

**Re: CON application by Coastal Hospice to establish a  
Hospice House,**

**Matter # 17-22-2404**

**RESPONSE TO COMPLETENESS QUESTIONS**

Submitted to

Maryland Health Care Commission

Centers for Health Care Facilities Planning and Development

Certificate of Need

Submitted By

Coastal Hospice, Inc.



**Re: CON application by Coastal Hospice to establish  
a Hospice House, Matter # 17-22-2404**

**RESPONSE TO COMPLETENESS QUESTIONS**

**PROJECT DESCRIPTION**

1. Describe Coastal Hospice, addressing when it was founded, services it offers, jurisdictions it serves, and key statistics for latest 5 years (e.g., admissions, patients served, average length of stay, average daily hospice census).

**Response:**

1. Coastal Hospice, Inc. is a 501(C)3 organization, incorporated in June of 1980 and provides hospice care in the four counties of the lower Eastern Shore; Dorchester, Somerset, Wicomico and Worcester. We are state licensed, Joint Commission Accredited, and a United Way Partner Agency. In 2004 Coastal Hospice opened a General Inpatient hospice unit within the Deer's Head Hospital Center, renting the 2 North wing. There has been steady growth in the hospice program as demonstrated in the chart below. Coastal Hospice formed a palliative partnership with Peninsula Regional Medical Center in 2006 and provides palliative consultations (with a blended team of hospital and hospice staff) to hospital inpatients and holds an outpatient clinic two afternoons a week.

Coastal Hospice 5 Year Statistics

	FY 13	FY 14	FY 15	FY 16	FY 17
Admissions	842	835	930	1043	1113
Patients Served	1030	992	1100	1186	1292
Average Length Stay	67.18	53.55	51.23	49.6	56
Average Daily Census	146.9	138.9	140.8	160.6	197.6

**PROJECT BUDGET**

2. The sources of funds includes cash from an "operating support fund." Given that this is a capital expenditure, is that a correct entry?

**Response:**

The line item "operating support fund" in Table 1 is a savings for operations and should not be listed in capital for construction. See revised Table 1 on the next two pages.

**TABLE 1: Project Budget**

<b>A. USE OF FUNDS</b>		
<b>1. CAPITAL COSTS (if applicable):</b>		
<b>a. New Construction</b>		
1)	Building	\$400,000
2)	Fixed Equipment (not included in construction)	Included
3)	Architect/Engineering Fees	
4)	Permits, (Building, Utilities, Etc)	
5)	Site and Infrastructure	\$54,900
<b>a. SUBTOTAL New Construction</b>		<b>\$454,900</b>
1)	Building	\$4,763,025
2)	Fixed Equipment (not included in construction)	
3)	Architect/Engineering Fees	\$479,000
4)	Permits, (Building, Utilities, Etc.)	\$7,500
<b>b. SUBTOTAL Renovations</b>		<b>\$5,249,525</b>
1)	Movable Equipment (includes furnishings, small equip, delivery etc.)	\$340,000
2)	Contingency Allowance	\$184,130
3)	Gross Interest During Construction	\$29,040
4)	Other (Specify) <b>Oxygen</b>	\$100,000
<b>c. SUBTOTAL Other Capital Cost</b>		<b>\$653,170</b>
<b>TOTAL CURRENT CAPITAL COSTS (sum of a - c)</b>		<b>\$6,357,595</b>
<b>a. Land Purchase Cost or Value of Donated Land</b>		<b>\$1,530,919</b>
<b>b. Inflation (state all assumptions, including time period and rate</b>		
<b>TOTAL PROPOSED CAPITAL COSTS (sum of a - e)</b>		<b>\$7,888,512</b>
a.	Loan Placement Fees	
b.	Bond Discount	
c.	CON Application Assistance	
c1.	Legal Fees	
c2.	Other (Specify and add lines as needed)	
d.	Non-CON Consulting Fees	

d1. Legal Fees	\$21,152
d2. Other (Specify and add lines as needed)	
e. Debt Service Reserve Fund	
f. Other (Specify)	
<b>TOTAL (a - e)</b>	<b>\$21,152</b>
<b>3. WORKING CAPITAL STARTUP COSTS</b>	<b>\$88,450</b>
<b>TOTAL USES OF FUNDS (sum of 1 - 3)</b>	<b>\$7,998,114</b>

## B. SOURCES OF FUNDS FOR PROJECT

1. Cash (for construction)	\$1,200,274.77
2. Pledges: Gross <u>\$841,650.52</u> , less allowance for uncollectables <u>\$45,370.87</u> = Net	\$746,279.65
3. Gifts, bequests	
4. Authorized Bonds	
5. Interest income (gross)	
6. Mortgage	\$4,000,000.00
7. Working capital loans	
8. Grants or Appropriation	
a. Federal	
b. State	\$500,000
c. Local	
9. Other (Specify) <b>Land for sale</b>	\$375,000
10. Cash Paid out for Building and Land	\$1,530,917
<b>TOTAL SOURCES OF FUNDS (sum of 1-9)</b>	<b>\$8,402,521.</b>
<b>ANNUAL LEASE COSTS (if applicable)</b>	
• Land	
• Building	
• Moveable equipment	
• Other (specify)	

Updated August 25, 2017



3. The sources of funds also includes a \$500,000 state grant. Please describe.

**Response:**

Bond Bill 2012-G016. The 2012 session of the General Assembly enacted Chapter 444 known as the MCCBL-MISC-Coastal Hospice at the Ocean Residence Project Loan of 2012. The purpose of this bill was to authorize the creation of a state debt in the amount of \$500,000 to be used as a grant for the acquisition, design, construction and capital equipping of the Coastal Hospice at the Ocean Project, located in Worcester County (now named the Macky and Pam Stansell House).

**Part III – Consistency with General Review Criteria at COMAR 10.24.01.08G(3)**

**A) STATE HEALTH PLAN: COMAR 10.24.13.05 STANDARDS**

**Admission Criteria**

4. The application did not identify any limits by age, disease, or caregiver. Please confirm that is the case.

**Response:**

Coastal Hospice, Inc. does not limit admission by age, disease, or caregiver status. We admit all hospice eligible patients.

**Minimum Services**

5. The applicant states that its volunteers consistently provides “well above the required 5% of patient care hours” (required by the Medicare Conditions of Participation). Please be specific with what that % has been for the latest three years.

