ESH Feasibility Study Project

Assessment of the Market Need & Necessary Conditions for a state run LTAC Hospital on the Zambarano Campus in Rhode Island

Final Report: April 7, 2023

Faulkner CONSULTING GROUP

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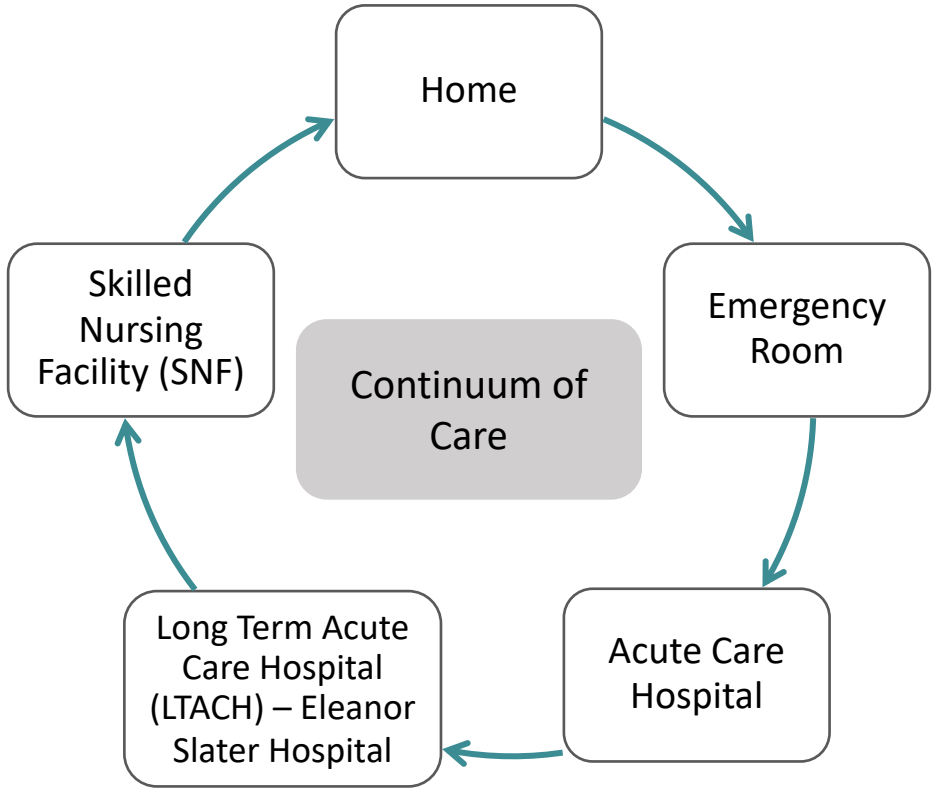
Background

ESH Vision and Goals

Goal	Return Eleanor Slater Hospital (ESH) to Long Term Acute Care Hospital (LTACH) Functionality in a modern facility
Keeping Care in RI	Provide in-state treatment options for individuals currently being transferred out of state for care
Supporting The Continuum	Provide the next step in the continuum for patients in RI's Intensive Care Units who require prolonged hospital level of care recovery
Creating Options	Provide an alternate care level for ESH patients requiring resource-intensive care, but below hospital level of care
Strategic Planning	Maintain overall IMD mitigation strategy allowing for continued FMAP drawdown

What is a Long-Term Acute Care Hospital?



Definition of a Long-Term Acute Care Hospital (LTACH)

- CMS Certified as a Long-Term Acute Care Hospital
- Patients must meet a hospital level of care (LOC) in order to qualify for admission
- Average length of stay (LOS) is 25 days
- Many patients are transferred directly from intensive or critical care units
- Services provided typically include respiratory therapy, infections disease management, complex wound care, and traumatic injuries

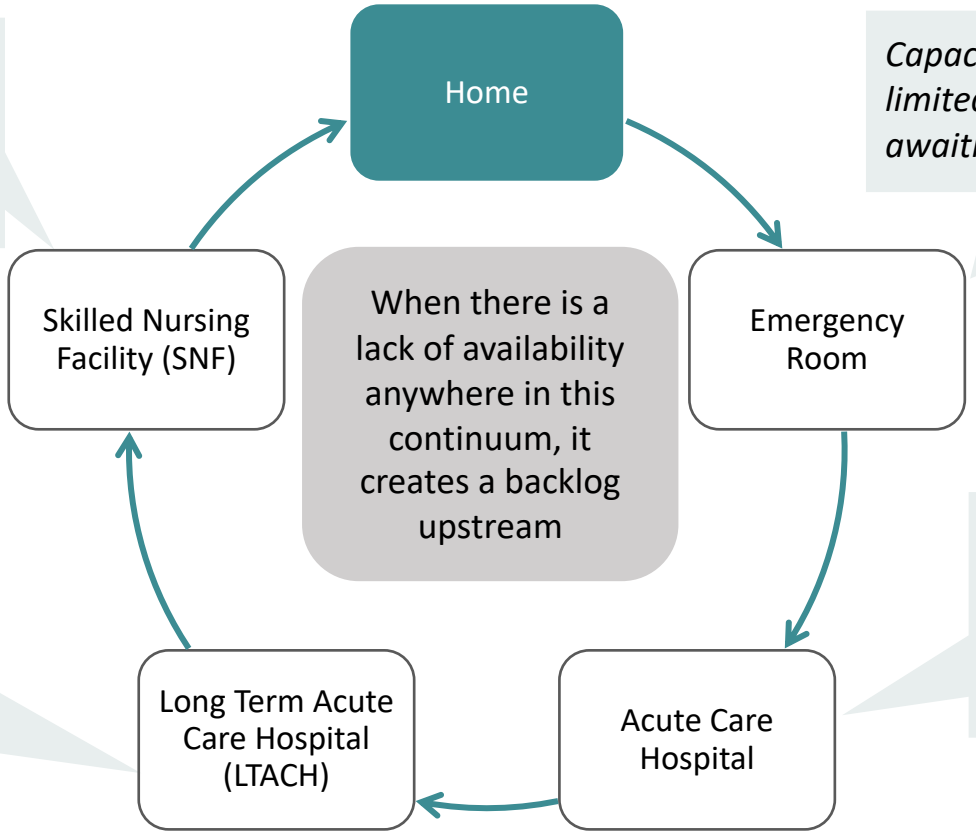
- ***ESH has shifted*** over recent years to meet the State's need for a long-term care facility for our most vulnerable residents with complex medical and behavioral health conditions, resulting in a ***lack of available LTACH beds in RI***.
- Current patients who need LTACH services are either being ***sent out of state*** or ***remaining in acute care hospitals*** longer than necessary, unnecessarily utilizing a bed that is needed for other patients.

Why does RI need an LTACH Hospital?

Without the availability of LTACH beds in RI, acute care hospitals beds will remain backlogged with patients who could be cared for in an LTACH, in turn impacting ER wait times

RI SNFs have capacity to take patients but are not equipped to care for the level of complexity of some non-hospital LOC patients. This creates a backlog in both acute care and LTACH hospitals.

National and RI: LOS varies between 15 days to life depending on needs of the patient



Capacity to see patients in a timely manner is limited by the number of patients in the ER awaiting hospital beds.

National and RI: Average LOS = from 2.75 hours to ~24 hours or more if waiting for a bed to become available

A lack of community discharge options for complex non-hospital LOC patients creates a backlog, leaving almost no LTACH bed availability. This is a contributing factor to the long LOS in acute care hospitals.

National: Average LOS LTACH = 25 days
ESH: Average LOS = 16 years.

*ERs are backed up due to limited acute care beds caused, in part, by a lack of LTACH beds. Therefore, some patients are remaining here for **hundreds** of days longer than necessary.*

National: Average LOS = 5.5 days.
RI: Average LOS = 5.76 with some patients remaining for 450 days or longer

Hospital Interview Feedback:

We have upwards of 20 patients today who have between 50 – 150-day lengths of stay who may qualify for LTACH services, and this is common. This is not beneficial to any part of the system.

Purpose of Engagement

The focus of FCGs engagement has been to conduct a feasibility study of a key element of ESH's strategic plan:

- To **"Build a new facility on the Zambarano campus to replace the aging Beazley building, initially constructed as a tuberculosis sanatorium ($108 million approved in the SFY 23 budget)"**

Key areas of analysis included:

1. **Determining Rhode Island's current and future need** for a state-run Long Term Acute Care/Subacute level of care setting(s) for medically complex patients who may be best served by a modernized facility(ies) on the Zambarano campus.
2. **Conducting a Community Engagement process** to introduce stakeholders to the project goals and workplan, collect feedback, and share results of the population needs assessment and identified service model options.
3. **Identifying the Necessary Conditions** – considering a range of service model options, regulatory/licensure considerations, and corresponding reimbursement options required to meet the needs of the medically complex population at the Zambarano campus.

