

Table of Contents

SERVICE AREA DEFINITION	2
OVERVIEW AND RECOMMENDATIONS	4
Project Objectives:	4
Executive Summary.....	4
Recommendations:	5
Taskforce Recommendations:	6
How Did We Get Where We Are?	6
Perceived Conflicts of Interest	8
Volume Loss	8
Inpatient Market Share – Maine State Data	9
Assumptions Should Be Tested	11
ACOs In Maine?	11
Other Pertinent Factors Not Addressed	11
2012 MARKET ASSESSMENT	13
Competitor Profile	13
Labor and Market Statistics	15
Job Loss Impact	16
SERVICE AREA DEMOGRAPHICS	17
Population by Age and ZIP Code	17
Population Growth by ZIP Code	19
Population Growth by Age Cohort	20
Median Household Income	21
Service Area Demographics – Observations and Conclusions	22
HOSPITAL UTILIZATION AND MARKET SHARE	23
Inpatient Surgical Market Share – All Inpatients (Maine State Data)	23
Medicare Inpatient Market Share Trend	24
Medicare Inpatient Market Share by ZIP Code	25
Medicare Outpatient Market Share by Provider for Lincoln County, ME	26
Inpatient Demand Estimates	28
Outpatient Demand Estimates by Service Line	29
Hospital Utilization and Market Share – Observations	30
MEDICAL STAFF ANALYSIS	31
Physician Demand	31
Physician Supply	32
APPENDIX A: SUMMARY OF KEY INTERVIEWS CONDUCTED GOODSPEED	33
APPENDIX B: SUMMARY OF KEY INTERVIEWS CONDUCTED GABARRO	35

SERVICE AREA DEFINITION

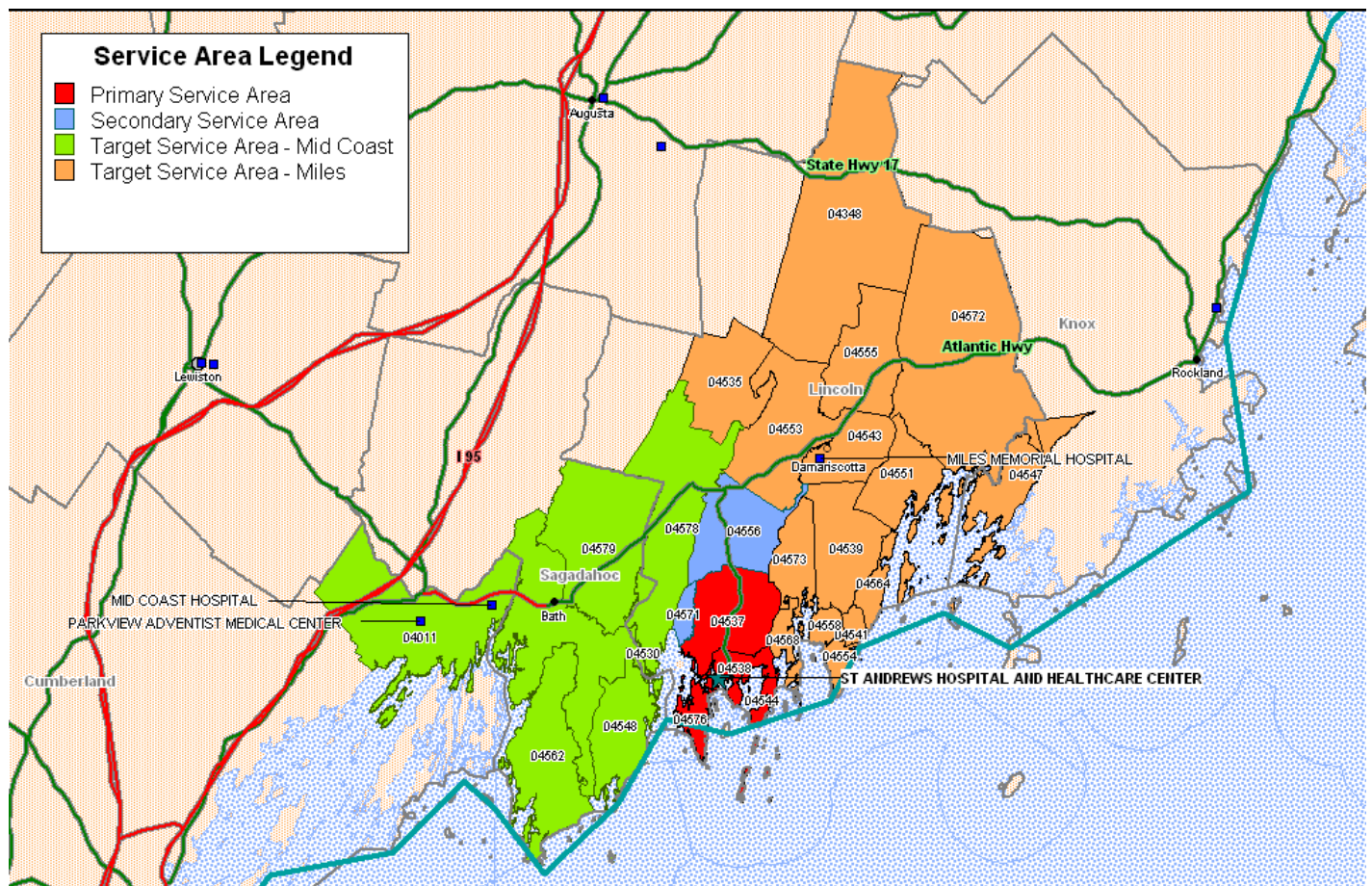
St. Andrews Hospital is located on the coast of south central Maine about 50 minutes east of Brunswick and one hour south of Augusta. Miles Memorial Hospital, MaineHealth's other facility, is 30 minutes northeast of St. Andrew's.

St. Andrews Hospital had a 2011 Primary Service Area population of 5,522 and Secondary Service Area population of 1,454. The combined Target Service Areas have a significantly higher population of 61,578.

St. Andrews Hospital had a Combined Service Area population of 6,976 in 2011 with 12.3% ages 14 and younger, 25.7% ages 15-44, 34.1% ages 45-64, and 27.6% 65 and older.

St. Andrews Hospital's Combined Service Area and Target Service Areas are mapped in Figure 1 and listed in Table 1.

Figure 1: Service Area Designations



*Combined Service Area = Primary + Secondary Service Areas

*Total Service Area = Combined + Target Service Areas

Table 1: St. Andrews Hospital Service Area

[illegible]

OVERVIEW AND RECOMMENDATIONS

Project Objectives:

iVantage Health Analytics and Gabarro Group (The Advisors) were engaged by the St. Andrews Taskforce to provide an opinion about Lincoln County Healthcare's (LCH) decision to close the St. Andrews Hospital Emergency Department and implement other changes in response to a changing healthcare environment. The Advisors were asked to perform a qualitative and quantitative assessment to understand the growth and financial opportunities in the marketplace; understand the perspectives of key stakeholders; quantify the demand for existing services as the analytical foundation for planning, and characterize the projected growth and change in usage of the market. The key interviews, along with the market assessment, are one of the most important ingredients in developing a strategic direction for St. Andrews Hospital.

In performing this work, we were requested to test the various assumptions LCH used in its decision to close the Emergency Department at St. Andrews Hospital and by doing so, relinquish Critical Access Hospital status and the advantageous reimbursement associated with this designation. We were also asked to consider alternative recommendations to those developed by LCH.

In fulfilling project objectives, The Advisors met with over 40 area business leaders and residents and completed a detailed assessment of available data associated with the St. Andrews marketplace. A summary of the key interviews appears on page 8. The interview findings were augmented by the series of interviews conducted by a St. Andrews Task Force subgroup. The recurring themes from this group reinforced the key findings of The Advisors. They are viewed as representative of the prevailing sentiment of Boothbay region residents.

Executive Summary

It is possible to have a viable Critical Access Hospital on the Boothbay Peninsula. Maine Health and LCH should reverse their decision to close the Emergency Department at St. Andrews Hospital. Specific data along with assumptions about a very uncertain future demonstrate there is no compelling reason to close the Emergency Department and forgo the cost based reimbursement associated with Critical Access status. Maine Health should honor the commitment documented in the Definitive Agreement that was agreed upon when St. Andrews joined Maine Health in 1997. A variety of educational options are available to address concerns that lower volumes threaten the clinical competencies of St. Andrews staff. All rural hospitals routinely face and respond to these challenges. Emphasis should be placed on meeting the community needs identified in the Maine Health Community Needs Assessment rather on further eroding St. Andrews service capabilities.

Recommendations:

The following are recommendations associated with the qualitative and quantitative analysis. The consultants are deeply appreciative of all those who contributed their thoughts to this important community process. LCH's study was excellent in many ways, particularly as it relates to demographics and a scan of the future. In isolation, it is easy to see how they arrived at their recommendations. However, when one looks at a range of other factors not considered in LCH's decision, there is no compelling reason to move forward with the changes currently proposed for St. Andrews.

The loss of Critical Assess Hospital status has significant financial implications that were either not stressed or mentioned in LCH's analysis. They include:

- Loss of \$1.5 million dollars in CAH revenue per year.
- Loss of \$250,000 annually for skilled nursing care associated with the hospital based-status for these services.
- Negative income impact of \$1,342,859 related to direct and indirect job losses.
- Increase in pre-hospital EMS costs that will ultimately be borne by area taxpayers estimated to be in the range of \$400,000 plus annually.
- Increased financial burden on area patients who were formerly cared for at St. Andrews associated with a significant increase in ambulance runs related to transporting patients previously cared for at St. Andrews to Miles or other locations.
- Negative financial impact on LCH by assuming a much smaller revenue loss than interview feedback suggests. When given a choice, no one expressed a willingness to be transported to Miles rather than Mid Coast Hospital or Portland.

St. Andrews should be viewed as a key component of an overall delivery system that continues to provide access to quality care to the residents of an area who have benefitted from it since 1905, including retention of Emergency Department capacity. MaineHealth should focus on the aggregate performance of the System rather than viewing St. Andrews in isolation.

- LCH should reverse its decision to close the Emergency Department and replace it with an Urgent Care Center.
- Continue to provide 24/7 emergency room services at a reduced cost by integrating experienced Emergency Department mid-levels into the staffing pattern.
- Rebuild clinical services at St. Andrews to include limited inpatient care, swing beds, outpatient diagnostics, outpatient surgery and mental health services.
- Invest in telemedicine to support physician and mid-level practitioners.
- Work Closely with Lifeflight to assist LCH emergency care providers in maintaining and enhancing clinical skills.
- Acquire a simulator mannequin in support of maintaining skills for all providers including pre-hospital providers.
- Design competency education in a manner responsive to clinical concerns associated with lower volume facilities.
- Reestablish outpatient surgery capabilities.

- Establish a geriatric center of excellence including a continuum of geriatric services such as hospice and palliative care services (recruit geriatrician); integrate respite and palliative care capabilities into the hospital-based skilled care using space formerly dedicated to inpatient care.
- Rather than closing the Emergency Department, make capital enhancements to the family care center facilities a priority with design conducive to a medical home model, which would include a mental health component.
- Implement a productivity system for all of Lincoln County that would be used to make staffing decisions for all related organizations.
- Jointly recruit specialists in those areas where demand calls for less than one physician in a given location.
- Restore patient clinics to include orthopedics, chemotherapy, and diabetes.
- Bring Mid Coast, Miles Memorial, and St. Andrews hospital together to explore collaborative opportunities, including sharing of specialists.