**Response:**

FY16 3154 Direct Care hours plus 2874 for Clinical Support/ 66,658 paid staff hours= 9% match

FY15 2912 Direct Care hours plus 3200 Clinical Support / 60,989 paid staff hours/=10% match

FY14 2752 Direct Care hours plus 3058 Clinical Support/ 55,121 paid staff hours= 10.54% match

**Financial Accessibility**

6. Please provide documentation of Medicare certification.

**Response:**

See Addenda 13, Medicare Revalidation Letter

## Charity Care and Sliding Fee Scale

7. In responding to the requirements of this standard, the applicant cited its Self Pay Policy, Financial Responsibility Policy, and Application for Reduction/Waiver of Fees, rather than a comprehensive Charity Care Policy. It is not clear from those submissions that each subpart of the standard are met. See questions 8(a), (b), and (c) below.

**J. Charity Care and Sliding Fee Scale. Each applicant shall have a written policy for the provision of charity care for indigent and uninsured patients to ensure access to hospice services regardless of an individual's ability to pay and shall provide hospice services on a charitable basis to qualified indigent persons consistent with this policy. The policy shall include provisions for, at a minimum, the following:**

8.(a)	<b>(1) Determination of Eligibility for Charity Care.</b> Within two business days following a patient's request for charity care services, application for medical assistance, or both, the hospice shall make a determination of probable eligibility.	<b>Response:</b> Coastal Hospice policy # 1-008.1 was adapted and voted in by the board of directors on 8/30/2017. (Addenda 14) Please see paragraph 2. Additional changes were made to the policy and procedure 1-007.1 Financial Responsibility (Addenda 15) specifying the same in the policy statement and paragraph 3 of the procedure.
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8.(b)	<b>(2) Notice of Charity Care Policy.</b> Public notice and information regarding the hospice's charity care policy shall be disseminated, on an annual basis, through methods designed to best reach the population in the hospice's service area, and in a format understandable by the service area population. Notices regarding the hospice's charity care policy shall be posted in the business office of the hospice and on the hospice's website, if such a site is maintained. Prior to the provision of hospice services, a hospice shall address any financial concerns of patients and patient families, and provide individual notice regarding the hospice's charity care policy to the patient and family.	<b>Response:</b> <a href="https://coastalhospice.org/how-we-help/charity-care/">https://coastalhospice.org/how-we-help/charity-care/</a>  Additionally this policy is now posted in our office and inpatient unit, and it is being included in our patient/family information binder. We will post the policy annually on our facebook page and the wording on our brochures (See addenda 16) under the heading "Paying for Hospice" will be changed to meet the policy language at next printing.
8.(c.)	<b>(3) Discounted Care Based on a Sliding Fee Scale and Time Payment Plan Policy.</b> Each hospice's charity care policy shall include provisions for a sliding fee scale and time payment plans for low-income patients who do not qualify for full charity care, but are unable to bear the full cost of services.	<b>Response:</b> the policy states "To meet this goal, and establish the level of need for charity care, Coastal Hospice will apply a financial assessment (application for reduction/waiver) and sliding scale fee structure. The sliding scale may be used to determine what portion of the fee is waived for patients who 1) have no

		insurance for hospice services, 2) have a co- pay on their insurance for hospice services, or 3) for residential care room and board fees. A patient's responsibility may be 100% waived and services not be billed, or they may be billed for service or a portion of service depending on their income and placement on the sliding scale." "On a case by case basis, time payments may be arranged with the Coastal Hospice finance department for low income patients who do not qualify for full charity care but are unable to bear their share of financial responsibility."
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### **Quality**

8. In order to assess applicants' ability to build a QAPI that meets the requirements of COMAR 10.07.21.09 MHCC staff has adapted the survey tool used by the Office of Health Care Quality to make such an assessment and created a form that will facilitate your ability to show that your policy conforms. That form is attached. As its instructions direct, cite the section of your QAPI and specific language that addresses the required QAPI content.

### **Response:**

Please see Addenda 17, Quality Program Assessment Tool

### **B) NEED**

9. Please provide a copy of the Evolve Consulting Group need assessment.

### **Response:**

Please see addenda 18

10. Several groups of patients are mentioned on pp. 22 and 23 as examples of patients who would be candidates for the proposed hospice house.
  - a) You state that in 2016 83 Coastal Hospice patients lived alone and another 83 with a compromised caregiver, some of whom had to choose a Medicare skilled nursing home bed instead. Do you have data to quantify the number that made this choice?

**Response:**

The statistics for the patients who lived alone and with compromised caregivers comes directly from our electronic medical record system. As for those making a choice for a skilled bed, the data I have comes from our Palliative Care Team. In FY 2017, 229 patients were discharged from Peninsula Regional Medical Center and our Palliative Care service to a Skilled Nursing Facility bed. The majority of these are the sickest of the palliative patients. Not all would have been eligible or chosen hospice, but generally 75% of our referrals do. This might indicate another 114 hospice residential patients. I have no data from other area hospitals.

- b) The applications states that Coastal Hospice Palliative Team members who are also members of the Peninsula Regional Medical Center's palliative care program "report that each week they see, on average, two patients who could and would choose a hospice residence for placement," and concludes that would yield another 104 potential patients as residents of the proposed hospice house. How rigorously recorded is that "two patients per week" average? That is, is there actual record-keeping, or is this the caregivers' impression?

**Response:**

This information is anecdotal but loosely supported by the number of patients whose disposition at discharge is to a skilled nursing facility above.

- c) The applicant projects an average stay of 33 days based on the experience of Talbot Hospice. That is a rather limited sample size. Please provide more thorough LOS data from other authoritative sources and studies.

**Response:**

I have found no authoritative sources on the subject matter. As residential care is not part of the hospice conditions of participation, nor paid for by Medicare or Medicaid, the National Hospice and Palliative Care Organization does not keep any statistics on this. The studies I have seen include General Inpatient Days and do not segregate purely residential care days. Inquiring among my colleagues, Chesapeake Hospice at one time had a length of stay longer than the 60 days that was their target and they enacted a screening tool so not to take in patients too early, Calvert Hospice experiences a 23 day length of stay. Talbot Hospice has been providing residential care in this area the longest and we felt their experience is most reliable as a model.

**C) AVAILABILITY OF MORE COST EFFECTIVE ALTERNATIVES**

12. The location of the proposed hospice house is not centrally located in the applicant's four-county service area. Please discuss the impact of that location on access, as well as whether alternative sites were considered.

