

Project Description

Sturdy Health Foundation, Inc. (“Sturdy Health” or “Applicant”), with a principal place of business at 211 Park Street, Attleboro, MA 02703, is filing a Notice of Determination of Need (“DoN”) with the Department of Public Health (“DPH”) for the renovation and expansion of the Emergency Department (“ED”) at Sturdy Memorial Hospital (“Sturdy” or “Hospital”), located at the same address (the “Proposed Project”).

Sturdy Health is an independent, not-for-profit, community-driven, fully integrated health system that offers hospital-based acute, emergency, and urgent care, in addition to primary and specialty care at 26 medical office locations across Southeastern Massachusetts including Attleboro, North Attleboro, Mansfield, Norton, Plainville, Rehoboth, and Seekonk. The health system includes one hospital, Sturdy Memorial Hospital, a 128-bed community hospital in Attleboro, Massachusetts that offers the community emergency care, labor and delivery services, surgical services, cancer care and a variety of clinical services on an outpatient basis.

The Proposed Project will address the growing need for emergency services that exceeds the current ED’s footprint and limited capacity. First built in 1979 and last renovated in 2003, the Hospital’s ED can no longer accommodate the number of patients arriving in need of emergency services. To address the need for increased and more efficient space, the Proposed Project will expand the ED’s footprint through new construction to include 50 private treatment rooms, four (4) triage bays, dedicated administrative space for clinical and ancillary staff, and dedicated equipment storage. Included in the treatment rooms will be a 12-bed dedicated and secured behavioral health unit, two (2) trauma rooms, one (1) room for patients of size, one (1) room for OB/GYN patients, and two (2) airborne infection isolation rooms with dedicated bathrooms and anterooms. The renovation will also feature a registration area dedicated to ED patients as well as space for radiology and imaging to be located within the ED. Lastly, the ED will include wider hallways to improve patient transfers and dedicated storage space for stretchers, code carts, and linen carts to keep the hallways clear.

Through the addition of 14 treatment beds and the shift to all private rooms, the ED will be right sized to meet the Patient Panel’s current and future needs for timely, high-quality emergency services. Patients will be able to be expeditiously moved from the waiting room to a private treatment space, reducing the time between arrival and disposition. Moreover, the services necessary to diagnose patients will be embedded within the ED, further improving treatment and disposition times. Further, the Proposed Project includes 12 beds in a separate, secure, and safe space designed for patients experiencing acute behavioral health emergencies. This dedicated unit within the ED will improve the experience and well-being of the patients experiencing a behavioral health crisis as they await transition to a specialized care facility.

In conclusion, the Proposed Project will provide the Hospital with an appropriately sized ED with thoughtful design features to maximize efficiency, care quality, and optimize throughput without increasing health care costs.

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.

Sturdy Health is an independent, community-driven, fully integrated health system that offers hospital-based acute, emergency, and urgent care, in addition to primary and specialty care at 26 medical office locations throughout the region. The health system is comprised of Sturdy Memorial Hospital, a community hospital, and Study Health Medical Group, the medical offices affiliated with the Hospital. As one of Attleboro's largest employers, there are over 2,100 employees when Sturdy Memorial Hospital and Sturdy Health Medical Group are combined.

The Hospital serves a population base of over 160,000 in suburban communities of Boston and Providence. Sturdy Memorial Hospital is licensed by the state of Massachusetts to provide acute care hospital services and has earned the reputation as a quality institution that is worthy of the finest standards of care. It is nationally accredited by DNV-GL Healthcare, demonstrating that it meets or exceeds patient safety standards set forth by the U.S. Centers for Medicare and Medicaid Services (CMS). Sturdy Memorial Hospital received the American Heart Association and the American Stroke Association Gold Plus Target Stroke Honor Roll Elite Achievement Award and earned the silver level Geriatric Emergency Department accreditation from the American College of Emergency Physicians. Sturdy also received the CMS 4-star hospital ranking for quality and patient experience, as well as the "A" Leapfrog Safety Grade, a score achieved by just 34% of hospitals across the country. Sturdy Health Medical Group achieved and continues to maintain the Harvard Pilgrim Health Care Honor Roll status.

Sturdy Health is dedicated to providing safe, high-quality, cost-efficient health care, along with the broadest range of diagnostic, inpatient, outpatient, and emergency services appropriate for a community hospital. The Hospital works to ensure that ample, high-quality primary and specialty care physician services are accessible to area residents. In 2024, over 8,490 patients received inpatient care at Sturdy Memorial Hospital, there were 52,160 visits at the Emergency Care Center and volunteers worked over 42,660 hours. In total, over 322,320 patient visits were provided by the Sturdy Health Medical Group's primary and specialty care providers.

The following charts provide a breakout of Sturdy Health's patients by system (Tables 1, 2, and 3), Hospital (Tables 4, 5, and 6), and Emergency Department (Tables 7 and 8).

Sturdy Health

Age: The age breakdown of Sturdy Health’s Patient Panel remained relatively consistent between 2022 and 2024, with the largest percentage of patients aged 18-45, followed by 46 to 64. Sturdy Health treats relatively fewer children and teenagers, with this age group consistently representing less than 17% of the total patient population.

Gender: Sturdy Health’s Patient Panel is consistently around 45% male, 55% female, and around 0.03% other.

Race and Ethnicity: Data reported between 2022 and 2024 indicate the vast majority of Sturdy Health’s patients self-identified as White (more than 84% in each year). This is reflected in Ethnicity data as well, with consistently more than 83% of patients self-identifying as not Hispanic/Latino. Of the non-White patients, the majority self-identify as Black or African American (roughly 5% each year).

Table 1: Demographic Measure	2022 Count	2022 Percent	2023 Count	2023 Percent	2024 Count	2024 Percent
Total	98,950	100.00%	100,721	100.00%	101,473	100.00%
Gender: Male	44,175	44.64%	44,984	44.66%	44,796	44.15%
Gender: Female	54,735	55.32%	55,712	55.31%	56,650	55.83%
Gender: Other	40	0.04%	25	0.02%	27	0.03%
Age: 0 to 17	16,657	16.83%	16,251	16.13%	15,950	15.72%
Age: 18 to 45	33,064	33.41%	33,636	33.40%	34,049	33.55%
Age: 46 to 64	28,178	28.48%	28,185	27.98%	27,967	27.56%
Age: 65+	21,051	21.27%	22,649	22.49%	23,507	23.17%
Race: White	83,988	84.88%	84,925	84.32%	85,392	84.15%
Race: Black or African American	4,967	5.02%	5,560	5.52%	6,365	6.27%
Race: American Indian or Alaska Native	92	0.09%	87	0.09%	143	0.14%
Race: Asian	2,980	3.01%	3,168	3.15%	3,322	3.27%
Race: Native Hawaiian or Other Pacific Islander	42	0.04%	49	0.05%	57	0.06%
Race: Other	1,754	1.77%	2,409	2.39%	2,586	2.55%
Race: Unknown	4,725	4.78%	4,117	4.09%	3,217	3.17%
Race: Patient Declined	402	0.41%	406	0.40%	391	0.39%
Ethnicity: Hispanic/Latino	4,941	4.99%	5,577	5.54%	6,261	6.17%
Ethnicity: Not Hispanic/Latino	82,715	83.59%	85,366	84.75%	87,300	86.03%
Ethnicity: Patient Declined	1,221	1.23%	895	0.89%	718	0.71%
Ethnicity: Unknown	9,700	9.80%	8,494	8.43%	6,811	6.71%
Ethnicity: Other	373	0.38%	389	0.39%	383	0.38%

More than 40% of Sturdy Health patients across FY 2022 through FY 2024 are from Attleboro and North Attleboro. Sturdy's Patient Panel is comprised of patients from across the state and surrounding region, as evidenced by the more than 20% of patients who come from "All Other" zip codes.