Project Overview: Key Tasks

*Objective: Determine the state's **current and future need** for a state-run Long-Term Acute/Subacute level of care setting(s) for medically complex patients who may be best served by a modernized facility(ies) on the Zambarano campus*

Task 1: Needs Assessment

- **Analyze** Hospital Discharge Data (HDDS) measures
- **Compare -** Research & compare findings with National benchmarks
- **Validate -** Utilize Medicaid claims data to validate HDDS data analysis
- **Project** future population needs considering an aging population

Task 2: Community Engagement & Public Input

- **Refine** - Conduct hospital interviews to review, confirm and refine our bed need assumptions
- **Communicate:** Provide ongoing updates to inform the community of our progress and findings

Task 3: Necessary Conditions

- **Options:** Identify comprehensive range of service model options & corresponding number of beds
- **Narrow & specify bed need options** based on
  - Regulatory/licensure considerations
  - Reimbursement options
- **Conditions:** Identify service model selection criteria & additional feasibility considerations for each option

Project Overview: Key Sources

The work is based on a combination of the following four primary sources

RI Specific Data & Analysis	National Landscape Review & Benchmarks	Regulatory Review	Hospital Interviews* (CEOs, CMOs, Directors of case management)

• RI Department of Health, Hospital Discharge Dataset (HDDS)
  • 18+ years
  • Jan 2016 - Jun 2022
• RI Medicaid claims extract 2016-2019
	• 2022 CMS Certified LTACHs – Used to apply national certified LTACH beds to RI population for benchmarking
	• 2015 New Jersey CON: Long-Term Acute Care Hospitals – Published approach for estimating LTACH bed need using hospital discharge data. Used for benchmarking to compare with FCG model estimates
		• RI Medicaid State Plan Amendment (SPA) Transmittal Number RI-20-0008 & cited federal authorities
		• Social Security Act:
		  • Title XVIII
		  • Title XIX
		• Code of Federal Regulations, Title 42
		  • Chapter IV; Subchapters B,C,G
			• **CharterCare:** Our Lady of Fatima, Roger Williams
			  • Jeff Liebman, CharterCare CEO
			  • Donna Rubinate, RN, MCN, Systems COO
			  • Susan Benfeito, VP of Quality, Risk Performance Management
			  • Guenevieve Delmundo, VP of Operations
			  • Kara Lefebvre, CharterCare Systems Director of Case Management
			  • David Lukasiewicz, Roger Williams Director of Case Management
			  • Jennifer Brothers, Lady of Fatima Director of Case Management
			• **Lifespan**: Rhode Island Hospital, Miriam, Newport Hospital
			  • John Fernandez, Lifespan CEO
			  • Maria Ducharme, Miriam Hospital President
			• **Landmark Medical Center**
			  • Michael R. Souza, LMC CEO
			  • Garron Lamp, CMO
			  • Kellie Johnson, Director of Case Management and Resource Utilization
			  • Victoria Reis-Savard, Director of Med/Surg Telemetry
			  • Jodi Lebrun, Assistant Director of Case Management
			  • Margie Macek, CNO
			• **Care New England:** Kent County Hospital
			  • Paari Gopalakrishnan, President and CEO
			  • Thomas Wold, Chief Medical Officer
			  • Ruth McNaughton, Sr Director of Case Management
			  • Mike Stanchina, Pulmonologist and Sleep Physician

Underlined blue text links to source

**For detailed findings, see Appendix A*

Summary of Findings

LTACH Service Models

In order to assess need, we first needed to define the LTACH service model – how would this entity be structured? Who would it serve?

Task 3: Model Options

	Feasible		Not Feasible	
	Option 1	**Option 2**	**Option 3**	**Option 4**
Definition	**Single license hospital** Patient Focus – Medicaid/Duals	**Single license hospital** Patient Focus: All Payor *(incl. Medicare/Commercial)*	**Two Facility Licenses** as an LTACH + Skilled Nursing (SNF) / Long-Term Care (LTC) Facility	**Specialized SNF only –** Sunset LTACH License *ONLY IF* *LTACH bed need estimates indicate insufficient need*
Level of Care	• *Hospital Level of Care +* • *Extended Care/Non-Hospital Level of Care*		• *Hospital Level of Care +* • *SNF Level of Care*	*Extended Care/ Non-Hospital Level of Care Only*

	• Single license hospital models should enable ESH to:
	  • Continue to provide both hospital and non-hospital level services
	  • Maintain Medicaid cost-based reimbursement for all services without risk, and
	  • Better manage risk of IMD classification
			• Possible cost-based reimbursement implications
			• High risk of IMD classification
				• No available LTACH services in RI
				• Possible cost-based reimbursement implications
				• High risk of IMD classification for remaining ESH hospital patients
				• Potential UPL implications

Conclusion:
Single License Models Options 1 & 2 appear to be the most feasible, warranting further assessment

For detailed assessment of all model options, see Appendix B

Feasibility Considerations

Successfully attracting Medicare and Commercial Markets would increase referral rates to ESH; However,
(1) this broad market approach adds meaningful risk and requires substantive investments; and
(2) ESH will need to carefully monitor extended care services (ECS) beds and actively develop community alternatives in order to retain sufficient capacity to support hospital LOC patients

Feasible Single License Hospital Options

	1	2a	2b
Target Market	Medicaid, Duals	+ Medicare FFS, Self Pay	+ Medicare Adv, Commercial
Total ESH Bed Need (Hospital LOC/ECS beds)	**85** (19/66)	**94** (22/72)	**119** (30/89)
General Level of Difficulty	**Low/Medium**	**Medium/High**	**High**

Duals: Medicare & Medicaid Eligible FFS: Fee-For-Service

Necessary Conditions

1	Win Adequate Referrals
2	Prepare to Serve the right DRGs*
3	Meet IMD† rule
4	Adequate Medicare/Commercial Payment
5	Monitor ECS Capacity & Develop Alternative Community Discharge Options
6	Maintain Medicaid cost-based reimbursement

BHDDH/ESH may consider that model options are not mutually exclusive but rather a progression, focusing on Medicaid and Dually Eligible patients to start (Option 1) while expanding community capacity and branching into Medicare and Commercial markets in parallel (Options 2a & 2b) – i.e., building a facility for model options 2a and 2b but staffing only for the beds required in Option 1.

*Diagnosis Related Group (DRG)
† Institutions of Mental Disease (IMDs) are health care facilities over 16 beds which have over 50% psychiatric patients and as such are not eligible for federal reimbursement for patients aged 18 to 65.

Details of Bed Need Over Time (Scenario 2a)

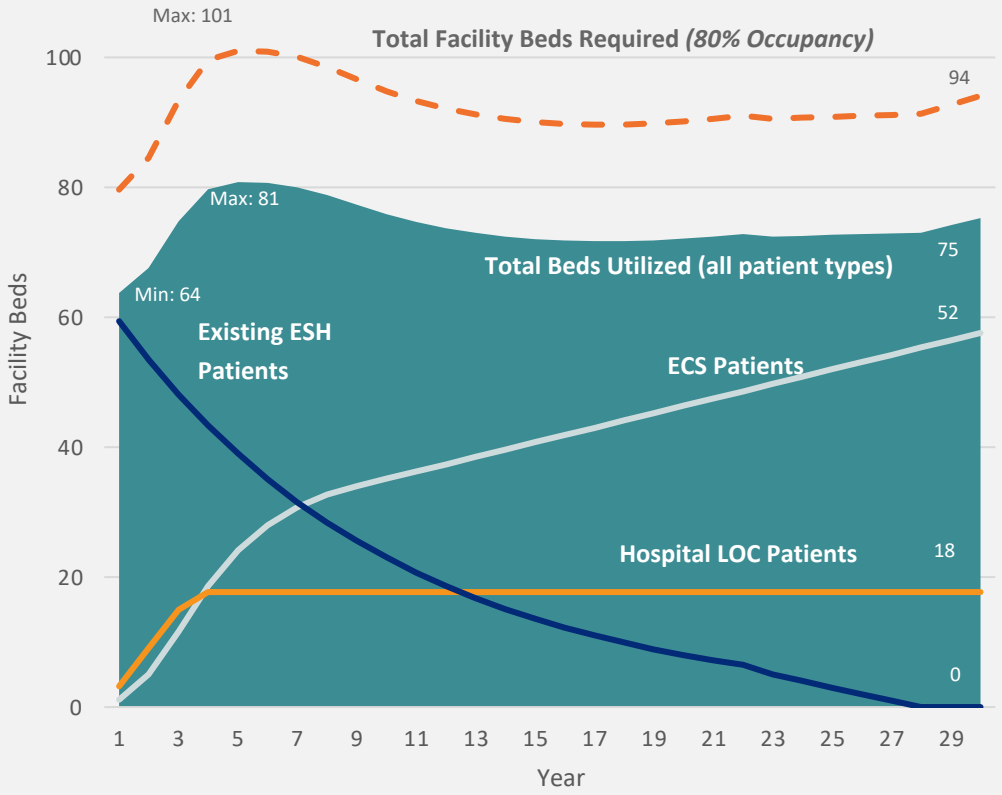
- Considering an 80% occupancy rate, a maximum of 22 LTACH hospital LOC beds and a total of 101 facility beds would be required, dropping to 94 total beds over time with attrition of current ESH population

Target Market 2a Assumptions*:	
Universe of Potential Patients	518
Medicaid & Dual/Medicare FFS/Med Adv & Commercial Referral Rates	90/25/0%
Annual LTACH Admissions (Fully Implemented)	238

Summary of Bed Occupancy Over 30 Years *80% Occupancy*	Min	Max	Est. Steady State *(Year 30)*
LTACH Hospital LOC Beds Required	4	22	22
Total Facility Beds Required	**80**	**101**	**94**

- **Attrition:** By Year 28, all currently existing ESH patient beds are assumed to be vacant, and attrition of new lifelong extended care patients is underway, therefore Year 30 is likely representative of a steady state of occupancy.
- **Total beds utilized** (all patient types) ranges from 64-81, with a steady state of 75. This includes a steady state of 18 LTACH hospital LOC beds **continuously** utilized (see chart on right)
- **Total Bed Need:** Considering an 80% occupancy rate, 22 LTACH hospital LOC beds would continuously be required, and a maximum of 101 total facility beds, which would drop to 94 over time with attrition of current ESH population

Results: Bed Occupancy Over Time



**For detailed bed modeling assumptions refer to Appendix C*

Key Condition: ECS Planning

Total ESH bed need and continued availability of hospital LOC beds is highly dependent upon the Extended Care Services (ECS) population