**Response:**

The location for our hospice house was carefully selected. Northern Worcester County has the largest percentage of persons over the age of 65, and has our second largest county population. Additionally, many retirees moved here to live within Northern Worcester County and are away

from other family caregivers and live alone or with an aging spouse. State statistics show that in 2015 Worcester County had 13,300 people over the age of 65. Our largest county, Wicomico, had 15,250. In Wicomico County, we have the ability to use our inpatient unit at Deer's Head for some residential care as the need arises, so for us, Worcester County demonstrates the greatest need. The hospice house will however be available to individuals of all four counties. This waterfront property we have acquired will provide the optimal ambiance for end of life care.

13. Please provide data to document the statement (p.25) that "Skilled nursing facilities charge Medicare a per diem rate that is higher than the Hospice per diem." (Provide source.)

**Response:**

<https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-03-09.html>

Skilled care reimbursed by Medicare ranged \$241 per day to \$483 per day in 2013.

14. In discussing alternatives, can the applicant state:

- a) Where do these patients go for residential care now?
- b) Compare the costs of other alternative settings, such as assisted living, nursing homes, hospital.

**Response:**

[https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/118928MD\\_040115\\_gnw.pdf](https://www.genworth.com/dam/Americas/US/PDFs/Consumer/corporate/cost-of-care/118928MD_040115_gnw.pdf)

Options for these patients includes moving out of the area to live with family, admission to a skilled nursing facility, or paying for an assisted living facility. The cost of skilled care to the Medicare system is addressed above in number 13. Assisted living for those with heavy care and medical needs is upward of \$5,500 per month or \$180 per day at one nearby assisted living (Gull Creek website). The Genworth survey of 2015 showed a range of approximately \$2,000 per month to \$11,000 per month for patient charges. Hospice patients are typically heavy care with frequent need for medications and often not able to self administer.

Hospitals are not an appropriate disposition for residential hospice eligible patients.

## **F) IMPACT ON EXISTING PROVIDERS**

15. Please provide a copy of the article referred to in the statement: "Re-admissions to the hospitals will be reduced as demonstrated in the Wicomico County study of cancer patients published in the Journal of Oncology Practice, Vol. 8, Issue 4" (p.28).

**Response:** See addenda 19, Journal of Oncology Practice, Vol. 8, Issue 4" (p.28). Table 3 demonstrates the number and percentage of cancer patients with an admission to ICU with and without hospice and the number and percentage of patients dying in the hospital with and without hospice.

## **TABLES**

16. The applicant neglected to complete the “Visits by Discipline” section of Table 2A for the projected years. Please submit a completed one.

### **Response:**

Please see addenda 20, Table 2A

17. The % occupancy for the hospice house entered in Table 2B appears to be slightly miscalculated.

### **Response:**

The number should be 91.7%

18. Please explain the wide fluctuations in charity care in Table 3.

### **Response:**

Addenda 21 has a corrected Table 3

The charity care should be \$537,336 for FY 2018. When I originally prepared table 3, I removed the residence accounts from the 2018 budget not remembering that we budgeted less charity care at the inpatient unit because we expected the routine patients would be at the residence. Without the residence many of those patients will probably be at CHL, so I added back the charity dollars.

The increase in charity care in 2017 (Projected) is due partially to our census increase and partially to the problems we’ve had billing Medicaid since the new pay reform took effect. When we write off Medicaid claims they go to charity care. We cleaned all of that out of the AR in 2017, and when I annualized the April YTD numbers to create the 2017 projection it magnified the increase. The 2019 jump in charity care is due to the addition of the expected charity care for the residence house.

19. Please explain the dip in Medicare as a) a % of total revenue; and b) as % Of visits or days in Table 3.

### **Response:**

Due to the large increase in referrals from the palliative clinic services, which sees a younger population therefore more commercial, self pay and charity patients, the percentage of Medicare is altered. The 2019 year projected revenue has a large increase in self pay room and board (from 2% to 14%) and uncompensated (from 3% to 6%) which makes the Medicare percentage of revenue smaller (70%). This is due to the residence being operational in that year.

20. What accounted for the “other operating revenues” in Table 3 being so much greater than prior and projected years?

### **Response:**

Other operating revenue consists of grant revenue used to cover operating costs and honorariums. In 2016 we received \$2,175 in honorariums, and the following new expenses were paid for thru grants:

Referral Software	=	12,650.00
Thanatology Prog.	=	653.40
Dr. Byock	=	5,000.00
ELNEC	=	495.00
Camp Safe Harbor	=	2,603.00

In addition to that we used an additional \$27,000 in Parson's grant funds, based on a conversation that Maureen had with the Parson's Foundation that lifted some of the restrictions on how the money could be used. So the \$27,000 came from unspent grant funds received in prior years.

Please submit six copies of the responses to the additional information requested in this letter within ten working days of receipt (Note: extensions are routinely available upon request). Also submit the response electronically, in both Word and PDF format, to Ruby Potter ([ruby.potter@maryland.gov](mailto:ruby.potter@maryland.gov)).

All information supplementing the application must be signed by person(s) available for cross-examination on the facts set forth in the supplementary information, who shall sign a statement as follows: "I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information, and belief."

Should you have any questions regarding this matter, feel free to contact me at (410) 764-5982.

Sincerely,

Kevin McDonald, Chief  
Certificate of Need

cc: Craig Stofko, Health Officer, Somerset County  
Lori Brewster, Health Officer, Wicomico County  
Rebecca Jones RN, Health Officer, Worcester County  
Roger L. Harrell, Health Officer, Worcester County  
Linda Cole  
Paul Parker

## **REVISED LIST OF ADDENDA**

### **In Original CON Application Document:**

Addenda 1	Evaluation for and Admission to Hospice Services
Addenda 2	Self Pay Policy
Addenda 3	Financial Responsibility Policy
Addenda 4	Application for Waived Fees/Sliding Scale
Addenda 5	2017 Quality Assessment and Performance Improvement Plan
Addenda 6	Quality Measures Dashboard
Addenda 7	Patient's Rights and Responsibilities
Addenda 8	2015/2016 Audited Financials
Addenda 9	Organizational Chart
Addenda 10	Board Minutes May 31, 2017
Addenda 11	Operating Cost Projections
Addenda 12	Letters of Support

### **In Answers to Completeness Questions:**

Addenda 13	Medicare Revalidation Letter
Addenda 14	Revised Charity Care Policy
Addenda 15	Revised Financial Responsibility Policy
Addenda 16	How Hospice Helps Brochure
Addenda 17	Quality Program Assessment Tool and related policies
Addenda 18	Evolve Consulting Group Needs Assessment
Addenda 19	Journal of Oncology Practice, Vol. 8, Issue 4" (p.28).
Addenda 20	Table 2A Revision
Addenda 21	Table 3 Revision
Addenda 22	QAPI Policies



Declaration:

I hereby declare and affirm under the penalties of perjury that the facts stated in this application and its attachments are true and correct to the best of my knowledge, information and belief.