Taskforce Recommendations:

- Explore affiliation opportunities to grow primary and specialty care.
- Request that LCH respond to recommendations no later than March 31, 2013.
- Keep legal options open.
- Proceed with the initiative to establish a hospital administrative district, including submission of placeholder legislation.
- Examine options for ownership of the hospital by an entity committed to rural access. These would include other Maine healthcare systems as well as community ownership.
- Consider retaining InnoVative Capital LLC, Springfield, PA to explore a range of community and ownership options.
- Develop an in-depth financial forecast reflecting the service structure identified in these recommendations. Determining the financial feasibility of proposed services will be integral to this process.
- Develop a communication strategy including talking points.
- Work with the community to have them fully appreciate the importance of accessing care and using ancillary services offered at St. Andrews. Support begins at home.
- Develop key talking points to assist in educating the region on this vital matter

How Did We Get Where We Are?

Lincoln County Healthcare determined how best to deploy its programs, services, and facilities to meet community needs while optimizing the organization's overall financial performance in a manner consistent with the LCH strategic plan. This analysis primarily focused on access ability and affordability and how LCH could achieve these two objectives. As such, the analysis was narrowly focused and concentrated on two major clinical areas: emergency services and obstetrical services. Attention was also given to primary care, long-term care options and surgical service capacity. It was noted that among

the various elements included in the Affordable Care Act is the mandate for providers to increase quality, safety, and access while decreasing resource consumption.

Several aspects of LCH's decision conflict with this mandate. Several of the factors leading to LCH's decision to close the Emergency Department at St. Andrews Hospital and in doing so, forgo Critical Access Hospital (CAH) status are disputable. LCH has concluded that its comparatively high cost structure relates directly to the costs associated with maintaining Critical Access Hospital status, as well as the duplication of services at St. Andrews. Financial data for the period ending March 31, 2012 reflects that Miles cost per discharge is \$9,575 compared to St. Andrews cost of \$5,264. In addition, for the same period St. Andrews' average charges per adjusted discharge were \$6,110 while Miles Memorial Hospital's were \$18,887. The major driver of LCH's high cost position relative to other Maine hospitals is Miles Memorial Hospital. In fact, it can be argued that St. Andrews ability to receive cost based reimbursement for almost 65% of its patient volume contributes to a lessening of future patient costs because a large part of these costs are recaptured through cost based reimbursement. Not only does Medicare reimburse the hospital at 101% of allowable costs, but the Maine Care (Medicaid) program currently reimburses at 109% of allowable costs. Miles on the other hand, does not have the equivalent ability to capture the same level of cost based reimbursement as St. Andrews which is reflected in greater cost shifting to commercially insured patients.

Management often influences questions for consultants to pose in their series of interviews and it appears that management desired to test the reaction to this possibility when they engaged Navigant. Several LCH officials noted that they were not expecting a decision to close the St. Andrews Hospital Emergency Department as a study outcome. They should have known this was a plausible outcome of the Navigant study as consultants were posing questions to the interviewees such as , "what would your response be if the St. Andrews Emergency Department was to close?" as they gathered information during the winter of 2012.

LCH is silent on other material cost factors contributing to its comparatively high cost structure. Before eliminating a core service, one that addresses community need and is part of the safety net of an isolated peninsula, other avenues of cost savings should be addressed. For example, LCH references the low productivity of LCH employed physicians and The Gabarro Group was informed by an individual familiar with the financial operation of LCH that the physician corporation was anticipating an "\$8.5 million dollar loss" for the most recent fiscal year. Our understanding is that there may be no productivity system in place at either St. Andrews or Miles Memorial Hospital to assist management in determining appropriate staffing levels for these facilities. Given the high cost of labor in the healthcare setting, opportunities to reduce cost through attrition and rebalancing of staffing should be fully evaluated prior to closing an essential community service.

It is unlikely that in today's environment, a hospital with an Emergency Department would be constructed in a setting similar to St. Andrews Hospital. That said, however, the St. Andrews Hospital has been serving the Boothbay region since 1905 and is an integral part of the fabric of the local healthcare system. Many interviewees noted that had there been an indication that LCH would have considered closing the Emergency Department, the decision made in 1997 to join MaineHealth would have never been made. Interviewees trusted that as part of MaineHealth, St Andrews would enjoy

economies and other resources that would enable the hospital to continue to serve the community. We believe language in the Definitive Agreement that established the relationship between the two organizations recognized this and pledged to maintain essential services such as the hospital's Emergency Department.

Perceived Conflicts of Interest

Although it can be argued that the governing body in revisiting the elements of the Definitive Agreement, determined that it was in the best interest of LCH to change certain core elements of the agreement, it should also be noted that the composition of the Board has changed dramatically from the initial 10 representatives from the Boothbay region and 10 from the Miles service area. The decision to close the Emergency Department at St. Andrews Hospital may be consistent with the long-term vision of LCH, but is clearly not viewed as being in the best interest of the citizens of the Boothbay region. LCH officials have acknowledged that they relied significantly on the input from the seven employed physicians who are members of the current Board. The citizens of the Boothbay region questioned whether the physicians who were relied on so heavily could make their recommendations without conflict of interest. This is particularly reinforced by the fact that Miles, medical community appears to receive the full benefit and experiences no adverse impact as a result of the proposed decision.

Volume Loss

Much of the justification for the closure of the St. Andrews emergency department related to the lack of productivity with an emphasis on the number of patients seen between 12:00 a.m. and 6:00 a.m. The .6 patients that are seen on average during these hours was a large part of the justification for closing the St. Andrews Emergency Department. Mr. Donovan, LCH CEO said "my mantra has been and continues to be it is all about the volume." If this rationale were applied to the other CAHs in the state of Maine, the vast majority of these hospitals would also be closing their Emergency Departments and relinquishing their CAH designation. Emergency Department services are recognized as one of the core services in Maine's Rural Health Plan, which was developed in conjunction with the State's Health Plan. In fact, Miles Memorial itself has an emergency department volume during this same period of slightly over two patients per night. In addition, data available to iVantage demonstrates there are many viable small volume Critical Access Hospital's in the country that continue to provide services in meeting community needs and sustaining the safety net that is vital in this type of setting.

LCH cites a trend in the loss of volume and associated loss of market share as a major determinant in making these service recommendations. The loss of volume and market share should come as no surprise to anyone familiar with St Andrews. The elimination of inpatient services, specialty clinics, oncology services, the scheduling of an LCH orthopedic surgeon on the same day as a visiting orthopedist from Brunswick ultimately leading to his departure from St. Andrews, and the elimination of surgical services in the Spring of 2012 were all factors that led to the conclusion that the recommended changes to St. Andrews were necessary.

Inpatient Market Share – (Maine Health Data Organization)

Table 2a and 2b below show inpatient market share using data from the Maine Health Data Organization (MHDO). The majority of inpatient cases in St. Andrews Hospital's Combined Service Area are sent to Miles Memorial Hospital.

Table 2a: Inpatient Market Share – 2011 ME State Data – Combined Service Area

Product Line	Total Market	ST ANDREWS		CENT ME MC		ME MC		MERCY HSP	
	Cases	Cases	Market Share	Cases	Market Share	Cases	Market Share	Cases	Market Share
CARDIOLOGY	917	4	0.4	25	2.7	260	28.4	3	0.3
CARDIOVASCULAR	92	0	0.0	7	7.6	85	92.4	0	0.0
GASTROENTEROLOGY	517	1	0.2	13	2.5	71	13.7	1	0.2
GYNECOLOGY	141	0	0.0	3	2.1	35	24.8	4	2.8
MEDICINE	1,232	6	0.5	22	1.8	208	16.9	8	0.6
MENTAL HEALTH	648	1	0.2	0	0.0	13	2.0	88	13.6
NEUROLOGY	330	1	0.3	12	3.6	72	21.8	0	0.0
NEUROSURGERY	157	0	0.0	7	4.5	125	79.6	17	10.8
OB-DELIVERY	550	0	0.0	10	1.8	73	13.3	18	3.3
OB-OTHER	72	0	0.0	2	2.8	20	27.8	3	4.2
ONCOLOGY	121	1	0.8	2	1.7	46	38.0	0	0.0
ORTHOPEDICS	689	0	0.0	23	3.3	191	27.7	51	7.4
PULMONARY	794	7	0.9	8	1.0	52	6.5	3	0.4
REHABILITATION	115	0	0.0	8	7.0	1	0.9	0	0.0
SURGERY-GENERAL	463	0	0.0	28	6.0	158	34.1	3	0.6
SURGERY-OTHER	23	0	0.0	0	0.0	7	30.4	1	4.3
TRANSPLANT	1	0	0.0	0	0.0	1	100.0	0	0.0
UNGROUPED OR INVALID DRG	17	0	0.0	0	0.0	9	52.9	0	0.0
UROLOGY	293	0	0.0	5	1.7	62	21.2	2	0.7
VASCULAR	65	0	0.0	2	3.1	53	81.5	2	3.1
Primary Service Area	595	18	3.0	7	1.2	171	28.7	17	2.9
Secondary Service Area	124	1	0.8	2	1.6	32	25.8	2	1.6
Target Service Area - Mid Coast	4,338	0	0.0	140	3.2	810	18.7	134	3.1
Target Service Area - Miles	2,180	2	0.1	28	1.3	529	24.3	51	2.3
Total Service Area	7,237	21	0.0	177	2.4	1,542	21.3	204	2.8

Table 2b: Inpatient Market Share – 2011 ME State Data – Combined Service Area

Product Line	Total Market	MID COAST HSP		MILES MEM		PARKVIEW MEM		PENOBSCOT BAY MC		All Other Hospitals	
	Cases	Cases	Market Share	Cases	Market Share	Cases	Market Share	Cases	Market Share	Cases	Market Share
CARDIOLOGY	917	329	35.9	167	18.2	81	8.8	25	2.7	23	2.5
CARDIOVASCULAR	92	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
GASTROENTEROLOGY	517	226	43.7	103	19.9	59	11.4	28	5.4	15	2.9
GYNECOLOGY	141	57	40.4	19	13.5	7	5.0	11	7.8	5	3.5
MEDICINE	1,232	507	41.2	270	21.9	135	11.0	43	3.5	33	2.7
MENTAL HEALTH	648	209	32.3	16	2.5	7	1.1	69	10.6	245	37.8
NEUROLOGY	330	117	35.5	64	19.4	34	10.3	12	3.6	18	5.5
NEUROSURGERY	157	0	0.0	0	0.0	0	0.0	1	0.6	7	4.5
OB-DELIVERY	550	305	55.5	108	19.6	0	0.0	27	4.9	9	1.6
OB-OTHER	72	34	47.2	3	4.2	0	0.0	6	8.3	4	5.6
ONCOLOGY	121	51	42.1	7	5.8	10	8.3	3	2.5	1	0.8
ORTHOPEDICS	689	216	31.3	138	20.0	33	4.8	21	3.0	16	2.3
PULMONARY	794	389	49.0	217	27.3	76	9.6	24	3.0	18	2.3
REHABILITATION	115	0	0.0	0	0.0	0	0.0	0	0.0	106	92.2
SURGERY-GENERAL	463	139	30.0	71	15.3	31	6.7	6	1.3	27	5.8
SURGERY-OTHER	23	11	47.8	0	0.0	2	8.7	0	0.0	2	8.7
TRANSPLANT	1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
UNGROUPED OR INVALID DRG	17	3	17.6	2	11.8	1	5.9	0	0.0	2	11.8
UROLOGY	293	98	33.4	62	21.2	34	11.6	22	7.5	8	2.7
VASCULAR	65	2	3.1	1	1.5	1	1.5	3	4.6	1	1.5
Primary Service Area	595	131	22.0	202	33.9	7	1.2	7	1.2	35	5.9
Secondary Service Area	124	34	27.4	43	34.7	2	1.6	1	0.8	7	5.6
Target Service Area - Mid Coast	4,338	2,375	54.7	97	2.2	487	11.2	11	0.3	284	6.5
Target Service Area - Miles	2,180	153	7.0	906	41.6	15	0.7	282	12.9	214	9.8
Total Service Area	7,237	2,693	37.2	1,248	17.2	511	7.1	301	4.2	540	7.5