Extended Care Services (ECS) Assumptions by Payor*

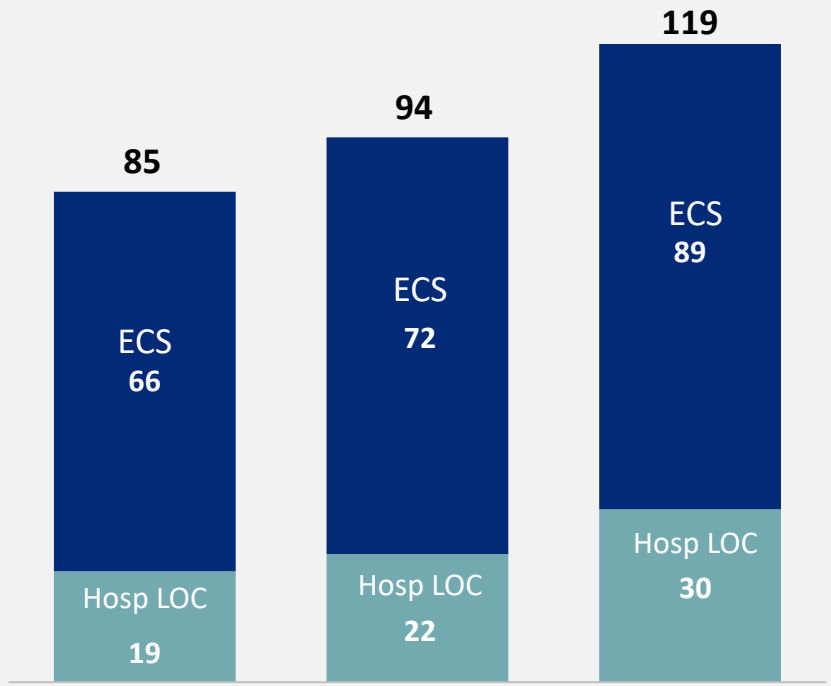
Payor	% Needing ECS	ECS LOS
Medicare FFS & MA*	4%	35% 1 yr. 35% 2 yr. 20% 5 yr. 10% Life
Dually Eligible	6%	
Medicaid Only	6%	
Commercial	4%	
Self Pay	4%	
Other	6%	
Total % LTACH patients needing ECS	~5%	

**Medicare only patients receiving ECS through ESH are assumed to transition to dual status after 365 days of ECS.*

Hospital Interview Feedback:

Estimate of 5% of LTACH patients requiring ECS is a good goal but may be significantly understated.

Total Bed Need & ECS Share



ECS % of Total	Facility Beds		
	77%	76%	75%
	ESH Beds (including 78 hosp. LOC beds in Cranston)		
	40%	42%	45%

Key Risks

- ESH is not permitted to admit patients below hospital LOC†
  - Extended care services are limited to existing ESH patients and new hospital LOC LTACH admissions patients who no longer require hospital LOC but for whom there is no appropriate discharge option
- ESH must work with community partners to develop discharge options to maintain Medicare Certification – this capacity development will be essential to:
  - Avoid ECS bed overflow and prevent backups in acute care hospitals
  - Reduce ECS beds required over time and allow ESH to continue to serve its primary purpose of admitting more hospital LOC patients by expanding market share

† *For authority citations, see Appendix F*

Summary of Bed Need

Total ESH bed need ranges from 85-119 depending upon the scenario; however, we estimate that the vast majority of beds may, over time, be filled by extended care services (ECS) patients

Taking the identified hospital LOC bed need & combining with the ECS bed need gives us an estimate of the total number of beds needed at ESH

	Target Market Options		
	Option 1: *Medicaid, Duals*	**Option 2a:** *+ Medicare FFS, Self Pay*	**Option 2b:** *+ Medicare Adv, Commercial*
Potential LTACH Patients & ESH Referral Rates			
Statewide Potential LTACH Patients	518 patients annually		
Medicaid & Dual/ Medicare FFS & Self Pay/ Med Adv & Commercial Referral Rates	90/0/0%	90/25/0%	90/40/40%
ESH Share of Total LTACH Market	40%	46%	62%
Potential LTACH Patients Admitted to ESH	207 pts	238 pts	322 pts
Estimated Bed Need (Yr. 30 steady state, 80% occupancy)			
Statewide LTACH Bed Need	48 beds needed statewide (LTACH Hospital LOC only)		
ESH LTACH Bed Need (Filled/**80% occupancy**)	15/**19 beds**	18/**22 beds**	24/**30 beds**
ESH Extended Care Beds (Filled/**80% occupancy**)	52/**66 beds**	58/**72 beds**	71/**89 beds**
Total ESH Bed Need *(Hospital LOC + ECS beds)*	**85** *(19/66)*	**94** *(22/72)*	**119** *(30/89)*
General Level of Difficulty	***Low/Medium***	***Medium/High***	***High***

Needs Assessment

Approach to Estimating ESH Bed Need

An estimate of LTACH bed need in Rhode Island was identified using the four steps outlined below and validated through interviews with local hospitals

Our Approach

Steps	Description
Step 1: Estimate RI LTACH Admission Candidates	➢ Using the RI Hospital Discharge Data Set (HDDS) the number of medically complex patients discharged to LTACHs in surrounding states was identified ➢ Using a combination of sources, a profile for "LTACH-like" patients who could have been candidates for discharge to an LTACH if there was availability was defined ➢ Using the estimates of "LTACH-like" and actual LTACH hospital discharges a low, medium, and high count of total RI LTACH admissions candidates was developed
Step 2: Total RI Hospital LOC Bed Need	➢ Estimates of total RI LTACH admission candidates were then translated into RI LTACH bed need for hospital level of care patients – and compared to benchmarks, including: • National Medicare Certified LTACH beds per 1M residents, and ratio for comparable states • Published New Jersey CON LTACH Bed Need Method – A documented approach to demonstrate LTACH need and identify potential LTACH patients using hospital discharge diagnoses and length of stay data.
Step 3: ESH Specific Hospital LOC Bed Need	➢ The payor mix for RI LTACH admission candidates was estimated ➢ Of the universe of potential RI LTACH admissions, an estimated number of patients who might be referred to a future ESH was determined according to payor and DRG mix ➢ Potential ESH LTACH admissions were translated into a ESH hospital LOC bed need
Step 4: Incorporate Extended Care Services (ECS)	➢ Patient profiles and considerations were developed for patients who might need extended care through ESH, including existing long-stay patients without alternative discharge options ➢ Potential ECS patients were incorporated into an overall estimate of beds required for a future ESH facility
To Validate: Interviews with RI Short Term Acute Care Hospitals & Hospital Groups	➢ To validate the estimates of potential patients, the approach for determining bed need, and to gather additional qualitative data, interviews were conducted with leadership, medical staff, and case managers at Lifespan, CharterCare, Care New England, and Landmark Medical Center. ➢ Hospital interview feedback was used to adjust estimates where appropriate

Total Estimated ESH Bed Need *including both Hospital LOC & Extended Care Services (ECS)*

Step 1: Identifying LTACH Admission Candidates

The RIDOH Hospital Discharge Data Set (HDDS) was the primary source used for identifying potential medically complex LTACH admission candidates.

Starting Estimate of Potential LTACH Admission Candidates

- To identify the appropriate patients, we first applied baseline exclusion criteria* which excludes discharges:
  - With primary psychiatric diagnoses
  - To home, against medical advice, or with hospice to narrow in on the appropriate level of acuity
- To identify LTACH-Like patients we considered:
  - Top 28 DRGs - most likely LTACH DRGs based on both CMS + RI data
  - + LOS of 20 - 15 days or more
  - + ICU stay of 3 days or more
  - Excludes patients who went home or expired within 20 days of admission
- + Actual LTACH discharges (146/yr.)**

	2016 – 2019 Avg
Potential Annual LTACH Admissions†	**450 - 587**

† Based on the 2016-2019 Rhode Island Hospital Discharge Data, Center for Health Data & Analysis, RIDOH.

Nationwide CMS published top 25 LTC-DRGs

Most Frequent RI LTACH DRGs not included in top 25

207	Respiratory system diagnosis with ventilator support >96 hours
189	Pulmonary edema and respiratory failure
871	Septicemia or severe sepsis without MV >96 hours with MCC
177	Respiratory infections and inflammations with MCC
166	Other respiratory system O.R. procedures with MCC
208	Respiratory system diagnosis with ventilator support <=96 hours
949	Aftercare with CC/MCC
4	Tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck without major O.R. procedures
981	Extensive O.R. procedures unrelated to principal diagnosis with MCC
682	Renal failure with MCC
870	Septicemia or severe sepsis with MV >96 hours
539	Osteomyelitis with MCC
314	Other circulatory system diagnoses with MCC
291	Heart failure and shock with MCC
853	Infectious and parasitic diseases with O.R. procedures with MCC
919	Complications of treatment with MCC
862	Postoperative and post-traumatic infections with MCC
592	Skin ulcers with MCC
559	Aftercare, musculoskeletal system and connective tissue with MCC
56	Degenerative nervous system disorders with MCC
371	Major gastrointestinal disorders and peritoneal infections with MCC
393	Other digestive system diagnoses with MCC
193	Simple pneumonia and pleurisy with MCC
190	Chronic obstructive pulmonary disease with MCC
463	Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders with MCC
3	ECMO or tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck with major O.R. procedures
872	Septicemia or severe sepsis without MV >96 hours without MCC
698	Other kidney and urinary tract diagnoses with MCC

Detailed baseline exclusion criteria is available in Appendix D

*** For additional analysis of RI LTACH discharges see Appendix E*

Step 2: Translating Potential Patients into LTACH Bed Need

Based on three distinct methodologies – preliminary estimates suggested a need for 27-63 LTACH Beds in Rhode Island