\_\_\_\_\_  
Signature of Owner or Authorized Agent of the Applicant

Alane K Capen, President

\_\_\_\_\_  
Date: 09/11/2017

\_\_\_\_\_  
Print name and title



\_\_\_\_\_  
Signature of Owner or Authorized Agent of the Applicant

Mike Dunn, Board Chairman

\_\_\_\_\_  
Date: 09/11/2017

\_\_\_\_\_  
Print name and title



9/11/17

\_\_\_\_\_  
Signature of Authorized Agent of the Applicant

Susan Olischar, Director of Finance

\_\_\_\_\_  
Date: 09/11/2017

\_\_\_\_\_  
Print Name and Title



A CELERIAN GROUP COMPANY

*We IMPACT lives.*

October 6, 2016

Coastal Hospice & Palliative Care  
Attn: Susan Olischar  
PO Box 1733  
Salisbury, MD 21802-1733

**RE: CMS 855A Provider Enrollment Application**  
**CGS Reference #: 71454167**  
**PTAN: 211505-----NPI: 1083709984**

Dear Coastal Hospice & Palliative Care:

We are pleased to inform you that your revalidated Medicare enrollment application is approved. Listed below are your National Provider Identifier (NPI) and Provider Transaction Access Number (PTAN).

**Medicare Enrollment Information -**

Provider Name:	Coastal Hospice, Inc.
Practice Location(s):	2604 Old Ocean City Road Salisbury, MD 21804-4629
	351 Deers Head Hospital Road Salisbury, MD 21801-3201
PTAN:	21-1505
NPI:	1083709984
Original Effective Date:	July 1, 1987
Provider Type:	Hospice

Please verify the accuracy of your enrollment information.

You are required to submit updates and changes to your enrollment information in accordance with specified timeframes pursuant to 42 CFR §424.516. Reportable changes include, but are not limited to, changes in: (1) legal business name (LBN)/tax identification number (TIN), (2) practice location, (3) ownership, (4) authorized/delegated officials, (5) changes in payment information such as electronic funds transfer information and (6) final adverse legal actions, including felony convictions, license suspensions or revocations, an exclusion or debarment from participation in Federal or State health care program, or a Medicare revocation by a different Medicare contractor.



Providers and suppliers may enroll or make changes to their existing enrollment in the Medicare program using the Internet-based Provider Enrollment, Chain and Organization System (PECOS). Go to: [www.cms.hhs.gov/MedicareProviderSupEnroll](http://www.cms.hhs.gov/MedicareProviderSupEnroll).

Providers and suppliers enrolled in Medicare are required to ensure strict compliance with Medicare regulations, including payment policy and coverage guidelines. CMS conducts numerous types of compliance reviews to ensure providers and suppliers are meeting this obligation. Please visit the Medicare Learning Network at <http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/index.html> for further information about regulations and compliance reviews, as well as Continuing Medical Education (CME) courses for qualified providers.

Additional information about the Medicare program, including billing, fee schedules, and Medicare policies and regulations can be found at our Web site at <http://cgsmedicare.com/index.html> or the Centers for Medicare & Medicaid Services (CMS) Web site at <http://www.cms.hhs.gov/home/medicare.asp>.

Whether you are a brand new applicant or an updating provider, the CGS Provider Outreach and Education (POE) team would like to extend a warm welcome to you. Our education events website <http://www.cgsmedicare.com/hhh/education/index.html> has the calendar for our online workshops, Ask-The Contractor Teleconferences, and in-person events. We also offer New Provider webinars with topics that will interest every practice. Sign up for those webinars, and gain other valuable information from our New Provider Resource Center <http://www.cgsmedicare.com/hhh/education/newprovider.html?wb48617274=EDC192E3>.

If you have any questions, please contact the J15 Home Health & Hospice Contact Center at (877) 299-4500 between the hours of 8:00 AM and 4:00 PM Central Time.

Sincerely,

Shelley Henry  
Provider Enrollment Analyst  
CGS Administrators, LLC

## **CHARITY CARE POLICY**

**Policy No: 1-008.1**

### **PURPOSE:**

To define the Coastal Hospice philosophy on providing charity care.

### **POLICY:**

Coastal Hospice provides care and services to patients regardless of their financial circumstances. To meet this goal, and establish the level of need for charity care, Coastal Hospice will apply a financial assessment (application for reduction/waiver) and sliding scale fee structure. The sliding scale may be used to determine what portion of the fee is waived for patients who 1) have no insurance for hospice services, 2) have a co-pay on their insurance for hospice services, or 3) for residential care room and board fees. A patient's responsibility may be 100% waived and services not be billed, or they may be billed for service or a portion of service depending on their income and placement on the sliding scale.

Coastal Hospice will determine charity eligibility and notify patients of their financial responsibility within two business days of completion of the application for waiver form. On a case by case basis, time payments may be arranged with the Coastal Hospice finance department for low income patients who do not qualify for full charity care but are unable to bear their share of financial responsibility.

See also Policy # 1-007.1 FINANCIAL RESPONSIBILITY for the assessment and notification procedure.

*Revised: 6/24/2014*

## FINANCIAL RESPONSIBILITY

### Policy No: 1-007.1

**PURPOSE:** To outline the process by which Coastal Hospice enables the patient and/or family/caregiver to understand his/her financial responsibility for Coastal Hospice services and to apply for a reduction/waiver of fees if applicable.

## POLICY

Upon admission, but before care is initiated, a clinician shall inform the patient of his/her responsibilities regarding payment for hospice services. The patient also shall be informed of any subsequent changes regarding payment that alters his or her responsibilities. Patients will be notified of their eligibility for charity care (a reduction or waiver of fees) within two business days after completion of the application for reduction/waiver of fees form. Patients requesting assistance with Medical Assistance applications will be notified of *probable* eligibility within two business days of request.