Table 2: Geographic Origin	FY22	FY22	FY23	FY23	FY24	FY24
02703 - Attleboro	28,665	28.97%	29,102	28.89%	29,109	28.69%
02760 – North Attleboro	14,216	14.37%	14,532	14.43%	14,771	14.56%
02766 – Norton	6,809	6.88%	6,861	6.81%	6,864	6.76%
02048 - Mansfield	5,761	5.82%	5,885	5.84%	5,842	5.76%
02762 - Plainville	4,043	4.09%	4,117	4.09%	4,156	4.10%
02035 - Foxborough	2,797	2.83%	2,855	2.83%	3,104	3.06%
02769 - Rehoboth	3,611	3.65%	3,580	3.55%	3,575	3.52%
02771 - Seekonk	3,291	3.33%	3,452	3.43%	3,444	3.39%
02093 - Wrentham	1,905	1.93%	1,931	1.92%	1,908	1.88%
02861 – Pawtucket, RI	1,671	1.69%	1,726	1.71%	1,727	1.70%
02864 – Providence, RI	2,176	2.20%	2,211	2.20%	2,329	2.30%
02780 – Taunton	2,343	2.37%	2,595	2.58%	2,784	2.74%
All Other	20,858	21.92%	21,662	21.89%	21,860	21.54%

Between FY 2022 and FY 2024, Medicare Fee for Service was the largest payer for Sturdy Health patients, representing roughly one-third of the Patient Panel. Commercial insurance was also a sizable portion of the Patient Panel, making up roughly one-third across each year. Commercial Medicare has seen an increase in use amongst Sturdy Health patients, rising from 10.9% in FY 2021 to 16.8% in FY 2024.

Table 3: Sturdy Health Payer Mix	FY 2022	FY 2023	FY2024
Commercial PPO/Indemnity	21.9%	22.4%	24.4%
Commercial HMO/POS	10.4%	9.6%	8.2%
MassHealth	5.1%	4.6%	4.2%
Medicaid Managed	13.8%	14.0%	13.4%
Commercial Medicare	12.6%	15.1%	16.8%
Medicare FFS	33.7%	31.8%	30.2%
All Other	2.4%	2.7%	2.9%
Total	100.0%	100.0%	100.0%

Sturdy Memorial Hospital

Age: Sturdy Memorial Hospital's age breakdown skews slightly older than that of the broader Sturdy Health system, with a smaller portion of children and teenagers (roughly 13% each year, compared to 17% for Sturdy Health) and slightly higher proportions of patients Ages 46 to 64 and 65+. Sturdy Memorial Hospital's age breakdown has been consistent across the past three years.

Gender: The Hospital's Patient Panel is consistent from 2022 to 2024, with approximately 43% of patients identifying as male and 57% identifying as female. Less than 0.05% identify as other.

Race and Ethnicity: Like the broader Sturdy Health system, Sturdy Memorial Hospital sees a large majority of patients self-identifying as White (greater than 85% each year). The portion of patients self-identifying as Black or Asian has increased from 2022, going from 5.32% to 6.77% for Black or African American patients and from 2.99% to 3.31% for Asian patients.

Table 4: Demographic Measure	2022 Count	2022 Percent	2023 Count	2023 Percent	2024 Count	2024 Percent
Gender: Male	35,151	43.56%	35,343	43.61%	35,308	43.25%
Gender: Female	45,517	56.40%	45,689	56.37%	46,317	56.73%
Gender: Other	32	0.04%	14	0.02%	14	0.02%
Age: 0 to 17	10,931	13.55%	10,295	12.70%	10,263	12.57%
Age: 18 to 45	27,600	34.20%	27,341	33.74%	27,672	33.90%
Age: 46 to 64	24,233	30.03%	23,759	29.32%	23,552	28.85%
Age: 65+	17,936	22.23%	19,651	24.25%	20,152	24.68%
Race: White	69,129	85.66%	69,161	85.34%	69,488	85.12%
Race: Black or African American	4,291	5.32%	4,779	5.90%	5,523	6.77%
Race: American Indian or Alaska Native	80	0.10%	72	0.09%	117	0.14%
Race: Asian	2,413	2.99%	2,536	3.13%	2,703	3.31%
Race: Native Hawaiian or Other Pacific Islander	39	0.05%	45	0.06%	52	0.06%
Race: Other	1,375	1.70%	1,915	2.36%	2,053	2.51%
Race: Unknown	3,089	3.83%	2,334	2.88%	1,534	1.88%
Race: Patient Declined	284	0.35%	204	0.25%	169	0.21%
Ethnicity: Hispanic/Latino	4,378	5.43%	4,922	6.07%	5,429	6.65%
Ethnicity: Not Hispanic/Latino	69,017	85.52%	70,704	87.24%	72,275	88.53%
Ethnicity: Patient Declined	871	1.08%	569	0.70%	396	0.49%
Ethnicity: Unknown	6,140	7.61%	4,542	5.60%	3,243	3.97%
Ethnicity: Other	294	0.36%	309	0.38%	296	0.36%

Like Sturdy Health generally, more than 40% of Sturdy Memorial Hospital's patients come from Attleboro and North Attleboro. However, the Hospital does see patients from across the region, as demonstrated by the approximately 23% of patients from "All Other" zip codes.

Table 5: Geographic Origin	FY22	FY22	FY23	FY23	FY24	FY24
02703 – Attleboro	23,950	29.68%	23,958	29.56%	24,140	29.57%
02760 – North Attleboro	11,515	14.27%	11,509	14.20%	11,826	14.49%
02766 – Norton	5,773	7.15%	5,642	6.96%	5,656	6.93%
02048 – Mansfield	4,735	5.87%	4,870	6.01%	4,750	5.82%
02762 – Plainville	3,197	3.96%	3,176	3.92%	3,215	3.94%
02035 – Foxborough	2,302	2.85%	2,233	2.76%	2,485	3.04%
02769 – Rehoboth	2,962	3.67%	2,915	3.60%	2,917	3.57%
02771 – Seekonk	2,677	3.32%	2,791	3.44%	2,779	3.40%
02093 – Wrentham	1,471	1.82%	1,537	1.90%	1,475	1.81%
02861 – Pawtucket, RI	1,396	1.73%	1,426	1.76%	1,449	1.77%
02780 – Taunton	1,986	2.46%	2,140	2.64%	2,277	2.79%
All Other	18,736	23.22%	18,849	23.26%	18,670	22.87%

Medicare Fee for Service represents the largest payer for Sturdy Memorial Hospital. Medicare products (FFS and Commercial Medicare combined) consistently represent close to 50% of the payer mix. Commercial payers were the next largest group, averaging around 30% across the most recent three years.