Assumptions Should Be Tested

There were other key factors not addressed by LHC that need to be considered as this decision is reexamined. LCH made the assumption that the positive financial leverage enjoyed by CAHs would be lost in the future. There is no evidence to support this in the short-term and one can only speculate what might happen in all sectors of healthcare in the long-term. The only exposure that has been openly discussed to date is the possibility that CAHs may see reimbursement for Medicare patients reduced from 101% of allowable costs to 100%. With the number of CAHs in the country exceeding 1300 and their location in rural areas strongly supported by representatives in Congress, one must seriously question the politics of CAHs being eliminated. There is no suggestion of CAH status being eliminated or even modified in the Affordable Care Act (ACA). In fact, the Affordable Care Act leaves CAHs largely untouched. Congress recognizes that the amount of money associated with CAH cost throughout the country can be described as a rounding error when compared to total hospital costs.

Maine is a good example of this, with five hospitals in the state accounting for over half of the healthcare expenditures in the entire state. It is estimated that the St. Andrews hospital budget represents less than one percent of the Maine Medical Center budget. If one were to add the budgets of the other MaineHealth hospitals, including Miles, to the Maine Medical Center total, the .9 tenths of one percent would decrease even more. There may be far greater opportunity for cost savings in other MaineHealth locations than those that would be achieved through the closing of the St. Andrews Hospital Emergency Department and the implementation of other recommended changes.

ACOs In Maine

In addition, LCH's recommendations are premised on the ability to implement an Accountable Care (ACO) model in a rural state like Maine. Uncertainty exists regarding the ability to successfully do so in a state like Maine with a total of 1.3 million residents spread over a wide geography. In a 1993 study, policy analysts estimated it would take a market population of 1.2 million to sustain three competing health plans, including the insurance function as well as all specialty and tertiary care (refer to footnote 1). For market competition, three such networks, all functioning efficiently, would be needed, thus suggesting a state like Maine could never expect to have a competitive market. If the three plans shared a single tertiary hospital, the necessary population was estimated at 360,000. Maine was not judged to have any markets of this size (refer to footnote 2).

Other Pertinent Factors Not Addressed

Furthermore, the LCH decision did not consider other factors pertinent to the well being of the Boothbay region. The ability of the area to continue to recruit retirees who may choose the Boothbay region because of the proximity to, and assurance they would have access to care at their local hospital will be significantly compromised in the future. All of the individuals interviewed during the course of the work done by iVantage indicated they would not have chosen to retire in the Boothbay region had they known that the decision would be made to close the emergency department. Of the twenty retirement communities in the state, all have close proximity to a local hospital, with the majority being within one and a half miles or less to the hospital.

Real estate industry executives were interviewed and expressed significant concern about the ability to sell homes and negative impact on real estate valuations in the area stemming from the closure of the

St. Andrews Hospital Emergency Department. Others questioned the loss of philanthropic giving in the region as a result of the LCH decision. There was strong consensus that the generous past history of philanthropic support of the hospital would no longer occur based on the process and substance of the LCH decision.

The challenges of recruiting primary care physicians, a strategy central to LCH's future, are well known in rural America. There is a strong correlation in the ability to recruit physicians to these areas if there is a viable hospital with its resources for physicians to rely on in the immediate area that a practice is being established. The ability of LCH to recruit physicians who have multiple options elsewhere for establishing their practices, in the absence of a hospital becomes more difficult.

Finally, the recommended relocation of skilled beds currently located at St. Andrews to the Village (Gregory Wing) site raises important questions as well. Unless the overall licensed bed complement is increased, the licensed skill beds will displace nursing facility beds at the Village and these residents may be required to be transferred outside of the area where they cannot conveniently be visited by family and friends as they enjoy their final years. Also, the likely incremental staffing costs at the Village associated with this change, conflict with LCH's goal to provide services in a more cost effective manner.

" Charles Colgan and David Hartley. The Footnotes 1 & 2: "The Two-Edged Scalpel: Healthcare and the Rural Economy Maine Center for Economic Policy (2007).

2012 MARKET ASSESSMENT

Competitor Profile

Listed below are St. Andrews Hospital's competitors in terms of market presence. St. Andrews Hospital captured only 2.6% of all inpatient admissions from the Combined Service Area in 2011; this is due to LCH's decision to discontinue inpatient services approximately two years ago. The other MaineHealth hospital, Miles Memorial Hospital had a 34.1% market share. This is lower than what would be expected in a typical full service community hospital. This market share was the largest in the Combined Service Area. The two greatest competitors in the market include Maine Medical Center and Mid Coast Hospital. Together, these hospitals captured 51.1% of the inpatient admissions in the Combined Service Area.

Table 3: St. Andrews's Market Competitors – Combined Service Area

Facility	City	State	Total Beds	Distance from Boothbay Harbor	2011 Market Share %
ST ANDREWS HSP LINCOLN CNTY HLTHCARE	BOOTHBAY HARBOR	ME	25	--	2.6
MILES MEM HSP LINCOLN CNTY HLTHCARE	DAMARISCOTTA	ME	34	30mi Northeast	34.1
ME MC PORTLAND	PORTLAND	ME	529	60 mi Northeast	28.2
MID COAST HSP BRUNSWICK	BRUNSWICK	ME	81	30mi West	22.9
MERCY HSP PORTLAND	PORTLAND	ME	160	61 mi Northeast	2.6
PARKVIEW ADVNT MC BRUNSWICK	BRUNSWICK	ME	47	33mi East	1.3
CENT ME MC LEWISTON	LEWISTON	ME	177	51 mi Northwest	1.3
PENOBSCOT BAY MC ROCKPORT	ROCKPORT	ME	73	47mi Northeast	1.1

*Source: Most Recent CMS Cost Report for period ending 03/31/12 and 2011 MHDO data.

Tables 4 and 5 below show the facility operating indicators as well as beds and days information for St. Andrews Hospital and its competitors.

Table 4: 2011 Market Competitors Operating Indicators

Facility	Hospital Discharges	Inpatient Days	Avg. Daily Census	Occupancy	ALOS	Adjusted Admissions	Operating Expenses	Net Patient Revenue	Total FTE	Hospital FTE
ST ANDREWS HSP	142	3,085	8.5	33.8%	21.7	719.5	\$20,185,397	\$19,018,524	163	124
CENT ME MC	10,251	44,157	121	54%	4.3	22,592.8	\$321,349,180	\$305,229,938	1,762	1,743
ME GENERAL	12,046	48,220	132.1	61.2%	4	33,288	\$320,337,828	\$318,505,936	2,183	2,152
ME MED	30,522	152,477	417.7	67.6%	5	50,100	\$811,001,468	\$808,533,184	4,797	4,753
MERCY HSP	8,842	32,602	89.3	53.5%	3.7	21,863.7	\$206,457,457	\$185,773,760	1,293	1,293
MID COAST HSP	4,906	21,506	58.9	64%	4.4	13,534.9	\$107,519,817	\$106,710,256	738	738
MILES MEM HSP	1,670	7,369	20.2	53.1%	4.4	4,296.4	\$52,109,778	\$52,398,414	276	224
PARKVIEW MC	1,107	4,300	11.8	21.4%	3.9	3,867.7	\$38,189,092	\$36,521,361	225	225
PENOBSCOT BAY MC	4,101	19,886	54.5	67.3%	4.8	11,054.7	\$119,681,504	\$113,541,458	888	786

Table 5: 2011 Market Competitors Bed and Days Information

Facility	Total Beds	Total Days	Inpatient Beds	Inpatient Days	Newborn Days	Routine Beds	Routine Days	SNF Beds	SNF Days	Case Mix Index
ST ANDREWS HSP	25	347	25	3,085	0	25	3,085	0	0	0.77
CENT ME MC	177	31,407	224	44,157	1,793	177	31,407	0	0	2.29
ME GENERAL	193	41,365	216	48,220	2,687	193	41,365	0	0	1.9
ME MED	529	123,677	618	152,477	5,599	529	123,677	0	0	2.1
MERCY HSP	160	28,900	167	32,602	2,147	160	28,900	0	0	1.87
MID COAST HSP	81	17,126	92	21,506	1,668	81	17,126	0	0	1.44
MILES MEM HSP	34	4,585	38	7,369	432	34	5,201	0	0	3.55
PARKVIEW MC	47	3,376	55	4,300	0	47	3,376	0	0	1.05
PENOBSCOT BAY MC	73	16,967	81	19,886	891	73	16,967	84	29,066	1.9

*Source: Most Recent CMS Cost Report for period ending 03/31/12

Labor and Market Statistics

Figure 2 shows the annual labor force and employment in Lincoln County since 2007. Since 2007 the county's labor force has increased 2.7%, but the number employed did not rise at all. The unemployment rate during the same time period rose from 4.2 % to 6.8%, peaking at 7.5% in 2009 (Figure 3). The current unemployment rate of 6.8% in Lincoln County is well below the national unemployment rate of 7.7%.