## PROCEDURE

1. During the referral process, admissions staff will coordinate with finance to determine the patient's insurance coverage.
2. If the patient has no insurance, inadequate insurance or is requesting residential care, staff shall inform the patient and family about the sliding scale fee process and complete an *Application for Reduction/Waiver of Fees* form with the patient and family if they desire to apply for waived fees. Coastal Hospice admissions staff should refer to Coastal Hospice social work to assist the patient/family with the process of application for Medical Assistance if applicable.
3. Finance staff will assist with the preparation of the *Notice of Patient Financial Responsibility for Services* form based on Coastal Hospice charges for care and the sliding scale category that is applicable to that patient. Patients will be informed of their financial responsibility and or probable eligibility for Medical Assistance within two business days.
4. Upon admission, all insurance coverage and any patient responsibility, is discussed and presented in writing to the patient and family/caregiver. The clinician discusses the document *Notice of Patient Financial Responsibility for Services provided by Coastal Hospice* with the patient and family/caregiver. The clinician assures that the patient family/caregiver understands the financial responsibility, obtains his/her signature, and leaves a copy of the document in the patient's residence. See *Addendum 1-001.B*.
5. Should we be unable to verify insurance coverage before admission, the patient/family will be asked to sign that they are 100% responsible for any services not covered by their insurance along with an *Application for Reduction/Waiver of Fees* form.
6. Patients who incur financial liability because of unexpected circumstances, such as a change in insurance status, must be notified in writing within thirty (30) calendar days from the date Coastal Hospice is notified of such changes.
7. Document written and/or verbal notifications of the patient's financial responsibility in the

electronic medical record.

8. All Notice of Patient Financial Responsibility forms ***that indicate that there may be a patient financial responsibility*** must be accompanied by an Application for Reduction/Waiver of Fees form.

9. See G: Forms/Admissions/Insurance/*Sliding Fee Scale*

See G: Forms/Admissions/Insurance/*Application for Reduction of Fees*

10. It is the practice of Coastal Hospice, Inc. to send patients an invoice for services provided three times, and then pursue no further.

*Revised: 4/7/03, 8/14/2004; 11/08; 3/17/09, 4/22/11, 6/24/14*

# *How Coastal Hospice Helps*



FINDING COMFORT, DIGNITY  
AND PEACE AT THE END OF LIFE



*Coastal Hospice  
& Palliative Care*

## *Hospice makes a difference*

Hospice is about living. Hospice care is the help patients and their families need to make the most of the time they have.

Coastal Hospice offers compassion, comfort and care. Our patients live with dignity and on their own terms. We offer treatment and support, not only to patients, but also to those who love and care for them.

When you are facing a life-limiting condition, you don't have to be alone. The Coastal Hospice team can help. We work with you and your physician to bring you comfort and peace of mind.

You may be reluctant to call Coastal Hospice. That's understandable. But we hear over and over again that patients and their families wish they'd called us sooner.

The future may be uncertain, but the end of life can also be deeply meaningful and full of love. At Coastal Hospice, we put you at the center of care. We strive each day to help you feel in control again.

## *How the hospice team helps*

Coastal Hospice team members visit you often. We provide care in your home or in an assisted living or nursing facility or at Coastal Hospice at the Lake, our inpatient hospice center.

Your doctor remains an important member of the hospice team. Coastal Hospice has physicians who focus on palliative care (comfort care) and consult with your physician to develop the best plan of care.



# *When should I call hospice?*

The earlier you call us, the more time you'll have to benefit from our team of professionals who provide comfort, care and support. Families often tell us, "I wish we had called hospice sooner."

If you are facing a life-limiting condition, call us when:

- You need help with daily activities, such as bathing, dressing, eating and getting around.
- You are feeling overwhelmed and don't know where to turn for help.
- You need care at home, including equipment, supplies and medications.
- You need comfort from pain or suffering.
- You are not feeling better despite treatments and hospitalizations.
- Your loved ones want emotional support and guidance.
- You desire to spend more time enjoying life.



*"When the nurse came in for our intake interview and said, 'This isn't about dying; this is about living', that got me right here. Nobody else said that."*

*~ Clyde Adams, former patient, with wife Tina*

# *The services provided by Coastal Hospice*

Coastal Hospice team members provide these services covered by the Medicare Hospice Benefit and most commercial insurances:

- Our doctors work with your own doctor or specialist to manage care and make house calls, as needed.
- Registered nurses skillfully gauge how you're doing, coordinate your care with your doctor and the hospice team and teach your loved ones how to care for you.
- Certified hospice aides help you with bathing, dressing, light housekeeping and other necessities.
- Social workers provide family counseling, advanced care planning and connection to other resources.
- Hospice chaplains provide nondenominational spiritual guidance and emotional support for the whole family.
- Trained volunteers offer friendship and comfort.
- Music and pet therapists provide fun and relaxation.
- Physical and occupational therapists help you maintain strength and find ways to engage in life.
- Medications are supplied to provide symptom control and pain relief.
- Medical equipment, oxygen and supplies are delivered right to your door.
- We are available 24 hours a day, 7 days a week to address your concerns and symptoms.

*“Every Sunday, I’m  
able to go to church  
and out to lunch.  
Without hospice,  
I wouldn’t be able  
to go out of the house.”*

*~ Judy Waring, former patient*





# *The four levels of hospice care*

As defined by Medicare, there are four levels of care:

## ROUTINE HOME HOSPICE CARE

Most hospice patients are managed under this level of care. Hospice team members visit often, as determined by your unique needs. We visit patients in their home, assisted living or nursing facility.

## GENERAL INPATIENT CARE

This is also referred to as symptom management. When pain and symptom management require intense and/or complex medical care, we provide the inpatient level of care. We contract with area hospitals, but most patients come to Coastal Hospice at the Lake for short-term symptom management.

## CRISIS CARE

(ALSO CALLED CONTINUOUS CARE)

Patients may need more intense care during periods of crisis to remain at home. A period of crisis is a time when a higher level of nursing care is required to manage symptoms. In this case, the patient does not want to transfer to an inpatient setting. Hospice nurses and aides are scheduled for a number of hours to provide care in the patient's home. Routine home care resumes once the patient is comfortable.

## RESPITE INPATIENT CARE

This helps when a caregiver needs a break from the demands of home care or needs to leave the home for a period of time. We can provide respite care for up to five days. Respite care can be given at a number of nursing facilities and Coastal Hospice at the Lake.

## *Paying for hospice*

Services are covered by Medicare, Medicaid, and most private insurance policies. If you don't have medical insurance, Coastal Hospice offers a sliding scale, based on financial need.

As a nonprofit organization, Coastal Hospice receives donations from the community that help cover the cost of caring for patients who lack financial resources. No one is ever turned away, regardless of their ability to pay.