		Potential Pts	LTACH Beds
1	**Benchmarks (No. LTACH Beds / 1M residents)[1]**		
	National Avg Applied to Rhode Island Population (excl. outliers)	-	63
	Delaware (comparable sized state)	-	35
	New Jersey (adjusted for RI population)	-	54
2	**RI Estimate Using New Jersey LTACH CON Method[2]**		
	Discharges w/ LOS > 20 days*, Top 26 LTACH diagnoses	500	37
3	**RI Specific Experience and LTACH Characteristics[3]**		
	Baseline: Actual RI Hospital Discharges to LTACHs	146	-
	Low: Actual Discharges to LTACHs doubled (to adjust for in state opportunity)	292	27
	Med: LOS ≥ 20 days, 3+ days in ICU, Top 28 LTACH diagnoses + Actual Discharges to LTACHs	450	42
	High: LOS ≥ 15 days, 3+ days in ICU, Top 28 LTACH diagnoses† + Actual Discharges to LTACHs	587	55

* LOS 15 days > annual ALOS of ~5 days

† Excludes routine discharge home, home under home health services, and expired discharge status for LOS < 20 days

- New Jersey published their certificate of need (CON) method for estimating LTACH bed need using discharge data.
  - To translate discharges into beds, New Jersey used a common industry approach of assuming a 25-day avg. length of stay and accounting for 80% occupancy.
  - To validate this approach, we met with New Jersey stakeholders involved in its creation.
- We then created a model to translate potential patients into beds, considering the types of diagnoses ESH would be admitting and expected lengths of stay specific to those diagnoses

During hospital interviews, leadership, medical staff, and case managers all expressed a significant need for LTACH services in Rhode Island

In reviewing potential patient estimates of 450-587, hospitals confirmed validity of FCGs approach, and the general feedback was that potential LTACH patient estimates could be understated

[1] Source: 2022 CMS Certified LTACHs, https://data.cms.gov/provider-data/topics/long-term-care-hospitals

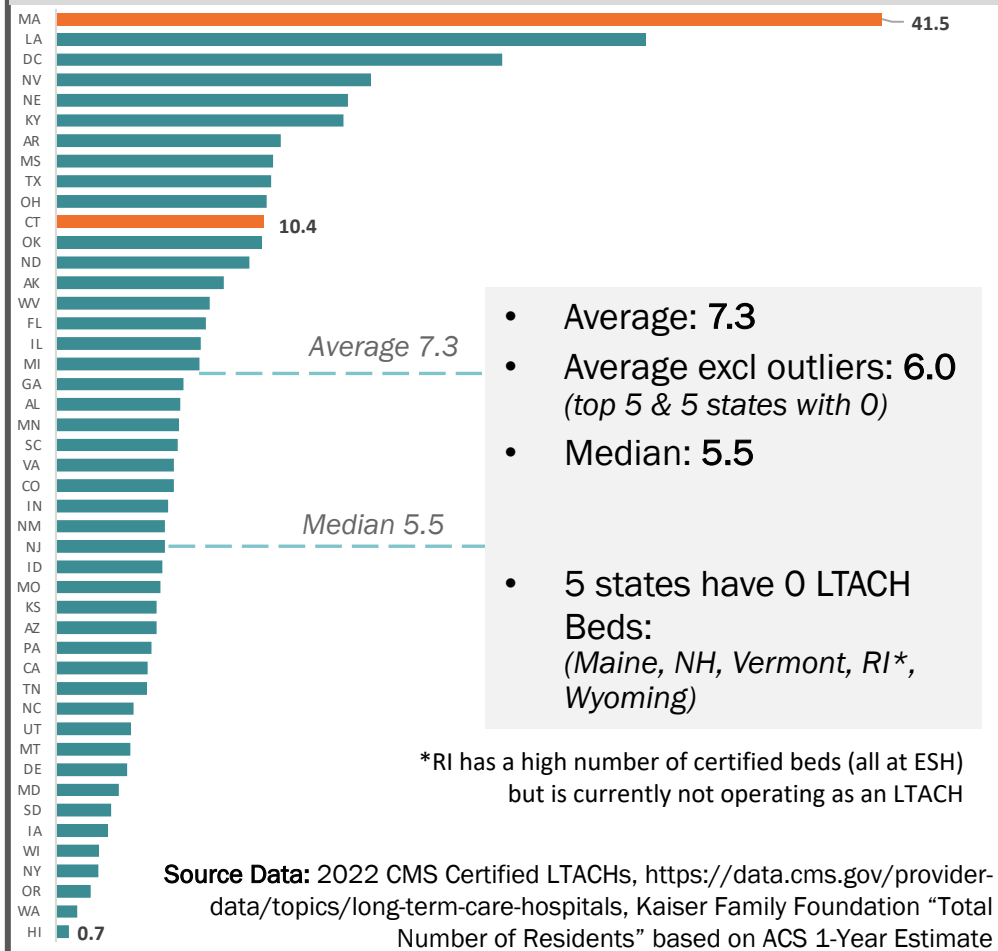
[2] Source: 2015 New Jersey CON: Long-Term Acute Care Hospitals https://www.nj.gov/health/legal/documents/adoption/readoption_8_33f.pdf

[3] Source: 2016-2019 Rhode Island Hospital Discharge Data, Center for Health Data & Analysis, RIDOH. Data represents 4 Year average

Step 2: Comparative National Benchmarks

Annual RI LTACH patients were translated into bed need & assessed validity *vs.* national benchmarks

Medicare-Certified LTACH Beds Per 100,000 Persons



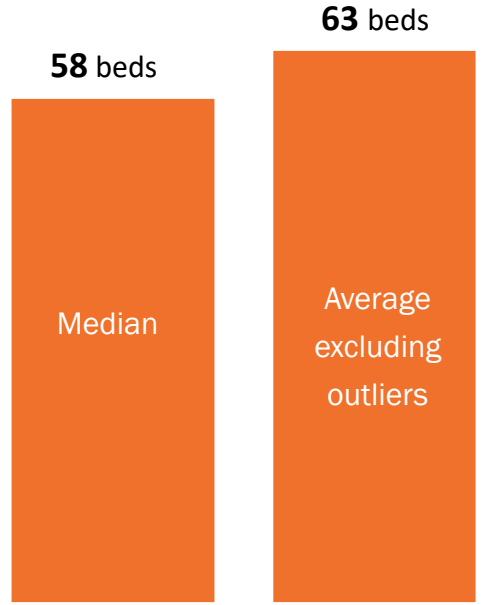
- Average: **7.3**
- Average excl outliers: **6.0**
  (top 5 & 5 states with 0)
- Median: **5.5**
- 5 states have 0 LTACH Beds:
  (Maine, NH, Vermont, RI, Wyoming)*

*RI has a high number of certified beds (all at ESH) but is currently not operating as an LTACH

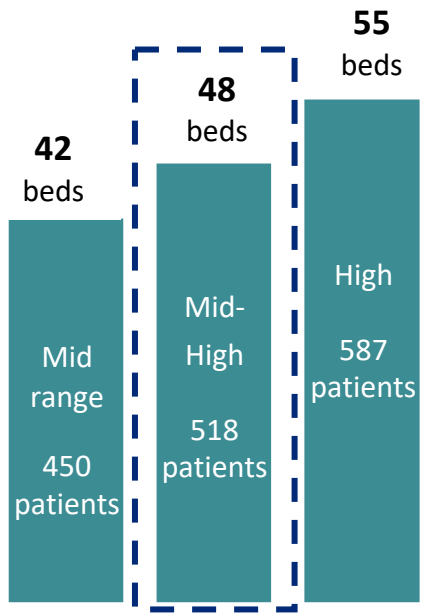
Source Data: 2022 CMS Certified LTACHs, https://data.cms.gov/provider-data/topics/long-term-care-hospitals, Kaiser Family Foundation "Total Number of Residents" based on ACS 1-Year Estimate https://www.kff.org/other/state-indicator/total-residents

After testing LTACH patient estimates with hospitals – they indicated numbers would be on the higher end, so chose the mid point between 450 & 587 of ***518 potential LTACH admission candidates***

Total Estimated LTACH Bed Need in Rhode Island
LTACH Hospital LOC ONLY (not including ECS)



RI Population Adjusted Licensed Bed Benchmarks

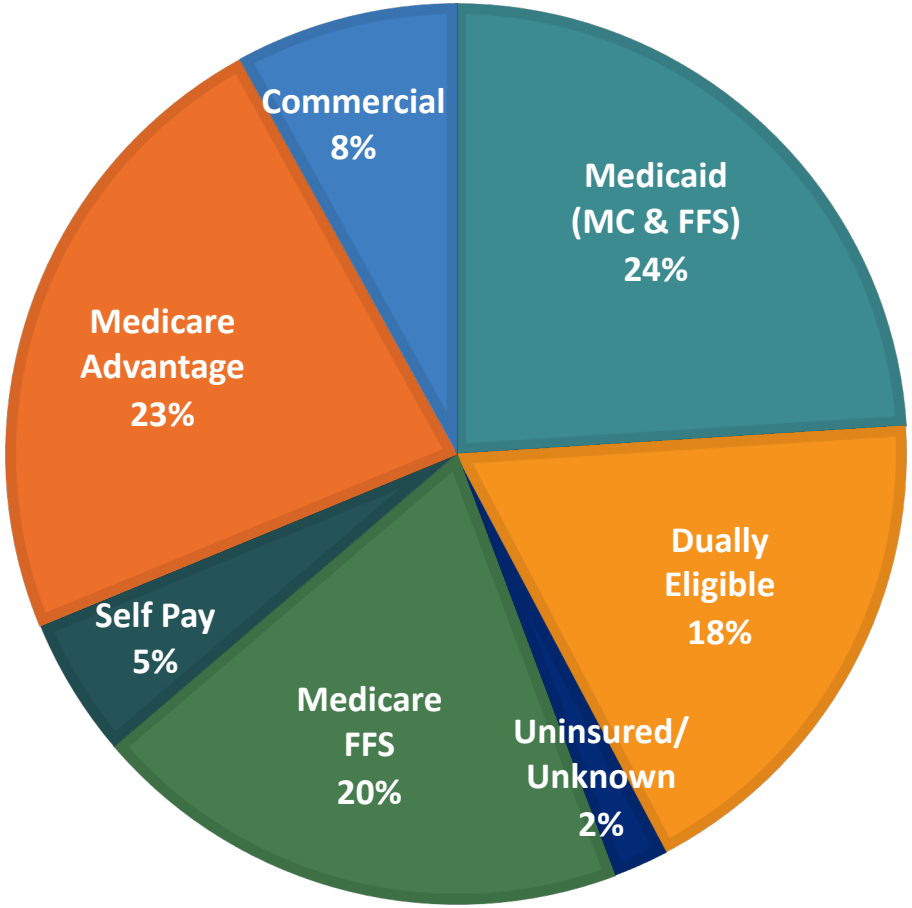


FCG Estimates of Staffed Beds Needed for RI Residents (80% Occupancy)

