Oncology & Emergency Services Expansion

Improving Access for South Coastal Residents
Need of the Population

- Improved Access
- South Coastal residents are farthest from health services
  - 25-45 minutes to nearest hospital or cancer center
    - Longer during tourist season
- Inland Bays impede access
Need of the Population

- 12.7% growth in Sussex County since 2010
- 15.8% growth in eastern Sussex County since 2010
- 8% projected growth in next 7 years
- 25.2% projected growth by 2023 of 65+ population
- 65+ population will make up 30% of Beebe’s Primary Service Area
- Total population in South Coastal communities estimated at 83,000

<table>
<thead>
<tr>
<th>South Coastal Service Area</th>
<th>Town</th>
<th>Zip Code</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bethany Beach</td>
<td>19930</td>
<td>5,009</td>
<td></td>
</tr>
<tr>
<td>Ocean View</td>
<td>19970</td>
<td>10,329</td>
<td></td>
</tr>
<tr>
<td>Fenwick Island</td>
<td>19944</td>
<td>1,318</td>
<td></td>
</tr>
<tr>
<td>Millville</td>
<td>19967</td>
<td>2,196</td>
<td></td>
</tr>
<tr>
<td>Dagsboro</td>
<td>19939</td>
<td>7,780</td>
<td></td>
</tr>
<tr>
<td>Frankford</td>
<td>19945</td>
<td>9,095</td>
<td></td>
</tr>
<tr>
<td>Selbyville</td>
<td>19975</td>
<td>13,309</td>
<td></td>
</tr>
<tr>
<td>Millsboro</td>
<td>19966</td>
<td>33,635</td>
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</tr>
</tbody>
</table>
Need of Population

• Tourists and visitors increase demand for healthcare services
  • Mostly for emergency and urgent care
• Estimate 100,000 seasonal population in southeastern Sussex County, residing in private residences
• Estimate 1.4 million day-trip beach visitors each year
• Additional hotel visitors not included in the above figures
Conformity to HRMP

• Beebe is an independent, not-for-profit community health system guided by charitable mission to encourage healthy living, prevent illness, and restore optimal health

• Medicare and Medicaid provider
  • 75% of total patient care expenditures for Medicare and Medicaid beneficiaries

• Charity Care Policy for income up to 400% of Federal Poverty Level
  • 4.1% of total patient care expenditures

• Participant with DHIN; user of EMRs
Conformity to HRMP

• Innovator in Care Coordination (since 2013)
• First DE health system to participate in Medicare Shared Savings Program ACO (since 2014)
• Participate in CMS Bundled Payment for Care Improvement (BPCI) (since 2015)
• Advanced Care Clinic offers post-discharge coordination and follow up for those without PCP
• Beebe C.A.R.E.s program offers comprehensive support for high utilizers of ED and Inpatient care
• All programs focus on improving care outcomes and lowering unnecessary utilization and cost
Financial Viability

• Total costs for Millville Health Campus, with Emergency Medicine and Oncology: $42 million

• Beebe maintains positive operating margins (4.9% in 2017 and 4.2% in 2016)

• Tax exempt bond offering will be used to finance construction and equipment costs.

• Analysis by Ponder & Co. affirms ability to secure bond financing without jeopardizing BBB bond rating.

• Both programs projected to generate surplus operating income, thus will be financially viable and will contribute to cost of debt financing
Oncology Services Expansion
Millville Cancer Center

- Comprehensive Cancer Center
  - medical oncology and hematology (9 exam rooms)
  - chemotherapy treatments (16 bays / 2 rooms)
  - radiation therapy (1 linear accelerator, Varian TrueBeam)
  - surgical oncology consults

- Cancer Screening and Breast Health Nurse Navigators

- Screening and prevention programs

- 15,107 dedicated square feet (9,967 sf shared support services)

- Capital costs expected between $15-20 million
Conformity to HRMP

• Accredited by Commission on Cancer of the American College of Surgeons

• Accredited by Quality Oncology Practice Initiative Certification Program of the American Society of Clinical Oncology

• Breast Health Program accredited by National Accreditation Program for Breast Centers of the American College of Surgeons (only in Delaware)

• Each program requires compliance with nationally recognized quality standards
Need of the Population

• 1,700 new cancer diagnoses annually among residents of Sussex County

• Approximately 471 new cancer diagnoses annually in the South Coastal region

• Growth of 65+ population puts pressure on services to treat people with cancer
  • 65+ people 10x more likely to be diagnosed with cancer than those younger than 65
Need of the Population

