569522/pdf/nihms692086.pdf

[4] Makam, A. M., Nguyen, O. K., Xuan, L., Miller, M. E., Goodwim, J. S., & Halm, E. A. (2018). Factors Associated With Variation in Long-term Acute Care Hospital vs Skilled Nursing Facility Use Among Hospitalized Older Adults. *JAMA Internal Medicine,* E1-E8. Retrieved February, 2018, from file:///C:/Users/LClarke/Downloads/jamainternal_Makam_2018_oi_170131.pdf

The current occupancy rate at the Facility is 82%. The Applicant asserts that the occupancy rate of the Facility will increase from 82% to 92% after the renovations.[5] Increased occupancy will lead to a change in the payer mix.[6] Further, the Applicant anticipates a shift in the Medicaid population away from fee for service (FFS) to Medicaid Managed Care payment as a result of the MassHealth Payment and Care Delivery Innovations[7] that offers expanded managed care options. The Applicant affirms that the Facility provides care to under insured and/or uninsured patients who might otherwise experience a financial barrier to accessing care, and states its intent is to "provide access to all seeking services regardless of payer source."[8]

Public Health Value (Outcomes, quality of life, and equity)
Public Health Value, for the purposes of DoN, requires that the project have an evidence base, be outcomes oriented and address health inequities. 105 CMR 100.210(A)(1)(b) Staff examined the impact of the transaction on improved coordination of care and patient access to care as well as the impact upon outcomes and quality of life as a result of the transaction.

The Applicant asserts that the planned renovations will improve the physical and social environment and care experience for both the short-term and long-term patients. Renovations will increase the number of private rooms from 10 to 42 which will accommodate patients requiring private rooms based on reasons including infection control, and medical equipment. Renovations will increase privacy for patients during family and friend visits, as well as improve accessibility of services and care. As a result, the Applicant asserts the number of re-hospitalizations will be reduced and length of stay decreased.

One private room on each floor will be equipped with a private bath and shower in order to provide care for patients needing infection control and to facilitate training in activities of daily living (ADLs) as part of discharge planning.[9] Improving a patient's ability to carry out ADLs has been shown to improve functional independence and quality of life. The Applicant cited research conducted on the benefits of private rooms in long term care facilities.[10] Private rooms were associated with better outcomes for patients requiring infection control. [11]

[5] The occupancy at the Facility will increase as a result the Facility's ability to accept more clinically complex patients.
[6] The Facility will provide increased access to rehabilitation for long-term and short-term patients, which will be reimbursed by Medicare.
[7] MassHealth is introducing new health plan options for its 1.3 million managed care eligible members in the form of accountable care organizations (ACOs). See, https://www.mass.gov/payment-care-delivery-innovation-pcdi-for-providers
[8] DoN Application 17112810 Responses, at page 4.
[9] Activities of daily living (ADLs), are the basic actions that involve caring for one's self and body and comprise the following areas: grooming/personal hygiene, dressing, toileting/continence, transferring/ambulating, and eating.
[10] Calkins, M., & Cassella, C. (2007). Exploring the cost and value of private versus shared bedrooms in nursing homes. *Gerontologist, 47*, 169-183. Retrieved January, 2018, from https://www.ncbi.nlm.nih.gov/pubmed/17440122.
[11] *id*.

A new 3,482 square foot rehabilitation gym will replace the existing 546 square foot gym and will offer a larger space to accommodate a greater number of patients and more state of the art therapy equipment. The Applicant reported that 92% of its Medicare patients receive rehabilitation therapy up to seven days per week. The new gym will improve the efficiency of rehabilitation therapy and will increase access to services from two residents per hour to 10 residents per hour seven days per week.

Renovations will also include increasing the size of the nursing stations to accommodate the different clinicians needed to manage the varying types and complexity of health needs among the patient population. Other renovations will include the creation of a roof-top courtyard for outdoor recreational and leisure use, renovated public and common space, which will create additional dedicated private spaces for patients to meet with family and friends, and a renovated dining area which will improve the quality of the dining experience. The Applicant suggests that these renovations will create what they call a homelike setting which will improve the quality of life for patients. Research supports the benefits of creating such homelike settings in long term care facilities, as reported by the Applicant.[12] [13] The Applicant argues the homelike setting will improve the recovery experience for patients. The impact on the patient experience will be measured in patient satisfaction surveys.