Table 6: Hospital Payer Mix	FY 2022	FY 2023	FY2024
Commercial PPO/Indemnity	20.1%	20.6%	22.5%
Commercial HMO/POS	9.3%	8.6%	7.4%
MassHealth	5.6%	5.1%	4.7%
Managed Medicaid	13.2%	13.4%	12.7%
Commercial Medicare	13.4%	15.9%	17.6%
Medicare FFS	35.7%	33.4%	31.8%
All Other	2.6%	2.9%	3.3%
Total	100.0%	100.0%	100.0%

Sturdy Memorial Hospital – Emergency Department

Age: The Sturdy Memorial Hospital Emergency Department (“ED”) age breakdown is similar to that of Sturdy Memorial Hospital across patients aged 0 to 17 and those 65+. However, the ED receives more patients aged 18 to 45 than the Hospital (around 38% for the ED compared to 34% for the Hospital).

Gender: The ED sees more male patients than the Hospital, with an approximate 48% male to 52% female breakdown (compared to 43% - 57% for the Hospital).

Race and Ethnicity: Like the broader Sturdy Health and Sturdy Memorial Hospital Patient Panels, the majority of ED patients self-identify as White. The ED sees a slightly larger proportion of patients self-identifying as Black or African American, up to 10.322% in 2024.

Table 7: Demographic Measure	2022 Count	2022 Percent	2023 Count	2023 Percent	2024 Count	2024 Percent
Gender: Male	15,258	47.89%	15,805	47.40%	16,197	47.50%
Gender: Female	16,597	52.10%	17,537	52.60%	17,900	52.49%
Gender: Other	<11	0.01%	<11	0.01%	<11	0.01%
Age: 0 to 17	4,301	13.50%	4,529	13.58%	4,204	12.33%
Age: 18 to 45	12,323	38.68%	12,616	37.84%	12,942	37.96%
Age: 46 to 64	8,060	25.30%	8,102	24.30%	8,248	24.19%
Age: 65+	7,171	22.51%	8,095	24.28%	8,703	25.52%
Race: White	27,179	85.32%	28,124	84.35%	28,188	82.67%
Race: Black or African American	2,649	8.32%	3,006	9.02%	3,519	10.32%
Race: American Indian or Alaska Native	36	0.11%	27	0.08%	44	0.13%
Race: Asian	775	2.43%	876	2.63%	919	2.70%
Race: Native Hawaiian or Other Pacific Islander	18	0.06%	28	0.08%	24	0.07%
Race: Other	839	2.63%	1,042	3.13%	1,194	3.50%
Race: Unknown	318	1.00%	203	0.61%	172	0.50%
Race: Patient Declined	41	0.13%	36	0.11%	37	0.11%
Ethnicity: Hispanic/Latino	2,613	8.20%	2,996	8.99%	3,203	9.39%
Ethnicity: Not Hispanic/Latino	28,448	89.30%	29,807	89.40%	30,390	89.13%
Ethnicity: Patient Declined	123	0.39%	89	0.27%	75	0.22%
Ethnicity: Unknown	602	1.89%	367	1.10%	320	0.94%
Ethnicity: Other	69	0.22%	83	0.25%	109	0.32%

More than 40% of the ED's patients come from Attleboro and North Attleboro. However, like the Hospital and Sturdy Health more generally, the ED also sees a large number of patients from across the region, as demonstrated by the more than 20% of patients from "All Other" zip codes.

Table 8: Geographic Origin	FY22	FY22	FY23	FY23	FY24	FY24
02703 - Attleboro	9,881	31.02%	10,389	31.16%	10,522	30.86%
02760 – North Attleboro	4,164	13.07%	4,319	12.95%	4,489	13.17%
02766 – Norton	2,442	7.67%	2,451	7.35%	2,562	7.51%
02048 – Mansfield	1,999	6.28%	2,155	6.46%	2,148	6.30%
02762 – Plainville	1,267	3.98%	1,320	3.96%	1,394	4.09%
02035 – Foxborough	1,194	3.75%	1,213	3.64%	1,418	4.16%
02769 – Rehoboth	1,051	3.30%	1,056	3.17%	999	2.93%
02771 – Seekonk	875	2.75%	967	2.90%	975	2.86%
02093 – Wrentham	760	2.39%	829	2.49%	814	2.39%
02861 – Pawtucket, RI	675	2.12%	724	2.17%	707	2.07%
02780 – Taunton	628	1.97%	772	2.32%	821	2.41%
All Other	6,919	21.72%	7,147	21.44%	7,248	21.26%
Total	31,855	100.00%	33,342	100.00%	34,097	100.00%

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 requests DoN approval to renovate and expand the existing emergency department at Sturdy Memorial Hospital. The Proposed Project will address the growing need for emergency services that exceeds the current ED's footprint and limited capacity. First built in 1979 and last renovated in 2003, the Hospital's ED is approximately 15,000 square feet. It contains two (2) triage bays, 31 treatment bays (mostly curtained), and five (5) ligature free behavioral health rooms. In addition to emergency services, the Hospital's main registration is located within the ED which not only causes confusion for patients and visitors, but also brings more traffic and congestion to the ED than necessary. Additionally, it limits the space available for ED registration and triage. Space in the ED has also become limited due to the need for ancillary departments to be embedded within the ED. However, this staff does not have permanent office space, so conversations with patients and families are often conducted in front of others. Similarly, the current ED does not have dedicated storage space, further compounding congestion in the ED's hallways.

To address the need for more efficient space, the Proposed Project will expand the ED's footprint through new construction to include 50 private treatment rooms, four (4) triage bays, dedicated administrative space for clinical and ancillary staff, and dedicated equipment storage. Included in the treatment rooms will be a dedicated and secured 12-bed behavioral health unit, two (2) trauma rooms, one (1) room for patients of size, one (1) room for OB/GYN patients, and two (2) airborne infection isolation rooms with dedicated bathrooms and anterooms. The renovation will also feature a registration area solely dedicated to ED patients, so patients and visitors of other hospital departments will no longer enter through the ED. The redesigned ED will include dedicated space for radiology and imaging to be embedded within the ED. The Hospital will replace an existing CT scanner currently located within the Imaging Department and install a new CT scanner within the ED along with x-ray imaging. Lastly, the ED will include dedicated space for staff, wider hallways to improve patient transfers, in addition to dedicated storage space for stretchers, code carts and linen carts to keep the hallways clear.

A. Historical Utilization

When the ED was last renovated in 2003, it was designed to accommodate a maximum of 45,000 annual visits. The ED saw nearly this many patients in FY 2021 and since then has experienced 16.2% growth with 52,160 visits provided in FY2024. Consequently, the number of patients who left without being seen has more than doubled over the same period of time. Similarly, boarding hours in the ED have increased 160% since 2021. These levels of boarding in the ED have resulted in a three-fold

increase in Level II Code Help Activations¹. Additionally, Inpatient Surges² increased 25% in FY2023 compared to FY2021, the increase largely driven by increased volume in the Hospital's ED and a proportional increase of patients requiring inpatient stays. The table below illustrates the growing need for emergency services by the Patient Panel.