Figure 2: Labor Force and Employment – Lincoln County 2007-2012

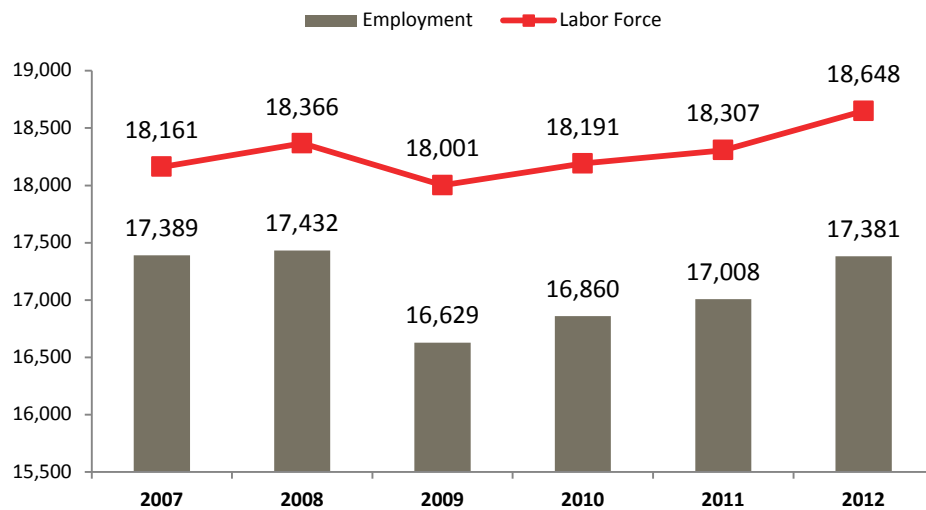
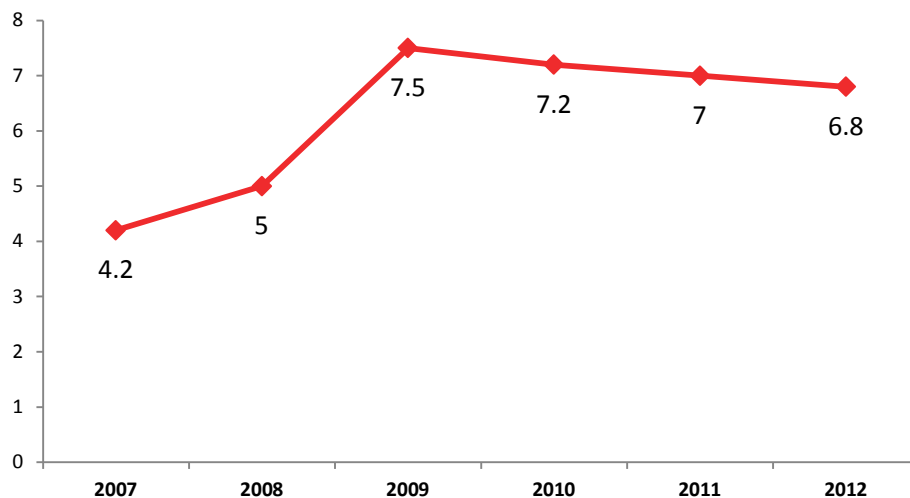


Figure 3: Unemployment Rate – Lincoln County 2007-2012



*Source: US Department of Labor, Bureau of Labor Statistics

*Note: 2012 Rate is average year-to-date.

Job Loss Impact

An analysis done by University of Maine Professor of Economics Todd Gabe shows a negative income impact of \$1,342,859 associated with a job loss of 38 (29 direct and 9 multiplier effect) in the region.

Table 6: 2011 Service Area Populations by Age and ZIP Code

Service Area	ZIP	City	0-14	15-44	45-64	65+	Total
Primary	04537	Boothbay	313	622	740	451	2,126
Primary	04538	Boothbay Harbor	183	498	667	683	2,031
Primary	04544	East Boothbay	67	148	258	273	746
Primary	04576	Southport	58	108	220	233	619
Secondary	04556	Edgecomb	197	336	394	207	1,134
Secondary	04571	Trevett	43	79	122	76	320
Combined Service Area			861	1,791	2,401	1,923	6,976

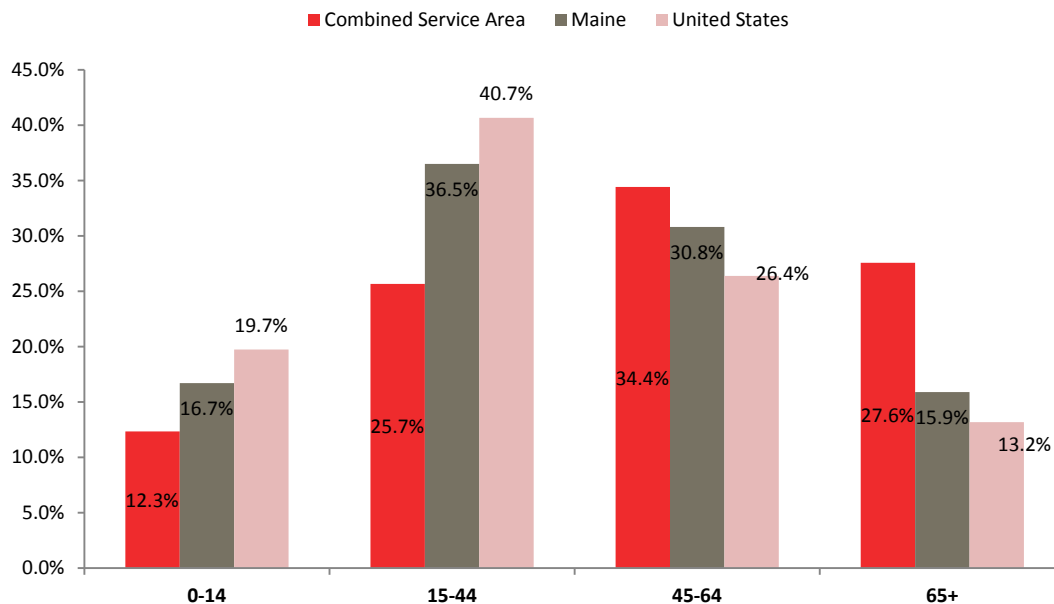
Percent of Totals

Combined Service Area	12.3%	25.7%	34.4%	27.6%	100%
Maine	17.0%	37.0%	31.0%	16.0%	100%
United States	19.7%	40.7%	26.4%	13.2%	100%

*Source: ESRI Business Information Solutions

Figure 5 and Table 6 show St. Andrews Hospital's Combined Service Area age distribution contrasted with state and national figures. The population of St. Andrews Hospital's Combined Service Area is older (45+) than both the average for the State of Maine and the United States. It is not uncommon for the elderly populations to have transportation difficulties.

Figure 5: Age Distribution Comparison



Population Growth by ZIP Code

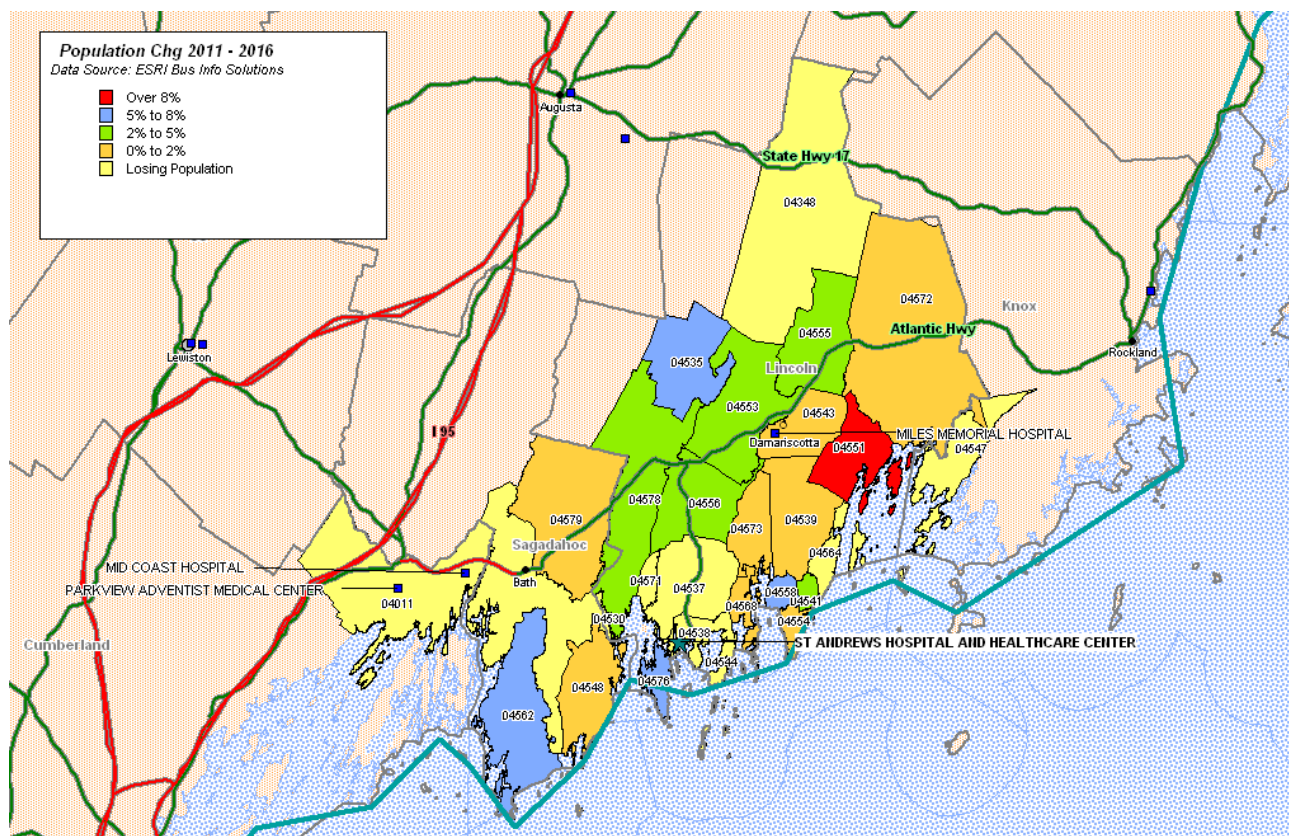
St. Andrews Hospital's Combined Service Area population is expected to remain stable from 2011-2016. This trend is common for the entire State of Maine. While the percent change in Boothbay Harbor appears high, it reflects only an estimated drop in 172 people, and the overall Combined Service Area change is estimated to drop only by 152. Table 7 and Figure 6 show the expected population change by ZIP Code.

Table 7: Population Change 2011-2016

ZIP Code – City Name	2011 Population	2016 Population	Volume Chg. 2011-2016	% Chg. 2011-2016
04537 Boothbay	2,126	2,117	-9	-0.42%
04538 Boothbay Harbor	2,031	1,859	-172	-8.47%
04544 East Boothbay	746	740	-6	-0.80%
04576 Southport	619	650	31	5.01%
04556 Edgecomb	1,134	1,168	34	3.00%
04571 Trevett	320	315	-5	-1.56%
Total Primary Service Area	5,522	5,366	-156	-2.83%
Total Secondary Service Area	1,454	1,483	29	1.99%
Total Combined Service Area	6,976	6,849	-127	-1.82%
Total Target Service Area	61,576	62,066	490	0.80%

*Source: ESRI Business Information Solutions

Figure 6: Population Change 2011-2016



Population Growth by Age Cohort

St. Andrews Hospital's Combined Service Area is projected remain stable from 2011-2016. Figure 7 shows projected population change by age cohort. The Combined Service Area is projected to experience little growth or to lose population from all age cohorts excluding seniors 65+; however, the senior population is a smaller number of individuals.