When operated by Spaulding, this Facility largely took referrals from Massachusetts General Hospital (MGH) and Brigham and Women's Hospitals (BWH). Under the Applicant's management and operation, they will accept referrals from MGH and BWH as well as other hospitals: of the 101 patient referrals to the Facility since October 2017, 40 (39.5%) were from MGH, 15 (14.9%) from St. Elizabeth's Medical Center and 9 (8.9%) were from Beth Israel Deaconess in Boston. The Applicant expects to expand the referral base to add Tufts Medical Center, and Boston Medical Center. The Applicant met with staff from local hospitals to gain a better understanding of the care needs of the patients and to support the continued need for the Facility and the improved care that it will offer after completing the renovations. The Applicant reports that the common theme at these meetings was the need for a facility to accommodate the needs of higher acuity patients.[14] The Applicant reported that cardiac and pulmonary disease were leading secondary diagnoses of patients from MGH, BWH, Tufts, and BMC, which were the targeted partner hospitals for referrals. Based on the meetings, the Applicant is proposing upgrades in equipment and staff training to improve access to more specialized care for patients with complex needs.

The standard model of care at Marquis Facilities includes specialty physicians, clinicians, and a subacute director as well as training in specialized program areas supported by weekly rounds and clinical oversight from medical specialists. The planned renovations will facilitate improved

[12] Sully, E. (2016, May). 'Homelike' long-term care: An achievable goal? . Retrieved January, 2018, from http://criticalgerontology.com/homelike-long-term-care/

[13] Koren, M. J. (2010). Person-Centered Care For Nursing Home Residents: The Culture-Change Movement. *Health Affairs, 29*(2), 312-317. Retrieved January, 2018, from https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2009.0966

[14] The Applicant reports that 10 referrals were declined based on clinical complexity.

implementation of this model of care and the Applicant anticipates both improved care and improved health outcomes. Cardio-pulmonary and stroke recovery programming for long-term and short-term patients will become a part of the Facility programming. Installation of piped-in oxygen, will improve care management for Pulmonary/Stroke and Cardiology Program patients. The Applicant states the intention to incorporate a Specialty Dementia Program at the Facility, which will include support groups for care givers of patients with Dementia.

Serving the Clinically Complex Patients

The Applicant plans to partner with local hospitals for clinical training, oversight, and program development. The clinical competency training and collaboration with local providers will allow the Facility to accommodate all levels of care required by the patient panel with more specialized treatment, particularly for higher acuity patients with more complex care needs. The Applicant argues that the renovations to the Facility will allow it to better accommodate the needs of patients referred to the Facility from nearby hospitals.

The Applicant is currently in the process of coordinating training with Tufts Medical Center to train Marquis staff on Left Ventricular Assist Device (LVAD) patients so that the Facility can serve as a post-acute option for patients who might otherwise be referred to a LTACH. The Facility will be equipped to accept patients referred from the Hospital or from the LTACH, thus decreasing the length of stay at LTACHs and reducing the cost of care. The Applicant will install piped-in oxygen and wall suctioning, increasing the comfort levels of patients while reducing the need for portable oxygen concentrators and portable suctioning machines, required for tracheostomy patients and higher acuity patients with pulmonary diseases who often have secondary infections and other comorbidities. Mass Eye and Ear (MEE) will offer training on caring for laryngectomy patients and the Facility's close proximity to MEE will allow it to accommodate laryngectomy patients who require weekly follow-up appointments at MEE. The Applicant reported additional planned meetings with the MGH transplant team. Organ transplant patients from MGH will require single rooms and the addition of private rooms will enable the Facility to meet this requirement and serve these residents.

Measurable outcomes

Marquis proposed the following measures for assessing the impact of the proposed project: referrals, admissions, re-hospitalizations, census occupancy and mix, resident admission questionnaires, patient satisfaction surveys, discharges home, occupancy, and payer mix. The Applicant currently tracks patient admission and discharges through several tools that are integrated into its electronic medical records. One tool, called Patient Ping, allows care coordinators to monitor the care being delivered to their members so that a facility can track the patients they share with other healthcare teams and systems. After a patient is discharged, Patient Ping alerts the Facility when a patient is admitted to another site for care, including admission to an ED, hospital, or an appointment with a primary care physician (PCP) that is within the ACO. Patient Ping allows for communication between members of a patient's care team, which helps a facility track patients post discharge upon reentry into the community, and monitor a patient's ability to remain in the community. Marquis states that the type of

monitoring provided through Patient Ping will improve care delivery, reduce duplication, improve quality, and reduce the costs of care.