Table 9: Historical Utilization	FY2021	FY2022	FY2023	FY2024
Annual Visits	44,893	48,877	51,106	52,160
Left without being seen	719	1,229	1,630	1,356
Left against medical advice	338	428	287	319
Psych boarding	3,444	3,717	3,046	2,262
Medical boarding	5,469	13,536	11,921	20,846
Code Help Activations (All Levels)	92	129	143	47 ³

To address the growing need for emergency services in the community, Sturdy Health has implemented several measures to reduce unnecessary ED visits and help patients receive care in the most appropriate setting for their condition. First, Sturdy Health provides easy-to-understand information on its website instructing patients on where to go for their condition or concern.⁴ Additionally, Sturdy Health has communicated to, and reminded, patients on appropriate uses of emergency care and when urgent care services is a more appropriate care setting to ensure all patients are receiving the right level of care in the right location at the right time. This information is available on Sturdy Health's website⁵ and is frequently communicated via Facebook posts and patient portal messages. The Hospital will continue to educate providers and patients regarding the appropriate setting for medical concerns; however, more than 70% of all ED visits at the Hospital are Levels I-III and are more appropriate for ED-level care. Very few patients come to the ED with a Level V complaint.⁶

B. Projected Utilization

As described above, the Hospital has experienced significant growth across emergency services. The Proposed Project seeks to right-size the Hospital's ED to meet the current need for emergency care in the community while allowing for modest growth in future years. The additional physical space and net new 14 treatment beds will allow the Hospital to provide timely, high-quality emergency services to its Patient Panel. The table below illustrates proposed annual visits to the ED for the first five years following the opening of the new ED.

Table 10: Proposed Utilization	FY2028	FY2029	FY2030	FY2031	FY2032
Annual Visits	53,160	53,410	53,660	53,910	54,160

¹ Level II surges are activated when, after implementing certain measures to decompress the ED, there remains a combination of two or more of the following activation triggers:

- 45 patients in the ED, or 18 after midnight without a proportionate increase in staff
- 10 or more ED patients waiting to be seen by a physician
- 12 or more patients in the ED lobby waiting to be seen
- Multiple patients awaiting in-patient admission for more

² An Inpatient Surge occurs when one non-traditional area is used to accommodate admitted patients.

³ While the number of Code Help activations decreased in FY2024, the number of days in Code Help remained relatively consistent with 214 days in FY2023 and 199 days in FY2024.

⁴ <https://www.sturdyhealth.org/medical-services/urgent-or-emergency-care/>

⁵ <https://www.sturdyhealth.org/medical-services/urgent-or-emergency-care/>

⁶ In FY2024, 21.7% of emergency visits had a Level IV ESI score. The national average for emergency visits with an ESI score of IV is 27%.
<https://epmonthly.com/article/on-your-mark-get-set-triage/>

C. Improved Care Delivery and Health Outcomes

Through the Proposed Project, the Hospital will not only ensure sufficient capacity to meet the needs of its Patient Panel but will implement specific design features to improve the delivery of emergency services and the patient experience.

First, the Hospital's main patient registration is located at the ED entrance, requiring all non-emergency patients and their visitors to pass through the triage area and leads to further congestion in the ED. Additionally, the location of registration limits the space available for a nurse greeter or triage nurse, therefore registration is a patient's first touchpoint when they check into the ED. Further, the waiting areas are inadequate for the number of patients that are waiting to either be triaged or brought back to the treatment area. Compounding space limitation, the current triage area is only comprised of two bays and is insufficient for managing patient flow through the front end. The current ED does not have the space needed for a care team to perform any patient evaluations or provide any initial care, such as vitals, specimen collection, electrocardiograms ("EKG"), medication administration, and other services needed to treat and discharge Level 5 acuity patients who do not require a treatment room.

The new ED will improve front-end flow via a large waiting area for both patients and visitors. The entrance will be dedicated to ED patients only and will no longer be shared with the Hospital's main registration. Patients and visitors who arrive for reasons other than emergency services will no longer enter the Hospital through the ED. Patients of the ED will be greeted by a Registered Nurse and a registration coordinator to ensure the immediate management of critical complaints. The expanded triage area will include a front-end team of clinical staff members, including an Advanced Practice Nurse ("APN"), a Registered Nurse ("RN"), and ED Technician ("EDT") who will be available to triage, manage, and treat lower acuity patients immediately, as well as begin work-ups on higher acuity patients. The new triage rooms will be large enough for phlebotomy technicians to initiate labs and for the EDT to perform EKGs. This dedicated patient triage team will help to decrease the number of patients that require a dedicated treatment bay, as some patients will be able to receive all necessary care in and be discharged from the new triage area.

Next, the new ED will feature a total of 50 private, fully enclosed treatment rooms, including two (2) trauma rooms and 12 behavioral health beds. The current ED features only 36 treatment spaces across a combination of private, double, and curtained spaces. Without fully walled private rooms, the majority of patients are not provided adequate privacy during their evaluation, treatment, and discharge. Moreover, the new rooms will be large enough to accommodate clinician workstations and, more importantly, visitors, which will contribute to positive patient experiences and improved health outcomes.

Of the 50 treatment rooms, 12 will be located within a secured behavioral health unit. The current ED only has five (5) ligature-free behavioral health rooms. The average number of behavioral health patients is consistently greater than seven (7) and is expected to increase in future years. When all five (5) rooms are occupied, behavioral health patients must be placed within a medical room or on a hallway stretcher until a more appropriate setting is available. These unideal placements create a number of challenges, including lack of privacy for treatment-related conversations, a chaotic environment in which other patients' treatment can be overheard, crowding in the hallway, and the need for one-to-one observation. Further, the current ED does not have a ligature-free bathroom space so patients must be escorted by at least two staff members across ED to use the bathroom.

and shower. This practice is not only negatively affects a patient's privacy and comfort but requires significant staffing resources.

The new behavioral health area will allow patients to safely and freely move throughout the area instead of being confined to their room. The unit will contain two (2) bathrooms and one (1) ligature-free shower. Most importantly, the expanded behavioral health area will be designed for the needs of patients experiencing acute behavioral health emergencies. There will be a dedicated intake area where behavioral health patients can change clothes and have their belongings inventoried and secured to keep the patient free from harm prior to entering their treatment room. The emergency service providers will have their own office space to engage in private conversations that cannot be overheard by other patients or providers, staff, family, or visitors not involved in their care. The re-designed and expanding behavioral health unit will create a safer, more therapeutic environment that will also reduce operational costs associated with the use of one-to-one observation aides. It will support an appropriate level of privacy and dignity to patients experiencing a behavioral health crisis.

In addition, the Proposed Project includes two (2) trauma rooms, two (2) airborne illness isolation rooms, one (1) OB/GYN room, one (1) patient of size room, and a dedicated imaging suite within the ED. The new trauma rooms will be appropriately sized for the level of care required and will provide greater efficiency for care delivery. Moreover, these rooms will be located near the ambulance bay and the elevators to the helipad, no longer requiring trauma patients to transverse the entire ED. Another design feature of the new ED will be the addition of an imaging suite. Currently, patients who require x-rays or CT must be transported out of the ED and through the hospital, which requires additional staffing resources and delays diagnosis and treatment. Embedding imaging within the ED will contribute to expedited diagnosis and care pathway determination, shorter lengths of stays in the ED, contributing to better throughput.