Figure 7: Population Growth by Age Cohort – Combined Service Area – 2011-2016

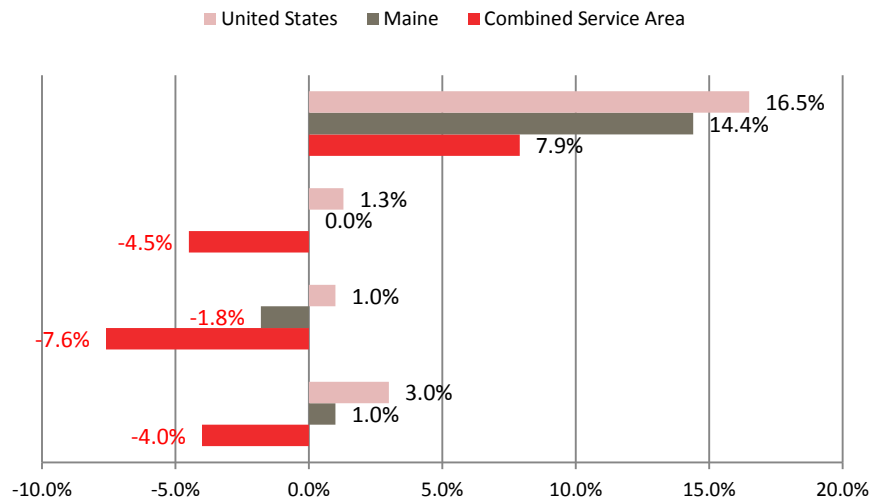
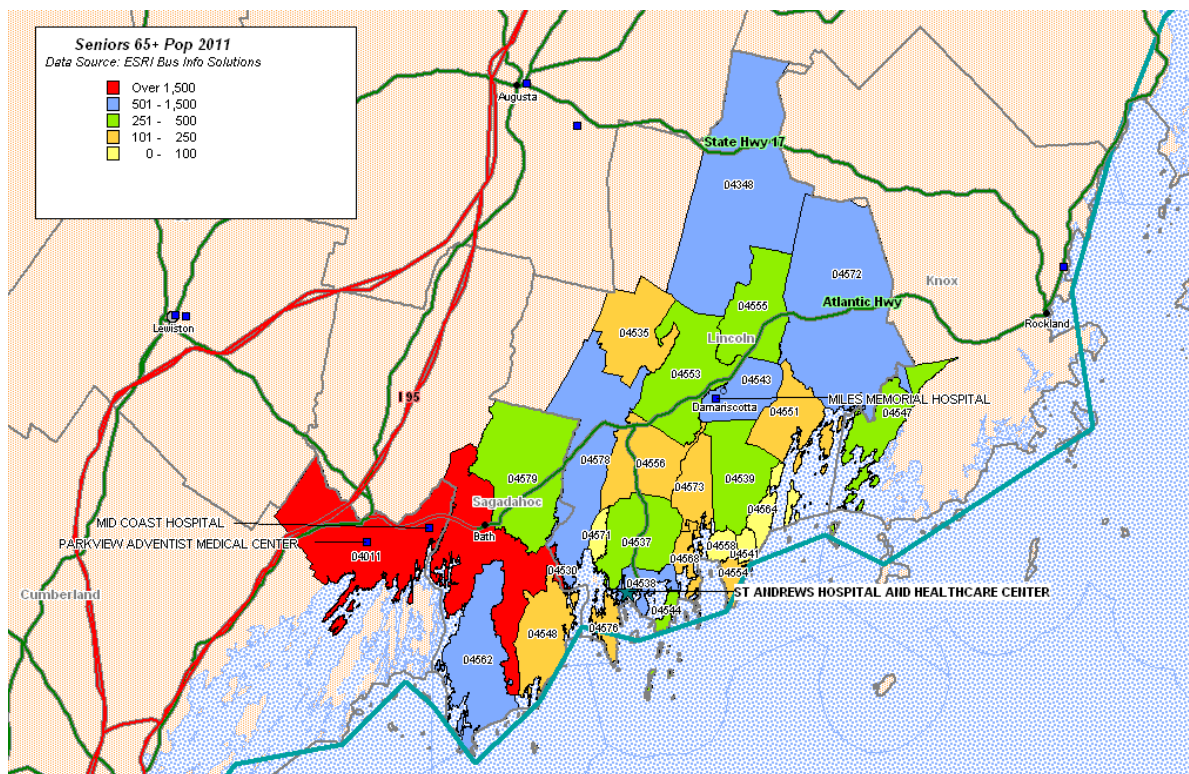


Figure 8: 2011 Service Area Senior (65+) Populations



Median Household Income

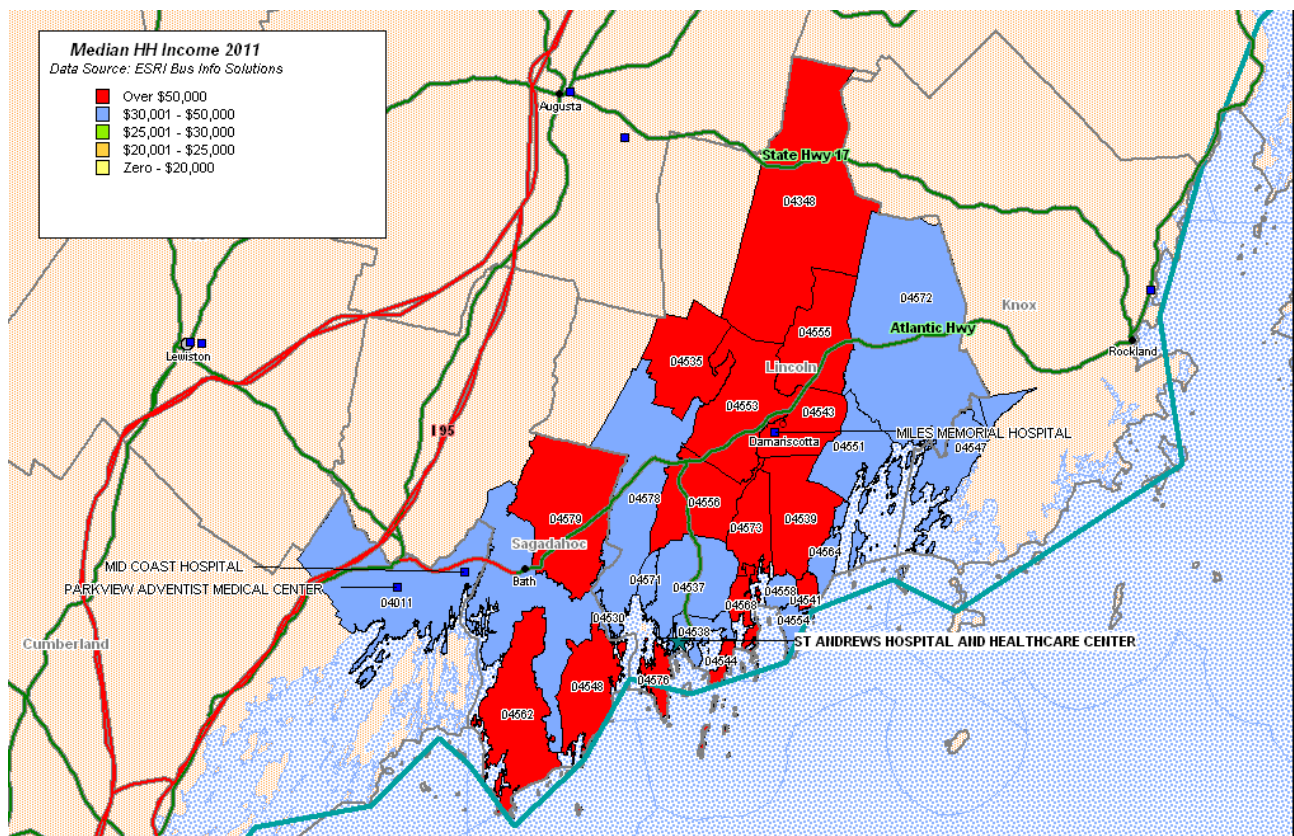
St. Andrews Hospital's Combined Service Area has a median household income of \$48,263. It is slightly higher than the median household income for Maine at \$46,193 and significantly lower than the median household income for the United States at \$53,358. The Combined Service Area median household income is projected to increase 11.1% to \$53,598 by 2016.

Table 8: Service Area Median Household Income Change 2011-2016

Designation	ZIP Code - City Name	2011 Median Household Income	2016 Median Household Income	Income Change 2011-2016	Percent Change 2011-2016	Compound Annual Growth Rate
Primary Service Area	04537 Boothbay	\$48,364	\$53,743	\$5,379	11.12%	2.13%
Primary Service Area	04538 Boothbay Harbor	\$41,268	\$45,802	\$4,534	10.99%	2.11%
Primary Service Area	04544 East Boothbay	\$57,979	\$62,387	\$4,408	7.60%	1.48%
Primary Service Area	04576 Southport	\$53,869	\$59,757	\$5,888	10.93%	2.10%
Secondary Service Area	04556 Edgecomb	\$51,984	\$57,437	\$5,453	10.49%	2.02%
Secondary Service Area	04571 Trevett	\$47,671	\$53,678	\$6,007	12.60%	2.40%
—Total Primary Service Area	—	\$47,618	\$52,856	\$5,239	11.00%	2.11%
—Total Combined Service Area	—	\$48,263	\$53,598	\$5,335	11.05%	2.12%
—Total Market—	—	\$48,236	\$55,921	\$7,685	15.93%	3.00%

*Source: ESRI Business Information Solutions

Figure 9: 2011 Service Area Median Household Incomes



Service Area Demographics – Observations and Conclusions

New demographic estimates show that St. Andrews' total population is expected to remain stable in the next five years. The senior 65+ populations is expected to increase over 14%, and this population often requires a higher amount of care as well as experiencing difficulties with transportation. Also noteworthy is the relatively low unemployment rate, which is significantly lower than the United States as a whole.

*Note: Source for above demographic data is ESRI Business Solutions unless otherwise noted.

HOSPITAL UTILIZATION AND MARKET SHARE

Inpatient Surgical Market Share – All Inpatients (Maine Health Data Organization)

Table 9a and 9b show inpatient surgical market share for the Combined Service Area. Over one-half (58.9%) of surgical cases went to Maine Medical Center; however, Miles Memorial Hospital captured 17.1% of cases while Mid Coast Hospital captured 12.7% of cases.