• 100% of South Coastal residents must drive out of their community for cancer treatment to:
  • Beebe Healthcare
  • Atlantic General
  • Peninsula Regional Medical Center
  • Nanticoke Memorial Hospital
  • Milford Memorial Hospital

• Cancer treatment is a long journey with frequent treatments and appointments
  • Chemotherapy patients receive daily treatment

• Reducing the burden of travel for South Coastal residents is a primary driver of this expansion
  • Doing so will eliminate need to expand the Tunnell Cancer Center on Route 24.
Less Costly Alternatives

• There are currently no cancer providers located in the South Coastal communities.

• 100% of South Coastal residents must drive out of their community for cancer treatment

• Construction of Millville Cancer Center on green field site will be less costly than expanding an existing facility (Tunnell Cancer Center)

• Maryland costs tend to be 10-15% higher:

<table>
<thead>
<tr>
<th></th>
<th>Maryland</th>
<th>Delaware</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicare*</td>
<td>$11,844</td>
<td>$10,296</td>
<td>15%</td>
</tr>
<tr>
<td>Medicaid**</td>
<td>$7,677</td>
<td>$6,921</td>
<td>11%</td>
</tr>
</tbody>
</table>

* Beebe/AGH Medicare Shared Savings program, performance year 2016
** CMS cost data, 2014
Relationship to Existing Healthcare

• Owned and operated by Beebe Healthcare

• Led by same team of physicians, nurses and staff as Tunnell Cancer Center

• In-referral network in place with employed and private practice PCPs, GIs, OB/BYNs, Pulmonology

• Out-referral network is in place out to Christiana, Johns Hopkins, Nemours et al

• Local surgeons will meet with patients in Millville Cancer Center
  • 90% of all new cancer diagnoses involve solid tumors
  • Fellowship trained surgeons in breast, oncology, and thoracic
Financial Viability

• 471 new cancer diagnoses annually in the South Coastal region

• Anticipate in first year of operation:
  • 330 new medical oncology patients
  • 148 new radiation patients

• Presently serve 52% of South Coastal cancer patients at Tunnell Cancer Center

• Anticipate Millville Cancer Center will serve 80% of South Coastal cancer patients

• Anticipate $715,560 operating surplus in year 1

Some overlap of people who are both medical and radiation patients
Impact on Cost

- No anticipated impact on cost or charges for oncology services due to building and operating Millville Cancer Center
- Improved access for patients will not increase costs for patients or payers
- Integrated design (involving physicians, patients, staff and architects) focused on patient experience and quality and will optimize efficiency
- Onsite lab and pharmacy will support timely care for patients and efficient operations
Quality

• Multi-disciplinary team of physicians, nurses, techs and care navigators focus on comprehensive, coordinated care; Clinical Practice Groups

• Weekly team meetings discuss cases and create care plans
  • Including care coordination to reduce barriers to care, such as financial, transportation, caregiver support, and psycho-social needs
  • Optimizing patient engagement

• Clinical Trials, in partnership with Christiana

• Accreditation programs have multiple quality standards and measures
Quality

• Focus on quality includes improvement projects:
  • improving care of patients undergoing chemotherapy concurrent with radiation therapy
  • patient outcomes
  • care plan adherence to guidelines on medications
  • improving patient adherence to oral chemotherapy
  • timeliness of patients receiving medication
  • minimizing wait times between screening, diagnosis, and treatment

• Varian radiation therapy system same as at Tunnell Cancer Center and at Nanticoke

• Early diagnosis programs (e.g., Lay Navigators, Navigational Bronchoscopy) identify cancers at earlier stages, leading to better patient outcomes
Questions?
Emergency Services Expansion
Millville Emergency Medicine

• 16,741 square feet of dedicated space (9,697 sf of shared support services)
  • 24 Emergency exam and treatment rooms
  • 1 Computed Tomography (CT) room
  • 1 X-ray room
  • 1 Ultrasound
  • Onsite laboratory & pharmacy

• Helicopter pad for transport to regional centers

• Lab, pharmacy and support services shared with proposed Millville Cancer Center