Lastly, the Proposed Project will address the current ED's insufficient space for providers and ancillary staff to work. The area where providers currently document is loud and distracting, making it difficult for them to manage patients. The proposed care team stations will be located in enclosed areas, ensuring adequate privacy as well as adequate space for necessary staff. Additionally, the new space will provide for improved co-location of hospitalists, ED providers, and nursing alongside case management and the ED pharmacist to facilitate better communications regarding patient care, including medication management, diagnosis, and disposition, and will improve time to determination of appropriate disposition and discharge.

The Proposed Project is essential to address current inadequacies and improve patient care. The existing ED, with its limited space and outdated design, struggles to support the efficient management of patient volumes and flow, as well as the necessary privacy and safety, particularly for behavioral health crisis patients. The new ED will feature an expanded footprint with 50 private treatment rooms, including a dedicated 12-bed behavioral health unit, and specialized rooms for trauma, OB/GYN, and airborne infection isolation. This expansion will not only enhance patient privacy and safety but will also streamline operations and reduce wait times. Additionally, the integration of an imaging suite within the ED will expedite diagnosis and treatment, further improving patient outcomes. By relocating the main hospital registration from the ED, redesigning the triage, and waiting areas, the new ED will significantly enhance patient experience and operational efficiency. The Proposed Project will also create dedicated spaces for clinical and ancillary staff, fostering improved collaboration and care coordination. Approval of the Proposed Project is crucial

to meet the growing needs of the patient population and ensure the delivery of high-quality, patient-centered emergency care.

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 Proposed Project will compete on the basis of price, total medical expenses, provider costs, and other recognized measures of health care spending by improving access to emergency care without increasing overall health care costs. The Hospital currently offers ED services, and the Applicant is not looking to expand ED patient volume through the Proposed Project. Instead, the objective is to optimize the ED to meet existing and anticipated future need for emergency services. Furthermore, the Proposed Project is essential to develop a physical environment that improves care delivery and fosters positive health outcomes, including amongst patients with behavioral health emergencies. As an essential component of the care continuum, the Hospital must guarantee timely access to high-quality emergency services. Consequently, the Proposed Project will ensure the Hospital is appropriately resourced and equipped to meet the needs of its Patient Panel without increasing healthcare costs.

Relatedly, the Applicant expects the Proposed Project will reduce unnecessary spending in the ED which results from overcrowding and related delays in treatment. Wait times in the ED have been shown to have a significant impact on the total cost of care for patients.⁷ For patients with the most acute conditions, a 60-minute increase in wait time increases the hospital's cost of care for the patient by an average of 30%.⁸ For those with moderately acute conditions, a 60-minute increase in wait time increases the hospital's cost of care for the patient by an average of 21%.⁹ During times of high patient volume, including Code Help, the ED must rely on per diem or overtime staff for assistance, increasing overall costs. Expanding the ED will help reduce this burden by creating space for regular staffing. Because the Proposed Project features a dedicated, secured behavioral health unit within the ED, the Hospital will be able to reduce its reliance on ancillary resources needed to care for this patient population, such as sitters and security officers, who are required when their care is provided outside of a dedicated unit. Finally, the Hospital's goal of reducing wait times by 29 minutes three years after the Proposed Project is complete will reduce the overall cost of care for ED patients by allowing faster diagnosis and treatment, while reducing the number of patients who leave without being seen and must return for costly follow-ups and hospitalization. The reduced wait times achieved through the Proposed Project's expansion and creation of more appropriate care settings will reduce health care spending which results from overcrowding.

⁷ See, e.g., Qing Huang et al., *The impact of delays to admission from the emergency department on inpatient outcomes*, 10 BMC EMERGENCY MEDICINE 16 (2010), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2912828/>.

⁸ Lindsey Woodworth and James F. Holmes, *Just A Minute: The Effect of Emergency Department Wait Time on the Cost of Care*, ECONOMIC INQUIRY (Nov. 5, 2019), <https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.12849>.

⁹ *Id.*

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.

The Hospital has outgrown its existing ED and requires additional physical space designed to optimize throughput and care delivery. As described in the previous section, the Hospital's ED has insufficient space to treat the growing volume of patients presenting to the ED leading to overcrowding and Code Help activations. This leads to increased wait times for patients, many of whom eventually choose to leave the ED and forego the services they need. To address the community's current and future need for emergency care, the Proposed Project will expand the ED to accommodate 14 net-new beds resulting in a total of 50 private, modernized treatment rooms, of which 12 beds will be located in a secured unit dedicated to patients experiencing acute behavioral health crisis. This increased capacity will provide the necessary space to allow clinical staff to facilitate ED patients more efficiently from registration to treatment to discharge. The Proposed Project's efficacy in addressing ED overcrowding and its associated problems via expanded space is well supported by extensive literature.

A. Dedicated Behavioral Health Unit

Numerous studies have established that traditional EDs are not designed to treat patients experiencing acute behavioral or mental health emergencies.¹⁰ Traditional EDs are inherently chaotic, confined spaces which are not conducive to treating patients experiencing behavioral health emergencies.¹¹ In fact, many patients' symptoms are exacerbated by the chaotic nature of a traditional ED, which can make patients feel a lack of control that triggers an increase in their anxiety and potentially worsens the psychiatric symptoms for which they are seeking treatment.¹² As a result, patients presenting to a traditional ED with behavioral and/or mental health emergencies may actually experience worsening symptoms and health outcomes.

Studies have shown that EDs can significantly improve the experience and outcomes for patients in behavioral health crises by implementing measures to promote a more beneficial experience.¹³ One such best practice is to dedicate a separate space for behavioral health patients, away from the main ED.¹⁴ These specialized areas should be quiet, calming, and designed with the unique needs of behavioral health patients in mind.¹⁵ A tranquil environment will help patients remain calm, making them more likely to participate in their immediate treatment, in turn leading to better health outcomes.¹⁶ Additionally, these dedicated behavioral health spaces should be staffed by clinicians experienced in caring for and treating patients with advanced behavioral health needs. By creating dedicated behavioral health units, EDs can provide more effective and compassionate care,

¹⁰ Kimberly Nordstrom et al., *Boarding of Mentally Ill Patients in Emergency Departments: American Psychiatric Association Resource Document*, Western Journal of Emergency Medicine, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6754202/> (Sept. 2019).

¹¹ *Id.*

¹² *Id.*

¹³ See, e.g., Elizabeth E. Austin et al., *Improving Emergency Department Care for Adults Presenting with Mental Illness: A Systematic Review of Strategies and Their Impact on Outcomes, Experience, and Performance*, FRONTIERS IN PSYCHIATRY (Feb. 2024), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10937575/>.

¹⁴ Anne M. Cox, *Applying Behavioral Health Design Strategies to the ED Environment*, HEALTH FACILITIES MANAGEMENT (Oct. 4, 2018), <https://www.hfmagazine.com/articles/3486-behavioral-health-design-strategies>.