Note: Benchmarks are total beds, not staffed beds, so expect them to be higher than FCG estimates

Step 3: Estimated Payor Mix of RI LTACH Patients

To estimate ESH referral rates it was necessary to understand the payor mix of these specific patients in RI



Potential LTACH Patients by Payor
N= 585

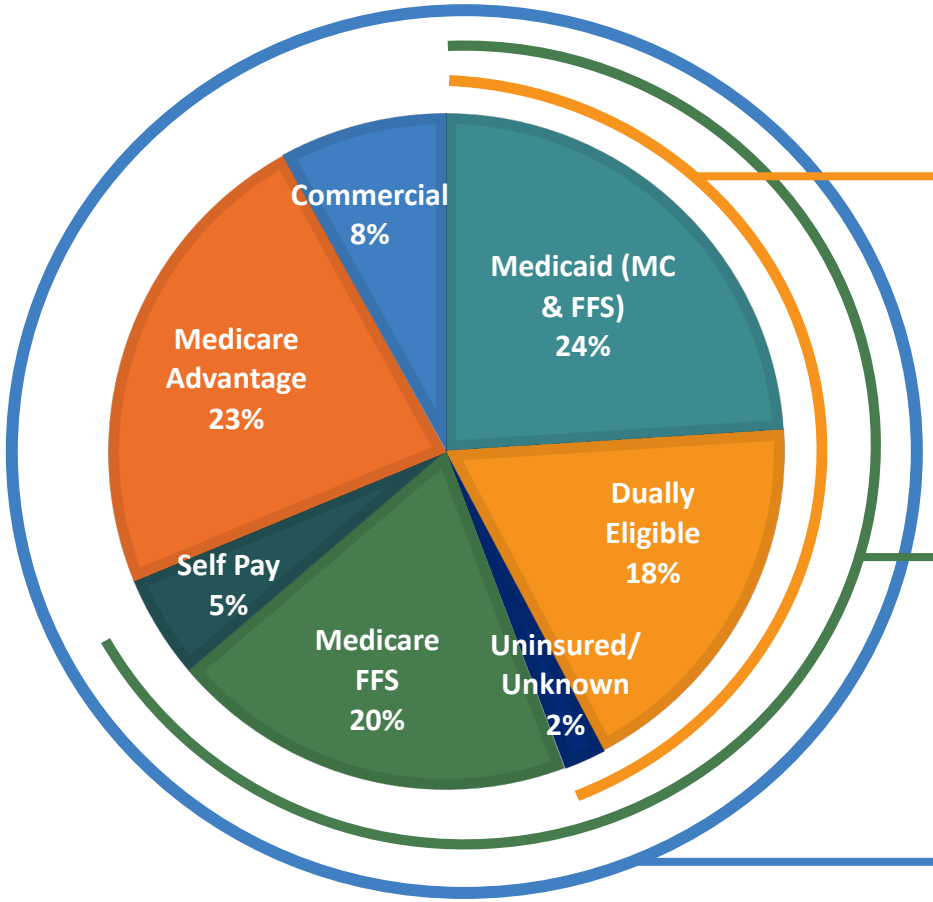
Patient Payor Mix Considerations:

- Historically, ESH patients have been primarily Medicaid & Dually Eligible
  - These payors made up approximately 42% of the total market and are expected to be referred to ESH once there is LTACH bed availability
- Medicare Advantage payors were separated from Medicare FFS based on the additional requirements of becoming an in-network provider for Medicare Advantage plans
  - The ability to admit Medicare Advantage and commercial payors will be dependent on the success of negotiating favorable contracts and achieving a Center of Excellence designation

Sources: Original payor mix derived from RIDOH HDDS 4-year average 2016-2019 for actual LTACH discharges (n=585). 30% of total Medicare payers (~60% Medicare overall, HDDS) are estimated to be dually eligible based on RI duals population of 22% of total Medicare beneficiaries (KFF, 2019) and National LTCH payor mix of ~39% dually eligible out of Medicare FFS claims 2016-2019 as reported by CMS (Medicare Post Acute Care and Hospice by Geography and Provider 2013-2019 Dataset). Split between Medicare Advantage & Medicare FFS derived from CMS Monthly Enrollment file (CMS, March 2023).

Step 3: Potential ESH Referrals by Payor

Potential ESH referrals will be highly dependent upon ESH's ability to capture target markets



Potential LTACH Patients by Payor
N= 585

Estimated % of Total Market

Option 1 Target Market: Medicaid, Dually Eligible, & Uninsured/Unknown — 40%

(Est 90% of Medicaid/Dual referral rate to ESH)

Level of Difficulty: Low/Medium

- Successfully attract referrals for Medicaid, Dually Eligible, and Uninsured/Unknown LTACH patients who are most likely to be referred to ESH – lowest barrier to entry
- **Key Requirements:** Build internal capacity in several skilled care areas; develop educational materials to be disbursed to other acute care hospitals, implement ESH clinical liaisons and a streamlined admissions process

Option 2a Target Market: (+) Plus Medicare FFS & Self Pay — 46%

(+ Est 25% of Medicare FFS/Self Pay referral rate to ESH)

Level of Difficulty: Medium/High

- Medicare FFS patients can elect to go to ESH without special negotiations with health plans – therefore this segment of the Medicare market is more accessible than Medicare Advantage & commercial.
- **Key Requirements:** In addition to Medicaid, successfully attract Medicare FFS by investing in effective rebranding strategy to realign internal culture and public perception with the future vision of ESH

Option 2b Target Market: (+) Plus Medicare Advantage & Commercial — 62%

(+ Est 40% of All Medicare and Commercial)

Level of Difficulty: High

- **Key Requirements:** In addition to Medicare FFS, win Medicare Advantage and commercial contracts and achieve Center of Excellence designation
- Entry into the Medicare Advantage & Commercial markets will require negotiation and partnerships with health plans – greatest barrier to entry

Sources: Original payor mix derived from RIDOH HDDS 4-year average 2016-2019 for actual LTACH discharges (n=585). 30% of total Medicare payers (~60% Medicare overall, HDDS) are estimated to be dually eligible based on RI duals population of 22% of total Medicare beneficiaries (KFF, 2019) and National LTCH payor mix of ~39% dually eligible out of Medicare FFS claims 2016-2019 as reported by CMS (Medicare Post Acute Care and Hospice by Geography and Provider 2013-2019 Dataset). Split between Medicare Advantage & Medicare FFS derived from CMS Monthly Enrollment file (CMS, March 2023).

Step 3: ESH LTACH Hospital LOC Bed Need

ESH hospital LOC bed need ranges from 19-30 depending upon the scenario

To translate statewide LTACH bed need into ESH bed need we made referral rate assumptions by payor to estimate the percentage of RI patients who will likely seek services through ESH

	Target Market		
	Option 1: *Medicaid, Duals*	**Option 2a:** *+ Medicare FFS, Self Pay*	**Option 2b:** *+ Medicare Adv, Commercial*
Potential LTACH Patients & ESH Referral Rates			
Statewide Potential LTACH Patients	518 patients annually		
Medicaid & Dual/ Medicare FFS & Self Pay/ Med Adv & Commercial Referral Rates	90/0/0%	90/25/0%	90/40/40%
ESH Share of Total LTACH Market	40%	46%	62%
Potential LTACH Patients Admitted to ESH	207 pts	238 pts	322 pts
Estimated Bed Need (Yr. 30 steady state, 80% occupancy)			
Statewide LTACH Bed Need	48 beds needed statewide (LTACH Hospital LOC only)		
ESH LTACH Bed Need (Filled/**80% occupancy**)	15/**19 beds**	18/**22 beds**	24/**30 beds**
General level of difficulty	***Low/Medium***	***Medium/High***	***High***

Step 4: Needs of ESH Existing Patients & Future Extended Care Services

- In addition to estimating hospital LOC beds for a new Zambarano facility, ESH will also need to accommodate:
  - Existing long-stay ESH patients
  - Future patients in need of Extended Care Services (ECS).
- **Authority***: Medicaid follows Medicare rules in defining a hospital and allowable services.
  - ***Medicare SSA Section 1883*** ***[****42 U.S.C. 1395tt****]*** *(a)(1) Any hospital which has an agreement under section 1866 may (subject to subsection (b)) enter into an agreement with the Secretary* ***under which its inpatient hospital facilities may be used for the furnishing of services of the type which, if furnished by a skilled nursing facility, would constitute extended care services.***
- **Approach**: To understand total bed need, existing patients and future patients in need of ECS were incorporated into our bed model using the following assumptions:
  - ESH's long-term patient population (existing & future) **attrition of 10% per year**, beginning with current census (66 pts, Jan 2023)
  - On average, we estimate that **5% of new LTACH hospital LOC patients would require an extended stay** due to lack of alternate discharge options (this percentage was estimated to be higher for vent patients and lower for other diagnoses)
  - New ECS patients would remain at ESH for **varying lengths of stay (1 year – life)**