• Capital costs anticipated between $19-22 million
Conformity to HRMP

• Beebe charitable mission will guide management of emergency medicine services

• Medicare and Medicaid provider
  • 34% of emergency medicine patient care expenditures were for Medicare beneficiaries
  • 25.2% of emergency medicine patient care expenditures were for Medicaid beneficiaries

• Accredited with Beebe Healthcare by Joint Commission on Accreditation of Health Care Organizations (JCAHO)

• Compliant with EMTALA ensuring access to services regardless of ability to pay

• Advanced Care Clinic for post discharge follow up
Need of the Population

• Access to timely care is a critical factor for the successful treatment of medical emergencies

• Presently there are no emergency medicine departments located in the South Coastal region

• 100% of residents and visitors must travel out of their community for emergency treatment

• Distance between Millville ED and Lewes ED = 22.9 miles; Middletown ED to CCHS Newark = 21.2 miles
Need of the Population

• Health System 100 report, *The Future of Demand for Hospitals*, projects national emergency visits per 100 residents between 46.5 and 49 by 2025.
  • 48.3 emergency medicine visits per 100 residents is projected for Millville Emergency department
  • Consistent with national rates when considering significant seasonal fluctuations in population

• 100,000 seasonal residents and over 1.4 million day trip beach visitors increases demand

• 25% of projected visits to the Millville Emergency Department are expected from those who live outside of Sussex County
  • Beebe serves the state’s large tourist population

• Seasonal traffic can make travel to area hospitals double in duration
Less Costly Alternatives

- A portion of visits to emergency rooms are for non-emergent needs
- Beebe operates four Walk-In Care Centers – one in Millville – to offer less expensive appropriate care for non-emergent cases
  - 11,100 visits to Millville Walk-In Care in fiscal 2017
- Walk-In Care volume has increased 109% between 2015 and 2017
- Urgent, level 1 & 2 emergency medicine visits at the ED in Lewes dropped by 18% over this same period
- Yet there is still no emergency medicine available in the South Coastal community
Relationship to Existing Healthcare

• Owned and operated by Beebe Healthcare
• Led by same team of physicians, nurses and staff as Lewes emergency room
• Governed by same policies and standards
• Formal transfer agreements in place with 52 receiving organizations
• Beebe is part of state Trauma System (though Millville Emergency will not be a trauma center)
• Active relationship with Sussex EMS and Basic Life Support
Financial Viability

• 15,000 annual visits projected to Millville Emergency
  • 3,750 of these would have been treated in Lewes
  • 25% projected to be visitors to region

• Assumes only 30% of total emergency medicine visits of patients living full time in South Coastal

• Anticipate $8 million operating surplus in year 1
  • Approximately $2 million of this income is currently generated at the Lewes emergency department and will transfer to the Millville emergency department as patients seek care there
Impact on Cost

• No anticipated impact on cost or charges for emergency services due to building and operating Millville Emergency Department

• Operation of Millville Walk-In Care will continue to offer low cost alternative (year round, open daily) for non-emergent care

• Continued investment in primary care will increase availability of low cost alternative

• Millville Emergency Medicine may lower costs for EMS services who won’t have non-productive travel time back from Lewes or other hospitals
Quality

- Timely access to diagnosis and treatment of medical emergencies is the most significant influence of positive outcomes in emergency medicine.
- Timeliness of care once at the emergency department is also an essential quality metric:

<table>
<thead>
<tr>
<th>Measure</th>
<th>Performance</th>
<th>National Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Door to Diagnostic Evaluation by a Qualified Medical Personnel</td>
<td>20.5 minutes</td>
<td>19 minutes</td>
</tr>
<tr>
<td>Median Time for ED Arrival to ED Discharge for Discharged ED patients</td>
<td>2 hrs 26 mins</td>
<td>2 hrs 13 mins</td>
</tr>
<tr>
<td>Median Time to Pain Management for Long Bone Fracture</td>
<td>56 mins</td>
<td>48 mins</td>
</tr>
</tbody>
</table>

- Timeliness of care is expected to be faster in free-standing emergency departments due to narrower ranges of case complexity.
Quality

- Millville Emergency Medicine will offer tele-health psychiatric evaluations like in Lewes
- Will seek recognition by state under Emergency Medical Service for Children (EMSC), like in Lewes
- Tele-health connection to A.I. DuPont Hospital for Children will be deployed
- Will participate in state Trauma System, but Millville site will not be a trauma center
- Millville Emergency Medicine will be included in future Joint Commission accreditation reviews
Questions?
Thank You