Table 9a: 2011 Inpatient Surgical Market Share – ME State Data – Combined Service Area

	Total Mkt	CENT ME MC		ME MC		MERCY HSP		MID COAST HSP	
Product Line	Cases	Cases	Mkt Share %	Cases	Mkt Share %	Cases	Mkt Share %	Cases	Mkt Share %
CARDIOLOGY	163	10	6.1	131	80.4	0	0	19	11.7
CARDIOVASCULAR	92	7	7.6	85	92.4	0	0	0	0
GYNECOLOGY	137	3	2.2	35	25.5	4	2.9	56	40.9
NEUROSURGERY	157	7	4.5	125	79.6	17	10.8	0	0
ONCOLOGY	4	1	25	2	50	0	0	1	25
ORTHOPEDICS	584	21	3.6	184	31.5	49	8.4	165	28.3
SURGERY-GENERAL	458	28	6.1	157	34.3	3	0.7	138	30.1
SURGERY-OTHER	16	0	0	6	37.5	1	6.3	8	50
TRANSPLANT	1	0	0	1	100	0	0	0	0
UROLOGY	97	2	2.1	43	44.3	2	2.1	18	18.6
VASCULAR	65	2	3.1	53	81.5	2	3.1	2	3.1
Primary Service Area	158	5	3.2	93	58.9	10	6.3	20	12.7
Secondary Service Area	36	0	0	18	50	1	2.8	8	22.2
Target Service Area - Mid Coast	990	61	6.2	432	43.6	36	3.6	358	36.2
Target Service Area - Miles	590	15	2.5	279	47.3	31	5.3	21	3.6
Total Cases(ex NB and Neo)	1774	81	4.6	822	46.3	78	4.4	407	22.9

Table 9b: 2011 Inpatient Surgical Market Share – ME State Data – Combined Service Area

	Total Mkt	MILES MEM		PARKVIEW MEM		PENOBSCOT BAY MC		All Other Hospitals	
Product Line	Cases	Cases	Mkt Share %	Cases	Mkt Share %	Cases	Mkt Share %	Cases	Mkt Share %
CARDIOLOGY	163	0	0	1	0.6	0	0	2	1.2
CARDIOVASCULAR	92	0	0	0	0	0	0	0	0
GYNECOLOGY	137	16	11.7	7	5.1	11	8	5	3.6
NEUROSURGERY	157	0	0	0	0	1	0.6	7	4.5
ONCOLOGY	4	0	0	0	0	0	0	0	0
ORTHOPEDICS	584	112	19.2	20	3.4	18	3.1	15	2.6
SURGERY-GENERAL	458	69	15.1	31	6.8	6	1.3	26	5.7
SURGERY-OTHER	16	0	0	0	0	0	0	1	6.3
TRANSPLANT	1	0	0	0	0	0	0	0	0
UROLOGY	97	0	0	18	18.6	12	12.4	2	2.1
VASCULAR	65	1	1.5	1	1.5	3	4.6	1	1.5
Primary Service Area	158	27	17.1	2	1.3	0	0	1	0.6
Secondary Service Area	36	9	25	0	0	0	0	0	0
Target Service Area - Mid Coast	990	16	1.6	72	7.3	1	0.1	14	1.4
Target Service Area - Miles	590	146	24.7	4	0.7	50	8.5	44	7.5
Total Cases(ex NB and Neo)	1774	198	11.2	78	4.4	51	2.9	59	3.3

Medicare Inpatient Market Share Trend

Table 10 below shows the Medicare inpatient market share trend for St. Andrews Hospitals and its competitors. Of note is the Medicare market share increases for Miles and Mid Coast hospitals.

Table 10 – Medicare Inpatient Market Share – 3 Year Trend – Combined Service Area

Hospital	2011		2010		2009	
	Medicare Discharges	Medicare Market Share	Medicare Discharges	Medicare Market Share	Medicare Discharges	Medicare Market Share
MILES MEM HSP LINCOLN CNTY HLT	167	36.1%	182	35.5%	92	16.2%
ME MC PORTLAND	129	27.9%	137	26.8%	135	23.8%
MID COAST HSP BRUNSWICK	83	18.0%	67	13.1%	51	9.0%
ST ANDREWS HSP LINCOLN CNTY HL	15	3.2%	60	11.7%	226	39.8%
PARKVIEW ADVNT MC BRUNSWICK	9	1.9%	5	1.0%	7	1.2%
PENOBSCOT BAY MC ROCKPORT	4	0.9%	4	0.8%	4	0.7%
CENT ME MC LEWISTON	3	0.6%	5	1.0%	2	0.4%
ME GEN MC AUGUSTA	2	0.4%	2	0.4%	2	0.4%
All Other Hospitals	50	10.8%	50	9.8%	49	8.6%
Totals	462	100%	512	100%	568	100%

*Source: Medicare Service Area File

Medicare Inpatient Market Share by ZIP Code

Table 11 – Medicare Inpatient Market Share by ZIP Code

Zip Code – City	Total 2011 Medicare Inpatient Discharges	St. Andrews 2011 Medicare Inpatient Discharges	St. Andrews 2011 Medicare Inpatient Market Share	Competitor 2011 Medicare Inpatient Discharges
04537 Boothbay	108	4	0.04%	104
04538 Boothbay Harbor	170	6	0.04%	164
04544 East Boothbay	48	2	0.04%	46
04576 Southport	52	2	0.04%	50
04556 Edgecomb	68	<1	*	68
04571 Trevett	77	<1	*	77
Total	523	14	2.6%	509

*Source: Medicare Service Area File

Medicare Outpatient Market Share by Provider for Lincoln County, ME

Table 12a and 12b show the Medicare Outpatient Market Share for Lincoln County, ME. Almost 40% of ER cases were treated at St. Andrews Hospital.

Table 12a – Medicare Outpatient Market Share by Provider

Type of Service	Total	ST ANDREWS HSP LINCOLN CNTY HLTHCARE		BRIDGTON HSP		CENT ME MC LEWISTON		ME GEN MC AUGUSTA		ME MC PORTLAND		MERCY HSP PORTLAND	
	Claims	Claims	Share	Claims	Share	Claims	Share	Claims	Share	Claims	Share	Claims	Share
Total Claims	38,429	6,726	17.5	18	0	204	0.5	2,858	7.4	2,755	7.2	491	1.3
Imaging Std Chest	2,162	416	19.2	<11	0	<11	0.1	146	6.8	53	2.5	<11	0.4
Imaging Std Musculoskeletal	3,984	651	16.3	<11	0.1	20	0.5	265	6.7	18	0.5	35	0.9
Imaging Std Breast	14	<11	0	<11	0	<11	0	<11	14.3	<11	35.7	<11	0
Imaging Std Contrast GI	157	<11	3.2	<11	0	<11	0	18	11.5	<11	3.8	<11	0
Imaging Std Nuclear Medicine	511	<11	0	<11	0	<11	0.4	121	23.7	26	5.1	<11	0.2
Imaging Std Other	257	35	13.6	<11	0	<11	0.8	41	16	17	6.6	<11	1.6
Imaging Advncd CAT Head	720	151	21	<11	0	<11	0.4	45	6.3	14	1.9	<11	0.1
Imaging Advncd CAT Oth	1,746	307	17.6	<11	0.1	11	0.6	118	6.8	71	4.1	<11	0.4
Imaging Advncd MRI Brain	181	<11	0	<11	0.6	<11	0	<11	1.1	<11	1.7	<11	0
Imaging Advncd MRI Oth	414	<11	0	<11	0	<11	0	<11	2.2	13	3.1	<11	0.5
Imaging Echo Eye	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	0
Imaging Echo Abdomen/Pelvis	523	60	11.5	<11	0.2	<11	0.2	30	5.7	<11	1	<11	0
Imaging Echo Heart	409	44	10.8	<11	0	<11	0.5	11	2.7	<11	1	<11	0.2
Imaging Echo Carotid Arteries	200	18	9	<11	0	<11	0.5	<11	4	<11	1	<11	0
Imaging Echo Prostate Transrectl	24	<11	0	<11	0	<11	4.2	<11	0	<11	0	<11	4.2
Imaging Echo Other	491	51	10.4	<11	0	12	2.4	34	6.9	<11	2	15	3.1
Imaging Px Other	167	<11	0	<11	0	<11	3.6	<11	3.6	46	27.5	27	16.2
Visit ER	4,802	1,912	39.8	<11	0.1	<11	0.1	227	4.7	39	0.8	<11	0
Px Major Normally Inpatient	427	<11	1.9	<11	0	<11	1.4	20	4.7	136	31.9	46	10.8
Px Eye Corneal Transplant	<11	<11	0	<11	0	<11	0	<11	0	<11	25	<11	0
Px Eye Catar Remove Lens Insrt	265	<11	0	<11	0	<11	0	16	6	<11	1.5	<11	0
Px Eye Retinal Detachment	<11	<11	0	<11	0	<11	0	<11	0	<11	60	<11	40
Px Eye Tmt of Retinal Lesions	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	0
Px Eye Other	38	<11	0	<11	0	<11	0	<11	5.3	<11	13.2	<11	0
Px Amb Skin	393	<11	2	<11	0	<11	0.8	47	12	11	2.8	18	4.6
Px Amb Musculoskeletal	123	<11	1.6	<11	0	<11	0	17	13.8	<11	4.1	<11	5.7
Px Amb Inguinal Hernia Repair	25	<11	24	<11	0	<11	4	<11	8	<11	4	<11	0
Px Amb Lithotripsy	<11	<11	0	<11	0	<11	0	<11	42.9	<11	28.6	<11	0
Px Amb Other	249	20	8	<11	0	<11	0	21	8.4	37	14.9	<11	4
Px Minor Skin	380	45	11.8	<11	0	<11	0.5	23	6.1	<11	2.4	16	4.2
Px Minor Musculoskeletal	1,106	36	3.3	<11	0	<11	0.1	46	4.2	<11	0.2	33	3
Px Minor Oth MCare Fee Sch	6,337	1,491	23.5	<11	0	18	0.3	551	8.7	219	3.5	139	2.2
Px Minor Oth Non-MFS	23	<11	0	<11	0	<11	0	<11	8.7	<11	4.3	<11	0
Px Oncology Radiation Therapy	1,640	<11	0	<11	0	<11	0	208	12.7	1,199	73.1	<11	0
Px Oncology Other	395	65	16.5	<11	0	<11	0	126	31.9	33	8.4	<11	1.5
Px Endoscopy Arthroscopy	48	<11	16.7	<11	0	<11	0	<11	4.2	<11	8.3	<11	6.3
Px Endoscopy Upper GI	253	29	11.5	<11	0	<11	0.4	22	8.7	50	19.8	<11	0.8
Px Endoscopy Sigmoidoscopy	<11	<11	20	<11	0	<11	0	<11	0	<11	10	<11	0
Px Endoscopy Colonoscopy	443	91	20.5	<11	0	<11	0.5	35	7.9	<11	1.8	<11	0.9
Px Endoscopy Cystoscopy	173	<11	4.6	<11	0	<11	0.6	<11	4	16	9.2	<11	0.6
Px Endoscopy Bronchoscopy	31	<11	0	<11	0	<11	0	<11	12.9	<11	0	<11	3.2
Px Endoscopy Laryngoscopy	22	<11	0	<11	0	<11	0	<11	0	<11	18.2	<11	9.1
Px Endoscopy Other	56	<11	0	<11	0	<11	0	<11	0	<11	14.3	<11	0
Px Dialysis MCare Fee Sch	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	0
Tests Lab Glucose	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	33.3
Tests Lab Oth MCare Fee Sch	2,795	230	8.2	<11	0	16	0.6	165	5.9	321	11.5	68	2.4
Tests Lab Oth Non-MFS	1,602	447	27.9	<11	0	37	2.3	177	11	200	12.5	<11	0.4
Tests Oth ECG	3,038	546	18	<11	0	13	0.4	110	3.6	111	3.7	17	0.6
Tests Oth CV Stress Test	224	<11	3.1	<11	0	<11	1.3	21	9.4	<11	0.4	<11	0
Tests Oth EKG Monitoring	287	22	7.7	<11	0	<11	0	<11	3.5	12	4.2	<11	0
Tests Oth Other	1,256	<11	0.4	<11	0	31	2.5	138	11	16	1.3	<11	0.2