*“At age 93, my husband had been in the hospital too many times and wanted to be at home. At first, our children were reluctant to call in hospice. But the Coastal Hospice nurse explained hospice didn't mean the end is near, that hospice is about living. Hospice was such a help to us.”*

*~ June Todd, wife of a former patient*

## *Facts about hospice care*

- Most Coastal Hospice patients are cared for in their own homes.
- Hospice cares for any patient with a life-limiting illness (not just cancer).
- Hospice care is covered by Medicare, Medicaid and private insurance. Grants and community donations provide for those without insurance.
- Each patient has a team of caregivers, including the family doctor.
- Hospice care includes medications and supplies.
- Doctors and families tell us their only regret is not calling Coastal Hospice sooner.

## *About Coastal Hospice*

Founded in 1980, Coastal Hospice is a private non-profit community program that provides traditional hospice services, palliative care, bereavement support, education and training to residents in Wicomico, Worcester, Dorchester and Somerset Counties on Maryland's Lower Eastern Shore.

More than 100 people are employed by Coastal Hospice and more than 250 individuals volunteer.

Coastal Hospice is accredited by The Joint Commission and supported by the United Way.

*“The patient is given priority, it seems, in everything.”*

*~ Ada Creamer, former patient*





*Call us. We'll come to you.*

*410-742-8732*

*tollfree 800-780-7886*

SERVING THE LOWER SHORE

Dorchester, Somerset,

Wicomico and Worcester counties



*Coastal Hospice*  
*& Palliative Care*

Post Office Box 1733  
Salisbury, MD 21802-1733

**CoastalHospice.org**

*Coastal Hospice, Inc. complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. (TTY: 1-800-201-7165).*



*Coastal Hospice, Inc. cumple con las leyes federales de derechos civiles aplicables y no discrimina por motivos de raza, color, nacionalidad, edad, discapacidad o sexo. ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al 1-410-742-8732. (TTY: 1-800-201-7165).*

*Coastal Hospice, Inc. konfòm ak lwa sou dwa sivil Federal ki aplikab yo e li pa fè diskriminasyon sou baz ras, koulè, peyi orijin, laj, enfimite oswa sèks. ATANSYON: Si w pale Kreyòl Ayisyen, gen sèvis èd pou lang ki disponib gratis pou ou. Rele 1-410-742-8732 (TTY: 1-800-201-7165).*



United Way  
of the Lower Eastern Shore



# *Guide to Charity Care*

*Coastal Hospice provides care and services to patients regardless of their financial circumstances. To meet this goal, and establish the level of need for charity care, Coastal Hospice will apply a financial assessment (application for reduction/waiver) and sliding scale fee structure. The sliding scale may be used to determine what portion of the fee is waived for patients who 1) have no insurance for hospice services, 2) have a co-pay on their insurance for hospice services, or 3) for residential care room-and-board fees. A patient's responsibility may be 100% waived and services not be billed, or they may be billed for service or a portion of service depending on their income and placement on the sliding scale.*

*Coastal Hospice will determine charity eligibility and notify patients of their financial responsibility within two business days of completion of the application for waiver form. On a case-by-case basis, time payments may be arranged with the Coastal Hospice finance department for low income patients who do not qualify for full charity care but are unable to bear their share of financial responsibility.*



*Coastal Hospice  
& Palliative Care*



## Addenda 17

### Quality Program Assessment Tool

<b>QAPI Characteristic as Described by OHCQ</b>	<b>State regulation reference</b>	<b>Location/citation in Applicant's QAPI</b>  Provide the section of the policy and the language that addresses the requirement.
<b>Develop, implement and maintain an effective, ongoing, hospice-wide data driven QAPI program</b>	<p>10.07.21.09A &amp; B</p> <p>A. The governing body shall ensure that the hospice care program conducts ongoing quality assurance and utilization review.</p> <p>B. Quality Assurance Program. The governing body shall assure that the hospice care program develops and implements a quality assurance and improvement program to assess and improve the quality of services being provided by the program.</p>	<p>All referenced policies are attached as addenda 22.</p> <p>The Coastal Hospice policy 6-003.1 on the governing body spells out the responsibility for the board in regards to QAPI as follows: The Board will:</p> <ol style="list-style-type: none"> <li>1. Ensure that:               <ol style="list-style-type: none"> <li>a. An ongoing program for quality assessment improvement and patient safety is defined, implemented, maintained, and evaluated annually, and</li> <li>b. The hospice-wide quality assessment and performance improvement (QAPI) efforts address priorities for improved quality of care and patient safety, and that all improvement actions are evaluated for effectiveness, and</li> <li>c. The QAPI program reflects the complexity of the organization and the scope of its services, and</li> <li>d. The QAPI program reflects all hospice services, including those provided under contract, and</li> <li>e. The QAPI program focuses on indicators related to improved palliative outcomes, and</li> <li>f. Coastal Hospice takes actions to demonstrate improvement in hospice performance, and</li> <li>g. Coastal Hospice maintains documentary evidence of its quality assessment and</li> </ol> </li> </ol>



		<p>performance improvement program, and</p> <p>h. One or more individual(s) who are responsible for operating the QAPI program are designated.</p> <p>2. Document that it consistently reviews relevant findings of performance and safety improvement activities as well as other information relevant to the quality of patient care (e.g., unusual occurrences in care or service).</p> <p>3. Authorize adequate resources and support to establish and maintain the hospice-wide QAPI program.</p> <p>The full policy is attached</p> <p>The Coastal Hospice 2018 Board Approved QAPI plan (previously submitted in addenda 5) states on page 1, Program Structure, paragraph 1:</p> <p>“The Coastal Hospice Board of Directors identifies the mission of the organization and establishes the QAPI program to measure and promote the achievement of the mission to maintain and improve quality care and patient safety. QAPI activities are ongoing and comprehensive and are inclusive of all clinical and non-clinical services at Coastal Hospice.</p> <p>The Coastal Hospice President and leadership team set priorities for quality assessment and performance improvement for the organization. In addition, they establish patient safety expectations and priorities. (See the Safety Improvement Plan for details about the Safety Program.) The Performance and Safety Improvement Committee members are charged with developing, implementing and maintaining the QAPI program.”</p>
<b>Maintain documentary evidence – able to</b>	10.07.21.09D(2)Maintain records to demonstrate the effectiveness of its quality assurance activities	Policy 6003.1 states that: “Coastal Hospice maintains documentary evidence of its quality assessment and performance improvement program,”