¹⁵ *Id.* See also Lindsay Kalter, *Treating Mental Illness in the ED*, Association of American Medical Colleges, <https://www.aamc.org/news/treating-mental-illness-ed> (Sept. 3, 2019).

¹⁶ *Id.*

ultimately leading to improved health outcomes for patients experiencing behavioral health emergencies.

B. Overcrowding and Impact to Health Outcomes

Overcrowding in an ED occurs when the number of patients needing care exceeds the Department's capacity to provide timely and effective treatment.¹⁷ This situation leads to a cascade of problems that significantly impact both patient outcomes and the overall efficiency of healthcare delivery.¹⁸ One of the most immediate and most obvious consequences of overcrowding is an increase in patient wait times.¹⁹ Longer wait times, from the time a patient registers to when they are seen by a physician, can increase patient discomfort and dissatisfaction, reduce the quality of care provided, increase the risk of hospital-acquired infections, and lead to more patients leaving the ED before being seen by a clinician.²⁰ Additionally, delayed treatment caused by overcrowding may exacerbate medical conditions, leading to more complex and expensive interventions, including subsequent ED visits and hospitalization.²¹ ED overcrowding not only negatively impacts the quality of patient care, but it also increases the costs the hospital incurs in providing said care. For each one (1) hour increase in patient wait time, the hospital's cost to provide emergency services grows between 21% and 30% to treat those presenting with moderately acute and the most acute conditions, respectively.²² All of these factors contribute to reduced health outcomes when patients are subjected to increased wait times due to overcrowding.²³

Additionally, overcrowding frequently results in care being provided in suboptimal settings, such as ED hallways.²⁴ This practice is associated with higher levels of patient morbidity and mortality.²⁵ Negative health outcomes in these scenarios are likely due to inconsistent or unreliable monitoring compared to what is available in designated ED beds.²⁶ The breakdown of communication and the effective coordination of care contributes to these issues.²⁷ When EDs are overcrowded, staff are more likely to be overwhelmed by the sheer volume of patients and the insufficient resources available to manage them, causing confusion surrounding patient assignments and ultimately

¹⁷ Marina Sartini et al., *Overcrowding in Emergency Department: Causes Consequences, and Solutions—A Narrative Review*, Healthcare (Basel) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9498666/> (Aug. 25, 2022).

¹⁸ See, e.g., Gabriele Savioli et al., *Emergency Department Overcrowding: Understanding the Factors to Find Corresponding Solutions*, Journal of Personalized Medicine (Feb. 14 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8877301/>.

¹⁹ *Id.*

²⁰ See, e.g., Ahmet Butun et al., *Emergency Department Overcrowding: Causes and Consequences*, Emergency and Critical Care Medicine (Dec. 2023), https://journals.lww.com/eccm/fulltext/2023/12000/emergency_department_overcrowding_causes_and.6.aspx.

²¹ Marina Sartini et al., *Overcrowding in Emergency Department: Causes Consequences, and Solutions—A Narrative Review*, Healthcare (Basel) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9498666/> (Aug. 25, 2022).

²² Lindsey Woodworth and James F. Holmes, *Just A Minute: The Effect of Emergency Department Wait Time on the Cost of Care*, ECONOMIC INQUIRY (Nov. 5, 2019), <https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.12849>.

²³ Ula Hwang et al., *Emergency Department Crowding and Decreased Quality of Pain Care*, Academic Emergency Medicine,

²⁴ Stephen Bohan, *Americans Deserve Better than 'Destination Hallway' in Emergency Departments and Hospital Wards*, Stat News (Aug. 1, 2022), <https://www.statnews.com/2022/08/01/americans-deserve-better-than-destination-hallway-emergency-department/>.

²⁵ *Id.*

²⁶ See, e.g., John R. Richards and Robert W. Derlet, *Emergency Department Hallway Care From the Millenium to the Pandemic: A Clear and Present Danger*, JOURNAL OF EMERGENCY MEDICINE (Sept. 11, 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9464318/>.

²⁷ John R. Richards et al., *Providing Care in Emergency Department Hallways: Demands, Dangers, and Deaths*, Advances in Emergency Medicine, <https://www.hindawi.com/journals/aem/2014/495219/> (Dec. 25, 2014).

compromising the quality of care delivered.²⁸ In sum, overcrowding in EDs negatively impacts quality of care, increases the likelihood of adverse outcomes, and promotes staff burnout and turnover.

F.1.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.

To assess the impact of the proposed Project, the Applicant will report on the following measures of patient access and experience. The measures are discussed below and will be reported to DPH on an annual basis following implementation of the Proposed Project.

1. **Access - Left Without Being Seen:** Through a redesigned physical space and new patient throughput processes, the ED will be able to move patients to exam rooms more quickly, reducing wait times, overcrowding and the Left Without Being Seen (“LWBS”) rate.

Numerator: The number of patients leaving the ED without treatment, without being seen, or without an appropriate discharge.

Denominator: The total number of patients who register in the ED to be seen.

Quality Measure #1	Baseline	Year 1	Year 2	Year 3
Percent of patients who leave without being seen	3.18%	3%	2.5%	2%

2. **Access – Door to Provider Time:** This metric will measure the amount of time it takes for a patient to move from registration to being seen by a physician (or equivalent, such as a nurse practitioner or physician assistant), including the time between being seen in triage to being moved to a treatment area.

Numerator: Total minutes from registration to triage area for all ED patients.

Denominator: Total number of ED patients.

Numerator: Total minutes from triage to treatment area.

Denominator: Total number of ED patients.

Quality Measure #2	Baseline	Year 1	Year 2	Year 3
Average time registration to provider (minutes)	64 min.	60 min.	45 min.	35 min.
Average time triage to treatment area (minutes)	46 min.	40 min.	30 min.	25 min.

²⁸ See, e.g., John R. Richards and Robert W. Derlet, *Emergency Department Hallway Care From the Millenium to the Pandemic: A Clear and Present Danger*, JOURNAL OF EMERGENCY MEDICINE (Sept. 11, 2022), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9464318/>.

3. **Patient Experience – Length of Stay:** This metric will measure patients’ total length of stay in the ED from registration to discharge.

Quality Measure #3	Baseline	Year 1	Year 2	Year 3
Length of Stay	265 min	250 min	225 min	200 min

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.

Sturdy Health aims to promote health equity excellence through workforce education and organizational development, to improve health outcomes through the development of equitable care and enhance our health-related social services through community partnerships. Sturdy Health respects each patient’s right to receive information in a manner that the patient understands. Sturdy Health prioritizes the unique situation of each patient and works to address their needs on a patient-by-patient basis.

A. Improved provision of behavioral health focused services

The proposed 12-bed secure, dedicated Behavioral Health Unit will provide behavioral health patients in crisis with a safe, private, and therapeutic care environment. This will assist with reducing episodes of agitated behavior which will lead to a reduction in use of physical restraints and a reduction in employee assaults/injury. Having the dedicated area will also reduce the exposure of our non-behavioral health patients to the noise and distraction that often occurs with behavioral health patients in crisis, allowing them to receive care in a calmer healing environment.