**For additional research/authority citations, see Appendix G*

Step 4: Total ESH Bed Need & ECS Planning

Total ESH bed need and continued availability of hospital LOC beds is highly dependent upon the Extended Care Services population

Extended Care Services (ECS) Assumptions by Payor*

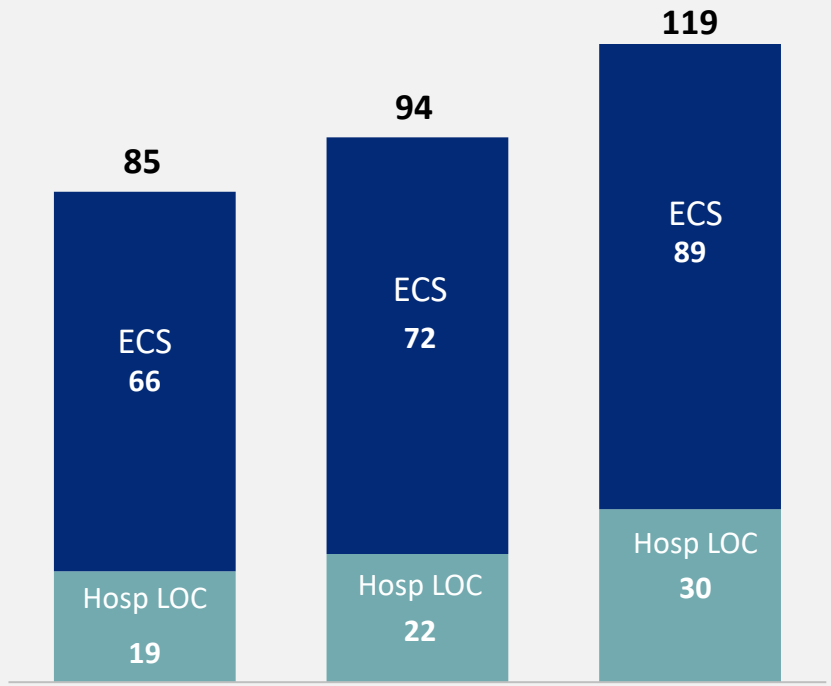
Payor	% Needing ECS	ECS LOS
Medicare FFS & MA*	4%	35% 1 yr. 35% 2 yr. 20% 5 yr. 10% Life
Dually Eligible	6%	
Medicaid Only	6%	
Commercial	4%	
Self Pay	4%	
Other	6%	
Total % LTACH patients needing ECS	~5%	

**Medicare only patients receiving ECS through ESH are assumed to transition to dual status after 365 days of ECS.*

Hospital Interview Feedback:

Estimate of 5% of LTACH patients requiring ECS is a good goal but may be significantly understated.

Total Bed Need & ECS Share



ECS % of Total	Facility Beds		
	77%	76%	75%
	ESH Beds (including 78 hosp. LOC beds in Cranston)		
	40%	42%	45%

Key Risks

- ESH is not permitted to admit patients below hospital LOC†
  - Extended care services are limited to existing ESH patients and new hospital LOC LTACH admissions patients who no longer require hospital LOC but for whom there is no appropriate discharge option
- ESH must work with community partners to develop discharge options to maintain Medicare Certification – this capacity development will be essential to:
  - Avoid ECS bed overflow and prevent backups in acute care hospitals
  - Reduce ECS beds required over time and allow ESH to continue to serve its primary purpose of admitting more hospital LOC patients by expanding market share

† *For authority citations, see Appendix F*

Step 4: Details of Bed Need Over Time (Scenario 2a)

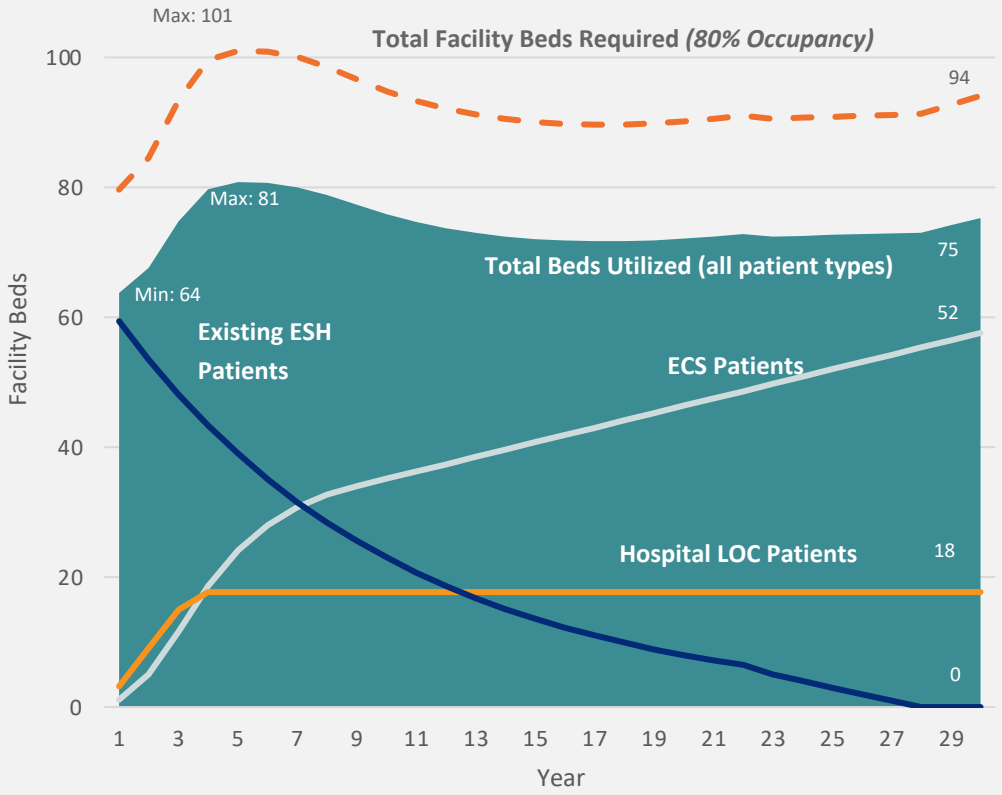
- Considering an 80% occupancy rate, a maximum of 22 LTACH hospital LOC beds and a total of 101 facility beds would be required, dropping to 94 total beds over time with attrition of current ESH population

Target Market 2a Assumptions:	
Universe of Potential Patients	518
Medicaid & Dual/Medicare FFS/Med Adv & Commercial Referral Rates	90/25/0%
Annual LTACH Admissions (Fully Implemented)	238

Summary of Bed Occupancy Over 30 Years *80% Occupancy*	Min	Max	Est. Steady State *(Year 30)*
LTACH Hospital LOC Beds Required	4	22	22
Total Facility Beds Required	**80**	**101**	**94**

- **Attrition:** By Year 28, all currently existing ESH patient beds are assumed to be vacant, and attrition of new lifelong extended care patients is underway, therefore Year 30 is likely representative of a steady state of occupancy.
- **Total beds utilized** (all patient types) ranges from 64-81, with a steady state of 75. This includes a steady state of 18 LTACH hospital LOC beds **continuously** utilized (see chart on right)
- **Total Bed Need:** Considering an 80% occupancy rate, 22 LTACH hospital LOC beds would continuously be required, and a maximum of 101 total facility beds, which would drop to 94 over time with attrition of current ESH population

Results: Bed Occupancy Over Time



**For detailed bed modeling assumptions refer to Appendix C*

Total ESH LTACH Bed Need

Total ESH bed need ranges from 85-119 depending upon the scenario; however, it is estimated that the vast majority of beds will, over time, be filled by Extended Care Services (ECS) patients

Taking the identified hospital LOC bed need & combining with the ECS bed need gives us an estimate of the total number of beds needed at ESH

	Target Market Options		
	Option 1: *Medicaid, Duals*	**Option 2a:** *+ Medicare FFS, Self Pay*	**Option 2b:** *+ Medicare Adv, Commercial*
Potential LTACH Patients & ESH Referral Rates			
Statewide Potential LTACH Patients	518 patients annually		
Medicaid & Dual/Medicare FFS & Self Pay/Med Adv & Commercial Referral Rates	90/0/0%	90/25/0%	90/40/40%
ESH Share of Total LTACH Market	40%	46%	62%
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Estimated Bed Need (Yr. 30 steady state, 80% occupancy)			
Statewide LTACH Bed Need	48 beds needed statewide (LTACH Hospital LOC only)		
ESH LTACH Bed Need (Filled/**80% occupancy**)	15/**19 beds**	18/**22 beds**	24/**30 beds**
ESH Extended Care Beds (Filled/**80% occupancy**)	52/**66 beds**	58/**72 beds**	71/**89 beds**
Total ESH Bed Need *(Hospital LOC + ECS beds)*	**85** *(19/66)*	**94** *(22/72)*	**119** *(30/89)*
General Level of Difficulty	***Low/Medium***	***Medium/High***	***High***

Summary of Key Findings from Hospital Interviews

Hospital interviews confirmed much of the shared analysis and provided additional context that led to refinements of final estimates

Interview Objectives

- Confirm estimate of potential LTACH patients and payors using Hospital Discharge Data
- Understand hospital perceptions of ESH and check referral assumptions
- Provide additional qualitative input on RI's long term care landscape

Key Takeaways:

- **There is a significant unmet need for LTACH services in RI**
  - Hospital leadership, medical staff, and case managers all expressed a **significant need for LTACH services** in Rhode Island
  - In reviewing potential patient estimates, hospitals confirmed the validity of FCGs approach, and the general feedback was that **potential LTACH patient estimates could be understated**.
- **There is also a significant unmet need for long term care services for medically complex patients in RI**
  - Hospitals have patients staying hundreds of days longer than necessary due to a lack of community discharge options
  - Interviewees indicated ESH's future LTACH would encounter the same issues, and initial estimates of 5% of LTACH patients requiring ECS may be significantly understated.
  - ESH may, once again, fill its beds with long stay ECS patients if additional capacity for long stay complex patients is not developed in nursing homes
- **Payor may not be a significant driver of referrals, but hospital reputation is a factor**
  - There is a lack of available LTACH placement across patients with all insurance types
  - Hospitals did not think that payor mix would be a significant driver for where they would ideally refer patients for LTACH services
  - However, hospitals noted the challenge of translating hospital recommended referrals into member choice and selection of ESH
  - In addition, commercial and Medicare Advantage payors may limit choice to Centers of Excellence (TBD - not yet assessed)
  - BHDDH will need to investigate options regarding rebranding ESH to improve the hospital's reputation and to highlight the LTACH availability

Hospital Interview Feedback:

Our beds are full, we need you.