Table 12b – Medicare Outpatient Market Share by Provider

	Total		MID COAST HSP BRUNSWICK		MILES MEM HSP LINCOLN CNTY HLTHCARE		PARKVIEW ADVNT MC BRUNSWICK		PENOBSCOT BAY MC ROCKPORT		WALDO CNTY GEN HSP BELFAST		All Other	
Type of Service	Claims	Share	Claims	Share	Claims	Share	Claims	Share	Claims	Share	Claims	Share	Claims	Share
Total Claims	38,429	11.5	4,433	11.5	14,697	38.2	673	1.8	2,904	7.6	77	0.2	2,593	6.7
Imaging Std Chest	2,162	10.1	218	10.1	1,059	49	35	1.6	103	4.8	<11	0.1	118	5.5
Imaging Std Musculoskeletal	3,984	7	279	7	2,228	55.9	51	1.3	247	6.2	<11	0.2	176	4.4
Imaging Std Breast	14	<11	21.4	<11	21.4	<11	0	<11	0	<11	0	<11	<11	7.1
Imaging Std Contrast GI	157	22	14	73	46.5	<11	2.5	20	12.7	<11	1.9	<11	<11	3.8
Imaging Std Nuclear Medicine	511	44	8.6	271	53	<11	0	25	4.9	<11	0	21	4.1	4.1
Imaging Std Other	257	32	12.5	100	38.9	<11	1.6	12	4.7	<11	0	<11	<11	3.9
Imaging Advncd CAT Head	720	59	8.2	359	49.9	<11	1.1	31	4.3	<11	0.4	46	6.4	6.4
Imaging Advncd CAT Oth	1,746	210	12	728	41.7	30	1.7	123	7	<11	0.2	137	7.8	7.8
Imaging Advncd MRI Brain	181	50	27.6	110	60.8	<11	0.6	<11	0	<11	1.1	12	6.6	6.6
Imaging Advncd MRI Oth	414	121	29.2	236	57	11	2.7	<11	0	<11	0	22	5.3	5.3
Imaging Echo Eye	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	<11	100
Imaging Echo Abdomen/Pelvis	523	93	17.8	250	47.8	<11	1.7	50	9.6	<11	0	24	4.6	4.6
Imaging Echo Heart	409	37	9	252	61.6	<11	1.7	25	6.1	<11	0.5	24	5.9	5.9
Imaging Echo Carotid Arteries	200	25	12.5	108	54	<11	2	15	7.5	<11	0.5	18	9	9
Imaging Echo Prostate Transrectl	24	<11	25	<11	8.3	<11	8.3	12	50	<11	0	<11	<11	0
Imaging Echo Other	491	78	15.9	222	45.2	11	2.2	29	5.9	<11	0	29	5.9	5.9
Imaging Px Other	167	62	37.1	<11	4.8	<11	0	<11	2.4	<11	0	<11	<11	4.8
Visit ER	4,802	290	6	1,884	39.2	46	1	181	3.8	12	0.2	198	4.1	4.1
Px Major Normally Inpatient	427	71	16.6	57	13.3	12	2.8	37	8.7	<11	0	34	8	8
Px Eye Corneal Transplant	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	<11	75
Px Eye Catar Remove Lens Instrt	265	44	16.6	155	58.5	11	4.2	<11	3.4	<11	1.9	21	7.9	7.9
Px Eye Retinal Detachment	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	<11	0
Px Eye Tmt of Retinal Lesions	<11	<11	100	<11	0	<11	0	<11	0	<11	0	<11	<11	0
Px Eye Other	38	11	28.9	<11	23.7	<11	0	<11	0	<11	0	11	28.9	28.9
Px Amb Skin	393	66	16.8	148	37.7	<11	0	41	10.4	<11	1.5	45	11.5	11.5
Px Amb Musculoskeletal	123	47	38.2	30	24.4	<11	0	12	9.8	<11	0	<11	<11	2.4
Px Amb Inguinal Hernia Repair	25	<11	16	<11	40	<11	0	<11	0	<11	0	<11	<11	4
Px Amb Lithotripsy	<11	<11	0	<11	0	<11	0	<11	28.6	<11	0	<11	<11	0
Px Amb Other	249	48	19.3	70	28.1	<11	1.6	25	10	<11	0	14	5.6	5.6
Px Minor Skin	380	36	9.5	183	48.2	<11	0.5	43	11.3	<11	1.1	17	4.5	4.5
Px Minor Musculoskeletal	1,106	121	10.9	709	64.1	11	1	108	9.8	<11	0.5	34	3.1	3.1
Px Minor Oth MCare Fee Sch	6,337	572	9	2,078	32.8	156	2.5	653	10.3	<11	0	455	7.2	7.2
Px Minor Oth Non-MFS	23	<11	8.7	12	52.2	<11	0	<11	21.7	<11	0	<11	<11	4.3
Px Oncology Radiation Therapy	1,640	<11	0	<11	0	<11	0	<11	0	<11	0	233	14.2	14.2
Px Oncology Other	395	22	5.6	<11	2	<11	0	62	15.7	<11	0	73	18.5	18.5
Px Endoscopy Arthroscopy	48	15	31.3	<11	14.6	<11	0	<11	16.7	<11	0	<11	<11	2.1
Px Endoscopy Upper GI	253	63	24.9	55	21.7	<11	3.6	16	6.3	<11	0.8	<11	<11	1.6
Px Endoscopy Sigmoidoscopy	<11	<11	30	<11	20	<11	0	<11	10	<11	0	<11	<11	10
Px Endoscopy Colonoscopy	443	113	25.5	119	26.9	15	3.4	40	9	<11	0	16	3.6	3.6
Px Endoscopy Cystoscopy	173	39	22.5	19	11	20	11.6	60	34.7	<11	0	<11	<11	1.2
Px Endoscopy Bronchoscopy	31	16	51.6	<11	3.2	<11	3.2	<11	19.4	<11	0	<11	<11	6.5
Px Endoscopy Laryngoscopy	22	<11	13.6	<11	4.5	<11	4.5	<11	27.3	<11	9.1	<11	<11	13.6
Px Endoscopy Other	56	14	25	<11	14.3	<11	3.6	19	33.9	<11	0	<11	<11	8.9
Px Dialysis MCare Fee Sch	<11	<11	0	<11	0	<11	0	<11	0	<11	0	<11	<11	100
Tests Lab Glucose	<11	<11	66.7	<11	0	<11	0	<11	0	<11	0	<11	<11	0
Tests Lab Oth MCare Fee Sch	2,795	545	19.5	633	22.6	57	2	427	15.3	<11	0.1	331	11.8	11.8
Tests Lab Oth Non-MFS	1,602	91	5.7	357	22.3	74	4.6	48	3	<11	0.2	162	10.1	10.1
Tests Oth ECG	3,038	289	9.5	1,644	54.1	40	1.3	119	3.9	<11	0.2	143	4.7	4.7
Tests Oth CV Stress Test	224	18	8	142	63.4	<11	1.3	20	8.9	<11	0	<11	<11	4
Tests Oth EKG Monitoring	287	26	9.1	166	57.8	<11	2.1	34	11.8	<11	0	11	3.8	3.8
Tests Oth Other	1,256	522	41.6	181	14.4	26	2.1	226	18	<11	0.3	105	8.4	8.4

*Source: CMS Outpatient File

Inpatient Demand Estimates

Inpatient Demand in the Combined Service Area is projected to remain the same from 2011-2016. Table 13 below shows the current and projected demand for each service line.

Table 13: Inpatient Projected Demand – Combined Service Area

Product Line	2011 Estimated Cases	2016 Estimated Cases	2011-2016 Volume Change	2011-2016 Percent Change
CARDIOLOGY	91	93	2	2.20%
CARDIOVASCULAR	12	12.6	0.6	4.90%
GASTROENTEROLOGY	42	43.1	1.1	2.60%
GYNECOLOGY	11	10.6	-0.4	-3.90%
MEDICINE	128	130.4	2.4	1.90%
MENTAL HEALTH	67	63.3	-3.7	-5.60%
NEUROLOGY	35	35.3	0.3	0.90%
NEUROSURGERY	18	18.7	0.7	4.00%
OB-DELIVERY	42	39.3	-2.7	-6.40%
OB-OTHER	4	3.7	-0.3	-6.90%
ONCOLOGY	16	16.9	0.9	5.60%
ORTHOPEDICS	68	70.7	2.7	4.00%
PULMONARY	79	81.9	2.9	3.70%
REHABILITATION	4	4.3	0.3	7.10%
SURGERY-GENERAL	53	53.8	0.8	1.50%
SURGERY-OTHER	3	2.8	-0.2	-6.20%
UNGROUPED OR INVALID DRG	7	7	0	0.10%
UROLOGY	29	29.7	0.7	2.30%
VASCULAR	10	10.4	0.4	4.50%
CSA Total Exc NB and Neonates (789-795)	762	767.7	5.7	0.80%
NEONATE (789-794)	719	727.5	8.5	1.20%
NORMAL NEWBORN (795)	16	14.7	-1.3	-8.30%
CSA Total Exc Only Normal Newborn (795)	27	25.5	-1.5	-5.50%
Combined Service Area (CSA) Total Cases	735	742.2	7.2	1.00%

Utilization Source: Maine Health Data Organization

Outpatient Demand Estimates by Service Line

Table 14 below shows outpatient demand estimates by service line. St. Andrews Hospital's Combined Service Area is projected to increase almost 13%. In particular, the demand for Emergency Department services is expected to grow 5 %, and the demand for Diagnostic Outpatient is expected to increase over 14%.

Table 14: Outpatient Projected Demand – Combined Service Area

Service Area	<u>Emergency Department</u>		2011-2016 Volume	2011-2016 Percent
	2011 Estimated	2016 Estimated		
Combined Service Area	4,067.50	4,269.20	201.70	5.00%
Primary Service Area	3,219.70	3,344.80	125.10	3.90%
Secondary Service Area	847.80	924.40	76.6	9.00%
Target Service Area - Mid Coast	24,058.10	25,788.70	1,730.60	7.20%
Target Service Area - Miles	11,845.10	12,899.30	1,054.20	8.90%
All Service Areas	39970.7	42957.3	2986.5	0.075

Service Area	<u>Ambulatory Surgery</u>		2011-2016 Volume	2011-2016 Percent
	2011 Estimated	2016 Estimated		
Combined Service Area	744.90	852.80	107.9	14.50%
Primary Service Area	589.60	668.20	78.5	13.30%
Secondary Service Area	155.3	184.70	29.4	18.90%
Target Service Area - Mid Coast	4,405.70	5,151.50	745.8	16.90%
Target Service Area - Miles	2,169.20	2,576.70	407.6	18.80%
All Service Areas	7,319.70	8,581.00	1261.3	17.20%

Service Area	<u>Diagnostic Outpatient</u>		2011-2016 Volume	2011-2016 Percent
	2011 Estimated	2016 Estimated		
Combined Service Area	22,879.30	26,097.70	3,218.40	14.10%
Primary Service Area	18,110.60	20,446.80	2,336.20	12.90%
Secondary Service Area	4,768.70	5,650.90	882.20	18.50%
Target Service Area - Mid Coast	135,324.10	157,645.20	22,321.10	16.50%
Target Service Area - Miles	66627.3	78853.1	12225.8	0.183
All Service Areas	224830.7	262596	37765.3	0.168

Service Area	<u>Total Outpatient Visits</u>		2011-2016 Volume	2011-2016 Percent
	2011 Estimated	2016 Estimated		
Combined Service Area	27,691.60	31,219.70	3,528.10	12.70%
Primary Service Area	21,919.90	24,459.80	2,539.90	11.60%
Secondary Service Area	5,771.70	6,759.90	988.20	17.10%
Target Service Area - Mid Coast	163,788.00	188,585.40	24,797.50	15.10%
Target Service Area - Miles	80641.6	94329.2	13687.6	0.17
All Service Areas	272121.2	314134.3	42013.1	0.154

Hospital Utilization and Market Share – Observations

Like many markets in the US, inpatient utilization in St. Andrews Hospital's service area is decreasing. However, outpatient utilization is projected to increase significantly over the next five years. In addition, the only other Inpatient and Emergency Room services are at least 30 miles away.