B. Meeting patients where they are/Accessibility

Language Access

Sturdy Health is committed to serving all patients where they are. This starts with screening all patients at registration to collect their race, ethnicity, and language preference. Interpreter services are available 24/7 to all patients using iPad virtual, telephone, and in-person interpreters. Sturdy Health contracts with external organizations (Cyracom, Partners Interpreter Services and AMN) to provide interpreter services within the Hospital and medical offices. The Hospital has identified the top languages accessed via the interpreter services as Haitian Creole, Spanish, Arabic, and Portuguese. The interpreter services partners also provide ASL services for hearing-impaired patients. Sturdy Health currently screens for visual and hearing impairment and provides hearing augmentation devices, as needed.

Sturdy Health has translated key healthcare documents (health-related social needs screening, Consent Forms, Patient Visitor Code of Conduct, Patient Rights and Responsibilities, Health Care

Proxy, and others) to the most requested languages to better serve its patients and community. These documents are available in printed form, as well as via QR code to allow patients the ability to share the documents with care givers and family members, as well as to store it on their phones for immediate access at any time. Sturdy Health utilizes patient experience feedback surveys to collect data regarding interpreter services, implement improvements and provide feedback to patients.

Accessibility

Sturdy Health screens patients at risk for falls and implements safety measures, including assistive devices, physical therapy in the ED, bed alarms, and bedside equipment (commodes, tables). Additionally, Sturdy Health performs the Identified Seniors at Risk (ISAR) assessment and provides case management consultation to those who screen positive for home safety evaluations, visiting nurse or other services, as needed. Lastly, the Hospital will be implementing a screening for disability needs in the ED within the next year to provide patients with the most appropriate accommodations during their treatment.

Staff Development

All patient-facing staff are required to complete a Diversity in Healthcare Training e-Learning course that focuses on addressing the needs of all patients. All providers are assigned an e-Learning course on how to Build a Foundation for Sexual Orientation and Gender Identity Empathy and Communication. Patient-facing staff will receive an e-Learning course assignment on how to Build Language and Skills that Welcome and Affirm LGBT Patients. Sturdy Health recently received a Rockland Trust DEI grant to support in-person, on-site management training (Introduction to Unconscious Bias and Multicultural Communications Training), as well as a catalog of Diversity and Unconscious Bias e-Learning courses for all staff to access.

Interpreter service guidelines and access instructions are presented to all Sturdy Health staff at new hire orientation. A language access guide is available to all staff on Sturdy Health's intranet with resources available to all staff within each department. Additionally, a step-by-step laminated card is available for instructions on use of interpreter services via telephone.

Social Determinants of Health

Social Determinants of Health (SDOH) screenings are conducting using the Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences (PRAPARE) tool. All patients admitted for inpatient or observation stays are screened for SDOH. At the Hospital, positive screens are coded using ICD-10 codes by Case Management and patients are provided resources to help address their identified social needs. Any immediate needs that prevent safe discharge from the Hospital are addressed prior to a patient's discharge.

Additionally, all patients are screened for SDOH at all Sturdy Health Medical Group locations. Patients of the Sturdy Health Medical Group's primary care offices have the SDOH screen sent to them via a digital check in platform for completion prior to their scheduled appointment. Clinical staff, including Medical Assistants (MA), RN, and Licensed Practical Nurses (LPN) validate the screening tool was completed and escalate any positive screens to the patient's treating physician or provider. Additionally, patients who screen positive in any category are offered information containing identified resources by Sturdy Health.

A comprehensive community resource guide, Sturdy Health Connection and Community, was developed in partnership with community organizations and serves as a resource for staff to provide to patients based on need. The Population Health and Equity team also enrolls eligible patients into food and housing security programs, such as the YMCA nutrition support program, Community Servings, and CCBC housing program.

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 Proposed Project will improve health outcomes and quality of life for the Hospital's Patient Panel by ensuring the ED has the capacity and resources needed to serve the community. In conjunction with Sturdy Health's overarching commitment to advancing health equity for all patients, the Proposed Project will ensure all patients can access the Hospital's services by enabling timely care. Sturdy Health works to ensure patients can effectively communicate with their providers and have access to services outside of the Hospital, as needed.

By creating the capacity required through the Proposed Project, the Hospital will be able to provide more timely emergency services in the most appropriate setting for patients seeking care. As further described in Section F1.b.i, overcrowding in the ED negatively impacts patients through delayed or avoided care and, often, with needed care having to be provided outside of a dedicated treatment space. To that end, the Proposed Project will ensure the community has access to an ED that can provide timely, high-quality care. Therefore, the Proposed Project will advance health equity through improved health and quality outcomes for all patients seeking care in the ED.

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.*

Expansion and modernization of the ED will improve health outcomes by providing timelier access to care as a result of additional resources and capacity. By reducing wait times, the number of patients who leave the ED without being seen will be reduced allowing patients to get the clinical care they need, reducing the risk of adverse outcomes due to delay in diagnosis and treatment.

The new design will allow improved colocation of hospitalists and ED providers with case management and ED pharmacists, greatly improving communications and patient care coordination, reducing the risk of medication errors, and improving the determination of appropriate disposition and time to discharge. Providers will also be located within pods with nursing which will allow for improved, timely communication between the nurse and provider staff.

Additionally, with the expanded Behavioral Health Unit, behavioral health patients in crisis will receive care in a private, secure, and calm environment. This will contribute to reduced episodes of agitated behavior and will lead to a reduction in use of physical restraints and employee assaults/injury.

Lastly, the new ED will have a dedicated radiology suite with CT scan and x-ray imaging which will allow acutely ill patients to receive diagnostic imaging more quickly without being transported outside of the ED, reducing the time to diagnosis, and improving the time to treatment.

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.*

The Applicant conducted a diverse consultative process with individuals at various regulatory agencies and departments regarding the Proposed Project. The following individuals and agencies are some of those consulted regarding this Project:

- Massachusetts Department of Public Health, including but not limited to: Dennis Renaud, Director, Determination of Need Program; Jennica Allen, Manager of Community Engagement Practices, Bureau of Community Health, and Prevention; Elizabeth Maffei, Program Manager, Bureau of Community Health, and Prevention; Katelyn Teague, Community Health Planning + Engagement Specialist, Bureau of Community Health, and Prevention
- Massachusetts Executive Office of Health and Human Services
- Health Policy Commission
- Center for Health Information and Analysis
- The Centers for Medicare & Medicaid Services

F1.e.i Process for Determining Need/Evidence of Community Engagement

With respect to the existing Patient Panel, please describe the process through which Applicant determined the need for the Proposed Project.

As more fully described in Section F1.a.ii, the Applicant primarily determined the need for the Proposed Project due to significant increases in emergency department utilization illustrated in annual patient visits to the ED. To engage the community more fully in the development of the Proposed Project, the Hospital hosted several meetings to inform the community on the state of the current ED, what the Proposed Project includes, and to answer any questions.

First, the Applicant engaged the Hospital's Patient and Family Advisory Committee ("PFAC") during multiple meetings to inform them of the Proposed Project and solicit their feedback in the development of the Proposed Project. During each of the presentations, attendees were educated on the Applicant's proposed plans, including how the Proposed Project will benefit patients and the community. Following the presentation, attendees were able to share feedback and ask the presenters questions. The Proposed Project was discussed at the following PFAC meetings: March 7, 2023, December 7, 2023, March 5, 2024, and June 4, 2024.