Are you planning to change the ESH name or rebrand? This will matter to families.

…hugely exciting and helpful…

Additional Data Considerations

- COVID Impacts
  - On average 146 patients were discharged annually to LTACHs from 2016-2019
  - From 2020-2021 annual discharges decreased to 90 patients per year (~40% decline).
  - By using our estimate of 518 annual LTACH patients, we are assuming LTACH discharges will increase by ~3.5 times the pre-covid average (146) – which will likely require a shift in referral behavior.
- Aging Population:
  - To account for Rhode Islands aging population, we stratified actual LTACH discharges by age and calculated a compound annual growth rate (CAGR) of 0.8%* based on RI population projections by age group. Note, this population adjustment was not applied to annual admission candidates when modeling bed occupancy.
- Data Limitations:
  - Using publicly available HDDS data, we were not able to identify patients with multiple admissions/discharges which may overstate estimates

*From 2024 to 2040

Necessary Conditions

Summary of Necessary Conditions

Successfully attracting Medicare and Commercial Markets would would increase referral rates to ESH, but adds meaningful risk and requires substantive investments

	Single License Hospital Options		
	Target Market 1: *Medicaid, Duals*	**Target Market 2a:** *+ Medicare FFS, Self Pay*	**Target Market 2b:** *+ Medicare Adv, Commercial*
Total ESH Bed Need *(Hospital LOC + ECS beds)*	**85** *(19/66)*	**94** *(22/72)*	**119** *(30/89)*
General Level of Difficulty	***Low/Medium***	***Medium/High***	***High***

Level of effort to meet each Necessary Condition

	Necessary Condition	Timing	Target Market 1	Target Market 2a	Target Market 2b
1	Prepare to Serve the right DRGs	Immediate			
2	Win Adequate Referrals	Immediate			
3	Meet IMD rule	Longer term			
4	Adequate Medicare & Commercial Payment	Medium Term			
5	Monitor ECS Capacity & Develop Alternative Community Discharge Options	Medium Term			
6	Maintain Medicaid Cost Reimbursement	Ongoing			

Condition #1: Prepare to Serve the Right DRGs

ESH must build capacity and demonstrate expertise in serving patients with the following DRGs in order to successfully attract referrals. ***Due to the short timeline to accomplish this, we would classify as a moderate risk.***

Top 10 DRGs Represent 76% of Estimated LTACH Discharges

#	DRG Category	DRG Description	% Total DRGs
1	Septicemia	Septicemia or severe sepsis without MV >96 hours with MCC	16%
2	Infectious	Infectious and parasitic diseases with O.R. procedures with MCC	15%
3	ECMO/Vent	ECMO or tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck with major O.R. procedures	12%
4	Septicemia/Vent	Septicemia or severe sepsis with MV >96 hours	10%
5	Trach/Vent	Tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck without major O.R. procedures	8%
6	Vent	Respiratory system diagnosis with ventilator support >96 hours	4%
7	Cardiac	Heart failure and shock with MCC	3%
8	Medically Complex	Extensive O.R. procedures unrelated to principal diagnosis with MCC	3%
9	Respiratory	Pulmonary edema and respiratory failure	3%
10	Respiratory/Vent	Respiratory system diagnosis with ventilator support <=96 hours	2%
	Total		76%

Top 5 DRGs represent **61%** of all LTACH cases

- 167 DRGs are represented*
- Remaining 24% of DRGs range widely, with no single DRG having more than 12 cases per year
- Complex/severe wounds account for 6 out of 587 est. patient discharges per year
- All frequent DRGs listed are included in the Top 28

Next 5 DRGs represent **15%** of all LTACH cases

*Based on the high estimate of 587 potential patients (15+ day LOS, 3+ days in ICU, excluding patients discharged home or expired within 20 days + actual LTACH discharges)

Condition #2: Win Adequate Referrals

Regardless of which model is pursued, there are several key requirements that must be successfully implemented. ***We would classify this as having a varying risk level based on which option is pursued.***

Target Market 1: *Medicaid, Duals*	Target Market 2a: *+ Medicare FFS, Self Pay*	Target Market 2b: *+ Medicare Adv, Commercial*

- **Build capacity in several skilled areas to support staff development**
  - Add expertise via training and bringing in expert partners to enhance service offerings in high DRG areas
  - Build reputation and repair public perception
- **Implement ESH Clinical Liaisons, streamline application process & provide educational materials to partner hospitals**
  - Identify ESH staff who can go out to acute care hospitals to meet with clinical staff and perform evaluations of patients awaiting discharge to see if they are candidates for admission to ESH
  - Eliminate lengthy application process and replace with 3-4 key pieces of eligibility criteria needed to evaluate patient possible admission to ESH
  - Develop relationships with acute care hospitals to improve communication between each organization and streamline the admissions process
  - Develop and disburse materials to referring hospitals to educate on ESH competencies and new processes

Required for Medicare (FFS/MA) & Commercial Markets (Options 2a & 2b):

(+) Attract Medicare FFS members:

- **Invest in effective rebranding strategies for all of ESH or the new LTACH Specialty Hospital Unit**
  - Realign internal culture to improve staff perception of hospital
  - Work with a marketing/advertising partner to shift public perception of ESH to be seen as a high-quality choice for LTACH care to patients of means

Common concerns raised by hospital interviewees about referring to ESH included ***lengthy application and admissions processes, public reputation*** *and* ***slow communications.***

Required for Medicare Advantage & Commercial Markets (Option 2b):

(+) Win Medicare and Commercial contracts and achieve Center of Excellence designation:

- Negotiate favorable contracts with Medicare Advantage and Commercial insurers to attract their members as patients
- Work with health plans to build up reputation and achieve Center of Excellence designation

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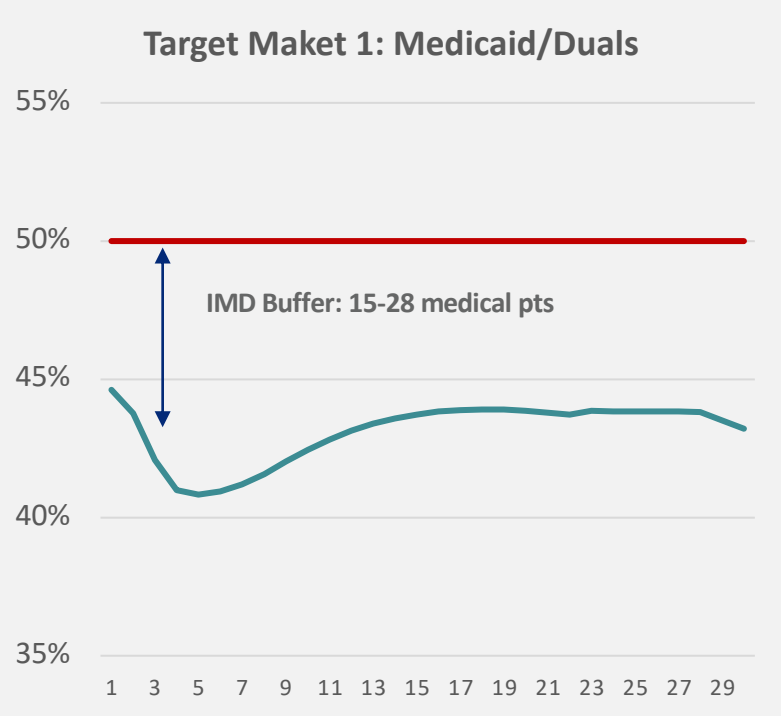
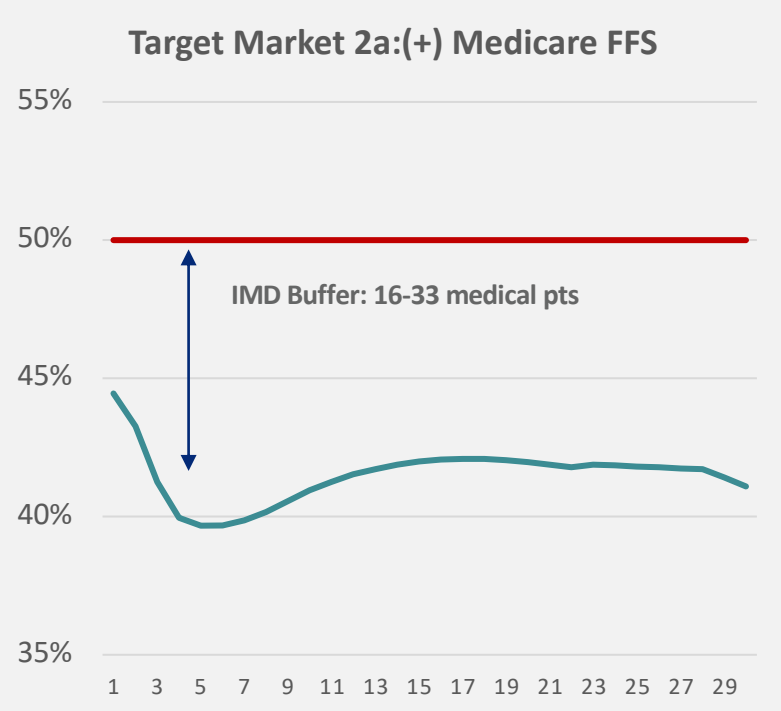
Condition #3: Meet IMD Rule