<p><b>demonstrate operation</b></p>		<ol style="list-style-type: none"> <li>1. Page 2 of the QAPI plan under Performance Improvement states: “The Performance Improvement Committee meets at least 6 times annually and reviews performance data to assess the quality of services. The Coastal Hospice leadership team and Board of Directors also receive <u>regular quality assessment reports</u> and review the performance data.” Additionally, the Performance and Safety Improvement policy (5-002.1) states: Scope of the Performance and Safety Improvement Program includes, at minimum:               <ol style="list-style-type: none"> <li>a. Ongoing collection and documentation of data to monitor organizational performance</li> <li>b. Systematic aggregation and analysis of data</li> <li>c. Analysis of identified undesirable patterns or trends</li> <li>d. Identification and management of Sentinel Events</li> <li>e. Use of information from data analysis to identify and develop/implement action plans for improvement                   <p>in organizational processes, service delivery, and patient outcomes, including safety</p> </li> <li>f. Use of aggregated/analyzed data to develop action plans for reduction in risk for Sentinel Events</li> <li>g. Proactive identification of potential risk for unanticipated adverse events (Hazard Vulnerability Analysis, Failure Mode &amp; Effects Analysis)</li> <li>h. <u>Documentation of audit results, trend reports, process improvement project results, QAPI committee meetings and any other QAPI activities.</u></li> </ol> </li> </ol>
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<p><b>Program capable of showing measurable improvement in indicators related to improved palliative outcomes and hospice services</b></p>	<p>10.07.21.09C(2)Have outcomes and results that are measurable and which may be incorporated into systemic changes in the program's operation;</p>	<p><b>Policy 5-002.1 states:</b></p> <p><b>PURPOSE:</b> The purpose of the Performance and Safety Improvement Plan is to outline the means by which Coastal Hospice intends to monitor, evaluate and improve the quality of patient and family care; resolve identified problems; and seek opportunities for organizational improvement</p> <p><b>POLICY</b> The Performance and Safety Improvement (PSI) Program shall <u>collect, analyze, and act upon data in order to improve the quality of care provided to patients</u>. The Program shall examine information related to:</p> <ol style="list-style-type: none"> <li>1. Quality Assessment and Performance Improvement (QAPI) as defined in Hospice Medicare Conditions of Participation</li> <li>2. Organizational systems and processes</li> <li>3. Quality and appropriateness of service delivery</li> <li>4. Patient level data collected through on-going Comprehensive Assessments</li> <li>5. Patient care measurable outcomes</li> <li>6. Patient and family satisfaction</li> <li>7. Environmental safety and infection control</li> <li>8. Incidents and complaints</li> <li>9. Risk assessments</li> <li>10. Prevention of adverse events</li> <li>11. External benchmarking</li> </ol> <p>The 2018 QAPI plan in addenda 5, pages 5 – 8 demonstrate the measurable outcomes that we are auditing and evaluating for identification of priorities for improvement process projects.</p>

<p><b>Must measure, analyze and track quality indicators including adverse patient events</b></p>	<p>10.07.21.09C(3) Require the systematic collection, review, and evaluation of information and data and the analysis of trends identified through the quality assurance process</p>	<p><b>Policy 5-016.1</b>  <b>PURPOSE:</b>  To define processes for analyzing aggregated data so that current performance levels, patterns, and trends can be readily identified and reported.</p> <p><b>POLICY:</b>  Data collected and aggregated through the Performance and Safety Improvement process shall be routinely and systematically analyzed in order to:</p> <ol style="list-style-type: none"> <li>1. Identify patterns or trends</li> <li>2. Identify risk potential and probability</li> <li>3. Identify/illustrate cause/effect relationships</li> <li>4. Illustrate performance over time</li> <li>5. Illustrate stability and predictability of processes</li> <li>6. Compare outcomes with established expectations</li> <li>7. Compare against benchmark “norms”</li> <li>8. Determine/demonstrate variability</li> <li>9. Determine/demonstrate affinity</li> <li>10. Prioritize for decision-making</li> <li>11. Isolate subsets for further investigation</li> </ol> <p>Results of data analysis shall be graphically displayed for comparison purposes, and reported to the Performance and Safety Improvement Committee.</p> <p>Additionally, the 2018 QAPI plan describes the identification of priority areas on pages 1 and 2.</p>