In addition, the Hospital hosted and participated in several community-wide events to engage a broader audience. First, the Hospital put on a "Community Coffee and Conversation" event on May 31, 2023, to present the Proposed Project to community members. Next, the Proposed Project was presented to community members at two separate Attleboro Movie Nights at Capron Park on September 29, 2023, and on August 9, 2024. Lastly, attendees of the Sturdy Health Vaccination Community Clinic event on October 15, 2023, were provided information on the Proposed Project and encouraged to share their thoughts and feedback.

Most recently, the Proposed Project was presented to the public at the Attleboro Spring Fling 2024 event on April 20, 2024, the Downtown North Attleborough Collaborative Block Party on September 18, 2024, and the Fall Meeting of the Sturdy Health Foundation on September 20, 2024.

At each of these events, community members evaluated the Proposed Project and expressed their generally supportive thoughts and feedback.

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".*

To ensure sound community engagement throughout the development of the Proposed Project, the Applicant took the actions detailed in Factor F1.e.i. In addition, the Applicant published two legal notices announcing the Proposed Project in The Sun Chronicle on November 15, 2024, and also posted a copy of such legal notice prominently on the Hospital's website. Please refer to Appendix 6 for copies of the legal notices.

Factor 2: Health Priorities

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.

The Proposed Project will meaningfully contribute to and further the Commonwealth's goals for cost containment by expanding capacity in the ED, allowing patients to be moved to the appropriate treatment space more quickly. Moreover, the Proposed Project will ensure equitable access to ED services at the lowest reasonable cost. The Proposed Project will improve access to emergency services which, when delayed by inefficiency and overcrowding caused by a lack of adequate resources and space, negatively impact health outcome, and increase the overall cost of health care. For example, when patients' wait time in the ED increases by 60 minutes, then the hospital's cost of care grows by 21% for patients with moderately acute conditions and by 30% for patients with the most acute conditions.²⁹ As discussed throughout the Application, ensuring timely access to emergency health services helps both improve health outcomes and reduce the overall cost of care by eliminating costly return visits and hospitalizations. The Proposed Project helps achieve that goal by expanding the ED's capacity, allowing the ED to treat more patients in a timely manner and reduce the overall cost of care.

²⁹ Lindsey Woodworth and James F. Holmes, Just A Minute: The Effect of Emergency Department Wait Time on the Cost of Care, ECONOMIC INQUIRY (Nov. 5, 2019), <https://onlinelibrary.wiley.com/doi/abs/10.1111/ecin.12849>.

F2.b. Public Health Outcomes

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

The Proposed Project will improve public health outcomes by ensuring patients have timely access to emergency services in the most appropriate environment for each patient's condition. This timely access to high-quality care will reduce delays in diagnosis and treatment, helping prevent avoidable return visits and hospitalizations. The current misalignment between ED capacity and number of patients presenting to the ED in need of services causes severe overcrowding, leading to increased wait times, more patients leaving without being treated, and higher levels of patient dissatisfaction. Historical utilization trends along with growing projected population demonstrates the clear need for the Hospital to expand its ED capacity in order to meet current and future need for emergency care. Expanding ED capacity will allow the Hospital to reduce overcrowding, thereby reducing delays and improving patient care and overall health outcomes.

Additionally, the new ED will feature two (2) trauma rooms, two (2) airborne illness isolation rooms, one (1) OB/GYN room, one (1) patient of size room, and a dedicated imaging suite. The new trauma rooms will be appropriately sized for the level of care required and will be located adjacent to the ambulance bay and the elevators to the helipad, cutting down patient transport time. Another way the new ED will reduce treatment times is by co-locating imaging within the ED. Currently, patients who require x-rays or CT scans must be transported out of the ED and through the Hospital which requires additional staffing resources and delays diagnosis and treatment. Embedding imaging within the ED will contribute to shorter lengths of stays in the ED, better throughout and health outcomes.

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 Applicant will continue working with health care providers and community social services providers to ensure patients are connected with needed resources outside of the Hospital. First, the Applicant screens all admitted patients for SDOH in accordance with the PRAPARE tool as discussed in Section F1.b.iii. All positive screenings are coded using ICD-10 codes by Case Management so Hospital staff can provide those patients with resources to help address their designated social needs. If there are instances whereby an immediate need prevents safe release from the Hospital, then those needs are addressed by the hospital staff prior to discharge.

In support of patients who screen positive for a social need, the Hospital collaborated with local organizations to develop the Sturdy Health Connecting our Community, a comprehensive guide to community resources available to patients. Hospital staff are able to provide this guide to patients based on their identified SDOH needs and in the patient's preferred language. For those patients who require a higher degree of assistance, Hospital staff will support them in enrolling in various programs, including the YMCA nutrition support program, Community Servings, and CCBC housing program.

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.*

This Proposal: The Proposed Project is to renovate and expand the Hospital's existing ED.

Quality: The Proposed Project is the superior option because of the significant impact it will have on timeliness of care, patient outcomes, quality of life, and patient satisfaction. Right sizing the Hospital's ED will accommodate current and future patient need, allowing the Hospital to improve timely access to emergency services for its patient population. This will also allow the Hospital to eliminate the use of hallway beds and provide a dedicated, secure, and therapeutic space for patients seeking emergency behavioral health care.

Efficiency: The Proposed Project will maximize the ED's efficiency by providing necessary capacity for the Hospital to treat patients seeking emergency care in spaces dedicated for the appropriate level of care acuity required by each patient. The Proposed Project will also improve patient flow, create adequate clinical workspace, and modernize the ED's patient treatment areas.

Capital Expense: The total capital expenses for the Proposed Project are \$81,441,502.

Operating Costs: The first-year operating expenses associated with the Proposed Project are projected to be \$34,942,581.

Alternative Proposal: Renovate, but do not expand, the existing Emergency Department.

Alternative Quality: The Hospital explored options to renovate the existing ED to improve certain features. This included leveraging alternative spaces which can safely be converted into emergency care treatment rooms. However, failure to expand the ED would not allow the Hospital to add greatly needed treatment rooms and would, thus, not meet the needs of the Patient Panel. This option would continue to exacerbate wait times and ED overcrowding, resulting in worsening patient health outcomes and lower patient satisfaction.

Alternative Efficiency: Hospital resources are already under significant strain due to limited capacity. Renovating in place without addressing the need for additional treatment space would compound existing inefficiencies and wait times. Patients would thus be at higher risk of adverse outcomes due to wait times before receiving care, including an increased number of patients who will leave the ED without receiving care at all.

Alternative Capital Expenses: The capital expenses of renovating the existing ED are \$100 million. In discussion with the construction company, renovating the existing space without

expansion is not an option. Updated standards would require larger patient bays and other accommodations resulting in fewer patient treatment bays.

If we renovated the existing space with a smaller addition, the estimated additional capital expenditure is approximately \$20 million over the cost of the Proposed Project. Much of the additional cost is related to a significantly longer construction timeline. During that time, the already overcrowded ED would need to be downsized while a portion of the ED was renovated at a time.

Alternative Operating Costs: Operating costs would not be noticeably different under this option than existing operating costs.