The Applicant will measure the impact of renovations to the Facility on patient experience and quality of life through patient satisfaction surveys. The Applicant currently monitors hospital referrals and will continue to do so after the transaction. With assistance from ACO partners, Marquis will report on cost containment and improved patient outcomes through quarterly and annual data review. The Applicant will use the Minimum Data Set (MDS) and Resident Assessment Protocols (RAPs) to assess patients' functional capabilities, care needs and progress resulting from rehabilitation.[15]

Care Coordination

The Facility is staffed with what the Applicant called a Marquis Care Navigator – a staff person who serves as the patient's main point of contact and who maintains that contact through the first four weeks after the patient transitions out of the Facility and back home. The Applicant asserts that the care navigator, equipped with information about the patient's health status and ongoing care, is well-positioned to support the patient through transitions in care and linkages with different providers in order to comprehensively coordinate patient care and, the Applicant asserts, the assistance they provide can reduce medical errors and readmissions.

The care navigator is offered to patients from their initial point of contact at the hospital to four weeks after transitioning back home. The Applicant reports that the Facility will maintain its current relationships for members in the Partners' ACO, Beth Israel ACO, Tufts (WellForce ACO), Steward ACO as well as any additional ACOs. Every resident at the Facility undergoes an intake assessment, and periodic assessments which are used to establish linkages to care for long-term residents to ensure that they are at their highest level of functioning and to provide community supports for short-term residents upon discharge, which improves their care coordination and continuity of care.

Community Engagement

The Applicant met with leaders in Boston hospitals and with community physicians, which helped them understand the need for additional capacity to serve the more complex patients. Marquis held family and community meetings, and a meeting with the North End Community Health Center. These meetings identified a need for continued access to care for the North End community and reintegration of local patients receiving acute care outside of Boston. The Applicant also met with local businesses, church associations, civic groups, and the local council on aging. The Applicant submitted letters from the community in support for the transaction.

[15] Minimum Data Set (MDS) and the Resident Assessment Protocols (RAPs) are part of the a core set of screening, clinical and functional status elements, including common definitions and coding categories, which forms the foundation of the comprehensive assessment for all residents of long-term care facilities certified to participate in Medicare or Medicaid.

Finding on Factors 1 and 2

Marquis has demonstrated that the physical renovations and clinical enhancements proposed are designed to improve care for the patient panel and improve the Facility's capacity to accept higher acuity patients. This is a response to the needs expressed by area hospitals, and the renovations will improve the Facility's ability to support patients transitioning from the hospital setting to the Facility as well as from the Facility back home into the community. The Applicant has designed measures to assess improved outcomes and quality of life, and has been responsive to cost containment and delivery system transformation goals of the Commonwealth.

Factor 3

Factor 3 requires compliance with relevant licensure, certification, or other regulatory oversight. The Applicant provided sufficient information in the form of its Affidavit of Compliance and other relevant documentation.

Factor 4

The DoN regulation at 105 CMR 100.210(A)(4) requires that an Applicant for a DoN provide "sufficient documentation of 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 and that the Proposed Project is financially feasible and within the financial capability of the Applicant." Factor 4 requires that the documentation provided in support of the Department's finding shall include an analysis of the Applicant's finances, completed by an independent Certified Public Accountant (CPA Report).

The Analysis prepared by BDO USA LLP (BDO) and dated November 13, 2017 was limited to an analysis of the five year financial projections for the Facility for the fiscal years ending 2018 through 2022 prepared by the Applicant, and the supporting documentation. Analysis of revenue projections included a review of historical operations of the Facility under previous management as well as the changes in reimbursement rates, payer mix, and patient occupancy expected to occur under Marquis' Management. Based upon operational changes and the renovations of the Facility, BDO reports that Marquis projects that the Facility will be able to attract more patients with a more profitable reimbursement rate and that Marquis is anticipating a decline in the percentage of Medicaid patients at the Facility from 64.5% under prior ownership in 2015, to 59.7% for the year-ending 2018, and stabilizing at 48.1% for the fiscal years 2019 through 2022.

Marquis acknowledges that the payer mix will shift but asserts that the number of MassHealth patients will not decrease. Rather, the more complex patients will be covered for the shorter term stays through Medicare, and other revenue will be generated as a result of the ability, facilitated through these renovations, to offer more rehabilitation and clinical care. BDO tested Management's assertion that the payer mix of the Facility would shift away from patients with

Medicaid to patients with Medicare A and HMO insurance plans by comparing this Facility to other locations recently acquired by Marquis. Revenue projections were deemed reasonable.