ESH is estimated to meet the IMD rule each year under all three target market options, with varying levels of risk or "buffer" as shown below. ***We would classify the risk level to be low to moderate depending on the approach to IMD mitigation***

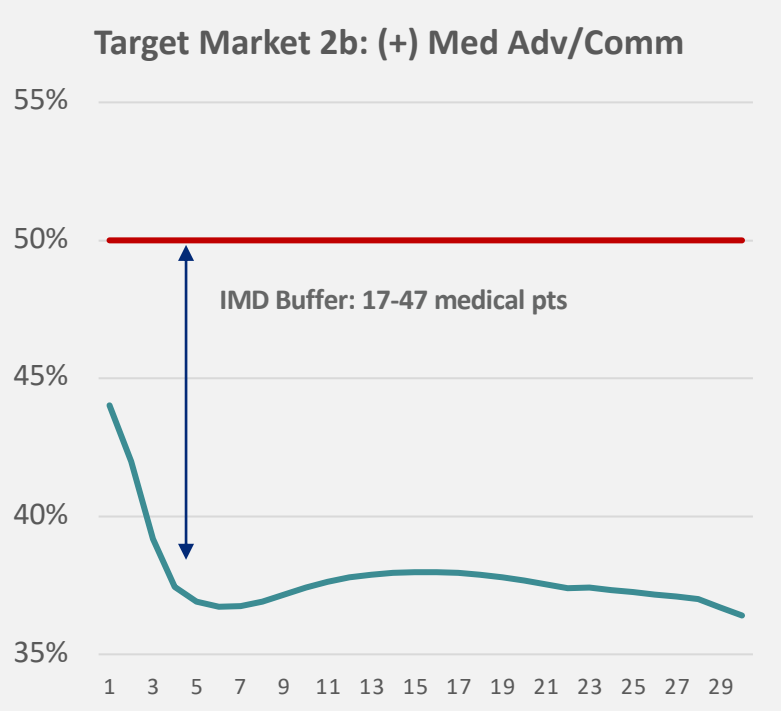
The below graphs show the estimated percentage of non-exempt psych patients as a percentage of total ESH patients using projected medical LTACH admissions and a constant assumption that 100% (78) of psych beds are occupied with 15 exempt psych patients.



Ranges from **15 to 28** medical patients before crossing into IMD territory



Ranges from **16 to 33** medical patients before crossing into IMD territory



Ranges from **17 to 47** medical patients before crossing into IMD territory

IMD Buffer

Condition #4: Adequate Medicare & Commercial Payment

There are several factors to be considered when deciding how aggressively ESH would like to pursue the Medicare FFS, Medicare Advantage, and Commercial markets. ***We would classify these risks as moderate/high.***

Necessary Condition: Adequate Medicare†/Commercial payment for full scope of services & operating costs (N/A for Option 1)*

*Re: Target Market 1: Medicaid SPA & correspondence are clear that both hospital LOC and ECS are covered at cost

	Target Market 2a: *+ Medicare FFS/Self Pay*	**Target Market 2b:** *+ Medicare Advantage/Commercial*
Key Risks	• **Hospital LOC:** Medicare FFS reimbursement may be less than cost for patients who require stays beyond their DRG geometric-mean LOS • **ECS:** Its unlikely Medicare will reimburse unless a new agreement is reached re: being a public hospital with large share of low-income patients ○ CMS may consider a two-tiered payment methodology for hospital level of care and non-hospital LOC services	• **Hospital LOC:** Medicare Advantage & Commercial plans may reimburse at less than cost, requiring RI to make up the difference • **ECS:** Commercial & Medicare Adv insurers are unlikely to cover ECS, seeing this as SNF-level "custodial" care and find alternate discharge options
Considerations	• Medicare/Commercial revenue does not require a State match, thus the net State cost for Medicare & Commercial patients will likely be lower than for Medicaid patients. • However, there may be some state GR required to cover the difference between Medicare/Commercial patient costs and Medicare reimbursement. Depending on the volume of patients, this added cost may be offset by savings on the Medicaid side from of economies and scale/filled beds. • If investments in identified key requirements are not successful in attracting sufficient hospital LOC admissions for target markets 2a & 2b, per patient costs may increase (requiring more general revenue).	

† *For additional context on ESH Medicare Reimbursement available in Appendix H*

Key Next Step:
Conduct additional analysis to justify potential GR expenditures on non-Medicaid patients of the hospital

Condition #5 – Monitor ECS Capacity & Develop Community Discharge Options

ESH is at risk of not being able to discharge ECS patients due to restricted discharge options/community capacity, limiting LTACH hospital LOC admissions. *We would classify this risk as high.*

Initial estimate of patients who will need to transition from hospital LOC to ECS at ESH: **~5%**

- Hospital interview feedback identified that the 5% ECS rate for ESH may be too low of an estimate. One interviewee indicated 5% would be a "good goal" and that many patients may be difficult for ESH to discharge when they no longer need LTACH hospital LOC services.
- Even with ESH implementing careful screening as well as limiting patient admission to those who are expected to improve and be discharged in a timely manner, there is an expectation that ESH will have high complexity patients whose needs remain too resource intensive for nursing homes in RI* and that those patients will need to remain at ESH for a longer period while awaiting an appropriate discharge.
- ESH must carefully plan patient outflows by working with community-based organizations to develop/incentivize additional discharge options for complex patients to maintain hospital LOC capacity. This must be pursued, in partnership with RI Medicaid, for ESH to ensure that their Medicare certification is retained.

Scenario Testing: Patients Requiring ECS
(as % of hospital LOC admissions)
Year 10 example

		5%	10%	20%
Year 10	**Total Beds Required** *(80% Occupancy)*	**96**	**139**	**225**
	% ECS Patients	**76%**	**84%**	**90%**
	Year Bed Need Exceeds 100 beds	-	**Year 5**	**Year 3**

*Outside of RI, nursing homes have successfully developed the capacity to care for medically complex patients once they no longer require hospital level of care.

Key Risks

- **Limited/No LTACH hospital LOC capacity**
  - Investment in rebranding, reputation development, etc. will have been wasted
- **Losing Medicare Certification**
  - If ESH exceeds 78 ECS patients at any time, the hospital will no longer primarily be providing hospital LOC (across both campuses)
  - If ESH does not prioritize developing alternate community discharge options, as is required to keep ECS patients moving, ESH will face future CMS audit trouble and risk losing its certification and federal match

Condition #6: Maintain Medicaid Cost-Based Reimbursement

While ESH currently meets the requirements for maintaining Medicaid cost-based reimbursement, it must continue to review them to ensure ongoing compliance. ***We would classify this risk as low.***

Requirements & Considerations

(Crosscutting – Regardless of Target Market)

- Majority of patients would be reimbursed at ESH's actual costs, with ESH's budget paying the ~49% state share for Medicaid
- There is no indication that the cost-based reimbursement SPA would be changed or withdrawn
- A legal review determined that the Medicaid Upper Payment Limit does not apply to ESH.

Next Steps

Next Steps

Note: Blue Font indicates next steps only required for Target Market 2a/b

	Necessary Conditions	Timing	Next Steps
1	Build Appropriate and Adequate Facilities	Immediate	❑ Build a new facility on the Zambarano campus to replace the aging Beazley building, initially constructed as a tuberculosis sanatorium
2	Prepare to serve the right DRGs	Immediate	❑ Development of excellence and capacity in several skilled care areas (vent, wounds and other areas) and create and share educational materials for ESH staff and partner hospitals
3	Win Adequate Referrals	Immediate	❑ Work with hospitals to participate in discharge planning - Continue to develop ESH clinical liaison relationships and referral and admissions protocols to streamline the application/admissions process ❑ Develop intensive and effective rebranding plan (hire a marketing/branding vendor) ❑ Perform initial assessment of Medicare Advantage and Commercial plans interest & requirements
4	Meet IMD rule	Longer term	❑ Build/enhance tracking tools to regularly monitor IMD status ❑ Begin any necessary preparations required should ESH need to move a psych floor from the Regan building into the new psychiatric hospital due to IMD risk
5	Adequate Medicare & Commercial Payment	Medium Term	❑ Evaluate estimated Medicare/Commercial hospital LOC reimbursement rates to assess sufficiency of payment. ❑ Conduct a fiscal analysis of GR impacts of each target market – considering anticipated future ESH ongoing costs and total (Medicaid + Medicare) reimbursements depending upon patient mix ❑ Explore negotiations with CMS to pay for ECS using a two-tier payment system on the basis of being a public hospital serving a high-proportion of low-income patients
6	Monitor ECS Capacity & Develop Community Discharge Options	Ongoing	❑ Develop clear admissions criteria and protocols for monitoring ECS capacity ❑ Partner with Medicaid to incentivize additional community-based discharge options for complex, non-hospital LOC patients
7	Be permitted to provide ECS	Medium Term	❑ Confirm extended care services are permitted by Medicare – pursue as part of rate negotiation for non-hospital level services.

Any Questions?

Deb Faulkner, President
Faulkner Consulting Group
deb@faulknerconsultinggroup.com
401-486-3700

Carson Colmore, Managing Director
Faulkner Consulting Group
carson@faulknerconsultinggroup.com
401-787-5903

Jessica Brown, Consultant
Faulkner Consulting Group
jbrown@faulknerconsultinggroup.com
401-330-8155

Tricia Leddy, Senior Consultant
Faulkner Consulting Group
tleddy@faulknerconsultinggroup.com
401-580-8986