MEDICAL STAFF ANALYSIS

Physician Demand

Physician Demand – Combined Service Area – GMENAC Model

Table 15 shows the physician demand estimates for the combined service area. The demand for physicians in the Combined Service Area is expected to increase only slightly from 2011-2016.

Table 15: Physician Demand – GMENAC Model

Specialty Group	Specialty	2011 Estimated Number of Physicians GMENAC Model	2016 Estimated Number of Physicians GMENAC Model
All Physicians	Overall Total	12.6	12.3
Primary Care	Fam/Gen Practice	2	2
	Gen Int Med	1.6	1.6
	Pediatrics	0.9	0.9
	Total Primary Care	4.6	4.5
Medical Sub-Specialties	Allergy	0.1	0.1
	Cardiology	0.3	0.3
	Dermatology	0.2	0.2
	Endocrinology	0.1	0.1
	Gastroenterology	0.2	0.2
	Hematology/Oncology	0.1	0.1
	Infectious Disease	0	0
	Nephrology	0.1	0.1
	Neurology	0.2	0.2
	Pulmonary Disease	0.1	0.1
	Rheumatology	0.1	0.1
	Total Medical Sub-Spec.	1.4	1.4
Surgical Specialties	Ob-Gyn	0.8	0.8
	General Surgery	0.8	0.7
	Cardiac Surgery	0.1	0.1
	Neurosurgery	0.1	0.1
	Ophthalmology	0.4	0.4
	Orthopedics	0.5	0.4
	ENT	0.2	0.2
	Plastic Surgery	0.1	0.1
	Thoracic Surgery	0	0
	Urology	0.3	0.3
	Total Surgical Spec.	3.2	3.2
Hospital Based	Radiology	0.6	0.6
	Anesthesiology	0.6	0.6
	Pathology	0.3	0.3
	Total Hospital-Based	1.5	1.5
Other Specialties	Psychiatry	0.8	0.8
	Urgent Care/Emer Med	0.4	0.4

	Physical Medicine	0.1	0.1
	Misc Other	0.5	0.5
	Total Other	1.8	1.7
	Urgent Care/Emer Med	3.8	3.9
	Physical Medicine	0.8	0.8
	Misc Other	4.5	4.6
	Total Other	17.4	17.5

*GMENAC model based on conservative estimate of 180 physicians/100,000 population

Physician Supply

Physician Supply – Based on CMS (Medicare) National Provided Identifier File

The Combined Service Area has a total of 10 physicians; all are located in the Primary Service Area. Table 16 shows the physician supply for the Combined Service Area.

Table 16: Physician Demand – GMENAC Model

Specialty	Sub-Specialty	Count
Total		10
Emergency Medicine		3
Emergency Medicine	Emergency Medical Services	1
Family Medicine		4
Internal Medicine		1
Physical Medicine & Rehabilitation	Neuromuscular Medicine	1

APPENDIX A: SUMMARY OF KEY INTERVIEWS CONDUCTED

November 26-27, 2012

Goodspeed

Summary of Key Interviews: Key interviews with task force, Lincoln County Healthcare board, providers and select community representatives were conducted over a two-day timeframe. The key interviews, along with the market assessment are one of the most important ingredients in developing the strategic direction for St. Andrews Hospital. The results of the interviews will be integrated into the plan and are suggestive of strategic themes and objectives.

Strategic Themes: As a result of the two days interviews, a number of consistent strategic themes emerged. Below is a summary of these themes:

- **Service Area Definition:** The proposed service area was reviewed with each participant and the primary, secondary and target service areas for St. Andrews were confirmed. Noted were the travel times to the various healthcare providers in the region. Significantly, most interviewees stated after the significant reduction of services at St Andrews, the preferred provider is Mid Coast Hospital because of its quality reputation, availability of providers, facilities and travel time.
- **Miles Memorial Hospital:** There was significant discussion regarding Miles Memorial Hospital and concerns about its reputation and “attitude of staff.” There was a general consensus that for St. Andrews service area residents, Miles would not be the preferred provider for acute care services.
- **Community Support:** During each interview, with few two exceptions, the level of community support for maintaining a hospital in Boothbay Harbor was unanimous. Fifty-two percent of the residents signed the general petition supporting St. Andrews Hospital. There was also a general sense that the consultant’s review needs to be objective and the recommendations must promote quality, access and financial viability. Finally, many questions were raised about the hospital’s community non-profit assets/donations.
- **The Future of St Andrews:** There was discussion of a wide range of potential services to be located at St. Andrews including things such as behavioral health, wound care, endocrinology, ambulatory care, outpatient surgery, limited inpatient services, rehabilitation, hospice, swing beds and emergency services to name a few. Most participants expressed having services related to the health care needs of the area.
- **Maine Health and the Navigant Report:** Participants consistently noted the lack of transparency in the decision to close the St. Andrews Emergency Department hence losing its’ critical access status and related cost-based reimbursement for Medicare and Medicaid patients. The general lack of trust with Maine Health was noted in many interviews. There was general confusion about how Navigant came to its conclusions. However, it was very clear that the primary criterion used by Navigant was accessibility/affordability. It was noted that criteria such as travel time, quality, safety net, outcomes, resident preference and even cost was not evident in making the decision. All recognized that healthcare is changing.
- **St Andrews Task Force:** Many participants noted the progress of the St. Andrews Task Force and the work of the subcommittees. There was also a universal suggestion that communication needs to be “significantly improved” among the various work groups.

- **Demographics:** There was discussion of the service area demographics and of note were the significant seasonal population and the income discrepancy between the “locals” and “visitors”. The significant wealth in the community was mentioned in many interviews.
- **Pre-Hospital Care/Ambulance Service:** There was universal concern about the additional cost subsidies (approximately \$500,000 per year) that the towns would have to provide when the St. Andrews Emergency Department closes. Greater concern was expressed for travel times and a potential for an unexpected clinical outcome due to lack of stabilization at the St. Andrews Emergency Department.
- **Village at St. Andrews:** Approximately one-third of those interviewed mentioned St. Andrews Village and a general concern about a continuum of care that was “promised” the residents that would now go away with the closing of the Emergency Department and Hospital.
- **Ownership Options:** Almost 50% of those interviewed expressed the desire for understanding potential new ownership/governance options. There were frequent questions/confusion about who owns St. Andrews Hospital and the property.
- **Collaborate or Compete with LCH:** Everyone interviewed expressed views on whether the Task Force should “collaborate or compete” with LCH. Many expressed the potential for a win-win, however, many were somewhat skeptical of a collaborative approach.

APPENDIX B: SUMMARY OF KEY INTERVIEWS CONDUCTED NOVEMBER 26-27, 2012

Gabarro

Nineteen individuals were interviewed over the span of two days in an effort to gauge impressions on the decision to close the St. Andrews Hospital Emergency Room and curtail skilled/swing bed services as well. Input regarding essential core services and other service options was solicited as well. Those interviewed included people with clinical backgrounds, community leaders, and Lincoln County Health representatives (trustees, former trustees and the CEO). Interviewees were both users and non-users of services at St. Andrews. They were thoughtful in their comments and all were genuinely concerned about the future of St. Andrews.

Those being interviewed identified others whose input was thought to be relevant to the situation. A list of these individuals was provided to the task force for its consideration.

There were a number of themes identified during the course of the interviews. Themes heard three or more times are bolded in this summary.

Findings

- **There was uniform concern about the closure of the Emergency Department. Although not as frequent, similar sentiments were expressed about the loss of skilled/rehab services.** One participant commented that if the low volume of services, particularly from midnight until 6:00 a.m., was the major driver of the decision, then the Fire Department should be closed as well.
- **There was concern about Emergency Services, Skilled/Rehab capability, hospice end of life care), specialty clinics, diagnostic services, substance abuse, counseling, marine rescue/emergency research center.**
- **Several people felt that there was a significant bias toward diminishing St. Andrews' capability in favor of Miles after the creation of LCH. It was felt that the erosion of services began a number of years ago and in some ways the "volume" concern was a self fulfilling prophecy.**
- **Trust and confidence in both LCH and Maine Health was a persistent theme.** The lack of community engagement and the the process that led to the July announcement, along with mixed messages from LCH subsequently regarding the basis for the decision, has resulted in a sense of betrayal and loss of trust in LCH and Maine Health.
- **The promises about bolstering EMS/ambulance capabilities have not resolved the fear associated with the planned closure of the Emergency Department.**
- Concern was expressed about the impact on property values and the ability to attract new residents.
- What will the impact on jobs be? Will good jobs be replaced by lower paying ones or not at all?
- **Emergency Service Selection: When queried about the future use of Miles-based Emergency Department services if they were no longer available at St. Andrews, virtually everyone indicated they would turn left at Route 1 and travel to either Mid Coast or Portland. Only one individual said that he would want to be taken to the closest place.**

- **Treatment of Equipment:** There was a broad perception that much of the equipment acquired through community generosity has been removed from St. Andrews and relocated to Miles. This is viewed as evidence of a long-term goal to shift care to the Miles campus.
- **Lack of Understanding:** Interviewees were struggling with the actual basis for the LCH decision but a number felt they would work to support it if they understood the future of healthcare that drove the decision.
- **Absence of Dialogue:** Receptivity to open dialogue was expressed by the majority of those interviewed, including both community based interviewees and LCH officials.
- **Misunderstanding of Decision:** There is a perception that the hospital is closing rather than services being eliminated.
- **Business Perspective:** Interviewees with business backgrounds expressed concerns about the high cost of services both at St. Andrews and Miles. Others felt, however that this was a financial decision made at the expense of community need and the community “safety net”.
- **Community Impact Not Considered:** Much concern was expressed about the negative economic impact of the decision both short and long term. Long-term concerns related to the loss of ability to attract retirees as well as the ability to retain current retirees.
- **Lack of Communication:** A few interviewees stated that if only LCH had informed them that St. Andrews was in trouble, financial support would have been forthcoming. Confidence was expressed that if it meant continued access to emergency services, there would be strong support via annual fundraising. They expressed pride in a long history of support for the hospital. Given the approach to the decision, however, people were doubtful about philanthropic support in the future.

The loss of community hospital (Critical Access Hospital) status was seen as a detriment to the retention of current physicians as well as the ability to recruit new physicians in the future.

Key Quotes

“ Show us the data. Retaining the hospital may or may not be feasible but if not, we deserve the best healthcare otherwise available to us. It is not if, but when, the St. Andrews ED services will be needed.”

“This decision may be in the best interest of LCH but it is not in the best interest of Lincoln County.” This is a clash of cultures.” “The issue is community benefit versus dollars and cents.”