An analysis of operating expenses accounted for a 1% to 3% increase in the majority of expenses per year, which the Report states, is consistent with national inflation. The renovated Facility will operate with the reduced number of licensed beds (from 140 to 100) which results in lower operating costs compared to those under prior management. The analysis showed that the reduction in beds from 140 to 100, would reduce the number patient days and staff, which would decrease expenses. The CPA report reviewed the capital expenditure estimate associated with the renovation of the Facility and deemed it reasonable. The Facility will see reductions in net operating income from 13.7% to 11.6% based upon estimates of capital expenditures for maintenance of the North End.

Finding on Factor 4

Based upon its review of the relevant documents and analysis of the Projections, BDO determined the anticipated operating surplus is a reasonable expectation and based upon feasible financial assumptions and that the Projections are reasonable and feasible.

Factor 5

Factor 5 requires an assessment of the relative merit of the proposed project compared to alternative methods for meeting the patient panel needs. In this context, the Applicant considered three alternatives to the proposed project: do nothing, close the facility, or replace the existing facility through new construction. The Applicant's primary consideration was to ensure continued access to a skilled nursing facility (SNF) for the North End community and thus rejected either to close the facility or do nothing. New construction at a different site would have been too costly and would have decreased access to the facility for the North End community. Renovating the existing facility proved to be the most cost-efficient way of "align[ing] this facility with the identified healthcare needs of the community".[16]

Finding on Factor 5

The Applicant received input on the proposed transaction from experts who evaluated the business proposal and determined that the Applicant's plan for the facility represents the maximally productive use of the site.[17]

Factor 6

In compliance with Factor 6 of the regulations, as a condition of approval, the Applicant will make payment in the amount of $185,487.63 to the Community Health Initiative (CHI) Healthy

[16] DoN Application 17112810 Responses, at page 17.
[17] DoN Application 17112810 Responses, at page 7.

Aging Fund pursuant to 105 CMR 100.210(6) and the *Determination of Need Community Health Initiative Planning Guideline* (Guideline). Pursuant to the Guideline, Holders of a DoN for a long-term care facility are directed to fulfill their CHI requirements by contributing 3% of the Total Capital Expenditure of the Proposed Project to the Healthy Aging Fund. This payment will be made within six months of receipt of the approved Notice of Determination of Need.

Finding and Recommendation

The proposed project includes renovations to the patient spaces, additional single rooms, expanded rehabilitation and clinical space, and improved space to facilitate clinical care coordination. The admission of the higher acuity patients meets the need of surrounding discharging hospitals, supports the financial feasibility for the Facility, and will not negatively affect access to the Facility for MassHealth patients and addresses the Commonwealth's goals for cost containment. The decision to renovate the Facility, rather than move or close it, maintains access to the community and to the referring hospitals.

Like all Holders of a DoN, Marquis will be required to report to the Department annually, including measures related to the achievement of each of the DoN factors 105 CMR 100.310(L) and to demonstrate compliance with all standard conditions.

Based upon a review of the materials submitted, Staff finds that the Applicant has met each DoN factor and recommends that the Department approve this Determination of Need application subject to the Standard Conditions and the following additional requirements which shall become conditions of the DoN:

Other Conditions

1. In its first report mandated by 105 CMR 100.310(L), the Holder will provide the following:
    a. A description of the current payer mix of the North End Rehabilitation and Healthcare Center, reported by each of the health insurance coverage categories reported on by CHIA.[18]
        i. Private Commercial – Overall
        ii. Private Commercial – MA Health Connector QHPs (Subsidized and Unsubsidized)
        iii. MassHealth – Overall
        iv. MassHealth – Temporary
        v. MassHealth – Managed Care Organizations (MCO)
        vi. Senior Care Options, One Care, PACE
        vii. Medicare Fee-for-Service (Parts A and B)
        viii. Medicare Advantage

[18] *Enrollment Trends Technical Appendix* (Rep.). (2018, February). Retrieved February, 2018, from CHIA website: http://www.chiamass.gov/assets/Uploads/enrollment/2018-feb/Enrollment-Trends-Technical-Appendix-.pdf

2. For the duration of the reporting period mandated by 105 CMR 100.310 (L) and (Q), the Holder will provide annual updates on the payer mix of the North End Rehabilitation and Healthcare Center as outlined in 1.a.