<p><b>Must use quality indicator data in design of program to: monitor effectiveness and safety of services and quality of care; identify opportunities for improvement</b></p>	<p>10.07.21.09D(3) Implement changes based upon results of the evaluated data; for example, when problems are identified in the provision of services, the hospice care program shall document corrective actions taken, including ongoing monitoring, revisions of policies and procedures, and educational interventions</p>	<p>Coastal Hospice uses a Plan/Do/Check/Act process for documenting problem monitoring, evaluation of data, corrective actions, and results.</p> <p><b>Policy 5002.C states:</b></p> <p><b>POLICY:</b></p> <p>The Performance and Safety Improvement Program shall use a variety of tools throughout the Plan-Do-Check-Act cycle to objectively measure performance, discover root causes of problems through evaluation, take corrective actions, and secure organizational achievement. Tools to be used include, but are not limited to the following:</p> <ul style="list-style-type: none"> <li>• Brainstorming</li> <li>• Cause-and-Effect Diagrams</li> <li>• Task Lists</li> <li>• Check Sheets</li> <li>• Control Charts</li> <li>• Flow Charts</li> <li>• Affinity Diagrams</li> <li>• Histograms</li> <li>• Multivoting</li> <li>• Pareto Charts</li> <li>• Run Charts</li> <li>• Scatter Diagrams</li> <li>• Prioritization Matrixes</li> </ul> <p>The Plan-Do-Check-Act format shall be used to address the problem identification, data analysis, solution planning, and result evaluation phases of the Performance and Safety Improvement process.</p>
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<p><b>Frequency and detail of data collection must be approved by governing body</b></p>	<p>10.07.21.09E The hospice care program shall be held accountable by the governing body for accomplishing the goals and standards that are established as part of the quality assurance and improvement system.</p>	<p>Each year the Board approves the annual QAPI plan which outlines the frequency and detail of data collection.</p> <p>Policy 5002.1 states: The Board of Directors accepts overall responsibility for the QAPI program and designates a responsible person to manage it.</p> <p>Additionally in policy 6003.1 outlines the roles and responsibilities of the board of directors. The board of directors will:</p> <p>6. Ensure that:</p> <ul style="list-style-type: none"> <li>a. An ongoing program for quality assessment improvement and patient safety is defined, implemented, maintained, and evaluated annually, and</li> <li>b. The hospice-wide quality assessment and performance improvement (QAPI) efforts address priorities for improved quality of care and patient safety, and that all improvement actions are evaluated for effectiveness, and</li> <li>c. The QAPI program reflects the complexity of the organization and the scope of its services, and</li> <li>d. The QAPI program reflects all hospice services, including those provided under contract, and</li> <li>e. The QAPI program focuses on indicators related to improved palliative outcomes, and</li> <li>f. Coastal Hospice takes actions to demonstrate improvement in hospice performance, and</li> <li>g. Coastal Hospice maintains documentary evidence of its quality assessment and performance improvement program, and</li> <li>h. One or more individual(s) who are responsible for operating the QAPI program are designated.</li> </ul>
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		<p>2. Document that it consistently reviews relevant findings of performance and safety improvement activities as well as other information relevant to the quality of patient care (e.g., unusual occurrences in care or service).</p>
<p><b>Must focus on high risk, high volume or problem prone areas</b></p>		<p>The Coastal Hospice 2018 QAPI plan on page 1 states:</p> <ul style="list-style-type: none"> <li>. Data is collected related to the areas of patient and family satisfaction and perceptions about safety; staff satisfaction and perception about patient safety; organization priorities; high risk processes; high volume processes; problem prone areas; occurrence and sentinel events; medication management and infection surveillance.</li> </ul> <p>Pages 5 – 8 of the plan indicate organizational priorities that were chosen for the above criteria.</p>
<p><b>PI activities must track adverse patient events, analyze their causes and implement preventive actions</b></p>	<p>10.07.21.09D(3) Implement changes based upon results of the evaluated data; for example, when problems are identified in the provision of services, the hospice care program shall document corrective actions taken, including ongoing monitoring, revisions of policies and procedures, and educational interventions</p>	<p>The 2018 QAPI plan page 1, under Data Collection states that:</p> <ul style="list-style-type: none"> <li>. Data sources include internal sources such as occurrence and sentinel event reports; patient/family concern reports; infection surveillance information; chart audit information; and operational statistics.</li> </ul> <p>And on Page 2, under Performance Improvement:</p> <p>The Performance Improvement Committee will:</p> <ul style="list-style-type: none"> <li>2. Implement performance improvement activities such as:</li> </ul>

		<ul style="list-style-type: none"> <li>○ <b><i>Changing systems</i></b>, such as communication channels</li> <li>○ <b><i>Changing structures</i></b> by modifying procedures, staffing, equipment or forms</li> <li>○ <b><i>Enhancing competence</i></b> through continuing education, circulating information and scientific reports, reading professional literature, viewing instructional videos and listening to instructional audios</li> <li>○ <b><i>Changing behaviors</i></b> through informal counseling, performance appraisal and assignment changes</li> <li>○ <b><i>Implementing formal Performance Improvement Plans/Plans of Action</i></b> for identified indicators</li> </ul>
<p><b>Must measure success and track performance to ensure improvements are sustained</b></p>		<p>The 2018 QAPI plan continues with:</p> <p>The Performance Improvement Committee will:</p> <ol style="list-style-type: none"> <li>1. Establish time frames for data collection, data analysis and performance improvement</li> <li>2. Monitor and evaluate the outcomes of performance improvement activities</li> <li>3. Report results of performance improvement activities</li> <li>4. Evaluate effectiveness of all changes made and track for sustained improvement</li> <li>5. Determine any additional monitoring needed</li> <li>6. Take action when appropriate changes are not achieved or sustained.</li> </ol>



<p><b>Number and scope of PIP (performance improvement projects), conducted <u>annually</u> based on the needs of the hospice's population and internal organizational needs, must reflect the scope, complexity and past performance of the hospice's services and operations</b></p>	<p>10.07.21.09C(1-6) C. The quality assurance and improvement program shall:</p> <p>(1) Focus on:</p> <p>(a) The needs, expectations, and satisfaction of patients and their families, and</p> <p>(b) All services provided by the hospice care program;</p> <p>(2) Have outcomes and results that are measurable and which may be incorporated into systemic changes in the program's operation;</p> <p>(3) Require the systematic collection, review, and evaluation of information and data and the analysis of trends identified through the quality assurance process;</p> <p>(4) Require that regular reports are prepared and reviewed by the governing body and appropriate personnel;</p> <p>(5) Provide for prompt and appropriate response to incidents when the patient's health and safety is at risk; and</p> <p>(6) Include proactive strategies to improve the quality of services.</p>	<p>Coastal Hospice adheres to our Joint Commission recommendations that at least three PIPs are done annually.</p> <p>In the 2018 QAPI plan on page 4:</p> <p><b><i>Planned Performance Improvement Projects (PIPs)</i></b></p> <p>The Performance Improvement Committee will determine priorities for PI Projects (PIPs) based on managerial reports and the findings from focus studies/chart review. Organizational improvement opportunities may also be addressed in Leadership through the SWOT process. Additional PIPs may be selected throughout the year as determined by the Coastal Hospice Board of Directors or Leadership team.</p> <p>1.a)</p> <p>Within the 2018 QAPI plan on page 1 we include our participation in the H-CAHPS Hospice Consumer Assessment of Health Care Providers and Systems as well as the Family evaluation of Bereavement Care from NHPCO.</p> <p>1.b)</p> <p>Our policy 6-003.1 states: The QAPI program reflects the complexity of the organization and the scope of its services, and</p> <p>The QAPI program reflects all hospice services, including those provided under contract, and</p> <p>2) Pages 5 – 8 of the 2018 QAPI plan list numerous measurable outcomes which may be incorporated into systematic changes.</p> <p>We participate with a quality reporting program with DEYTA so that we have benchmarking information for comparison against other hospice programs.</p>
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		<p>3) and 6)</p> <p>The 2018 QAPI plan itself is demonstration of Coastal Hospice’s system of collection, review, evaluation and analysis of data and identification of trends.</p> <p>In Policy 5-002.1 it is stated:</p> <ol style="list-style-type: none"> <li>1. Scope of the Performance and Safety Improvement Program includes, at minimum: <ol style="list-style-type: none"> <li>a. Ongoing collection and documentation of data to monitor organizational performance</li> <li>b. Systematic aggregation and analysis of data</li> <li>c. Analysis of identified undesirable patterns or trends</li> <li>d. Identification and management of Sentinel Events</li> <li>e. Use of information from data analysis to identify trends and develop/implement action plans for improvement in organizational processes, service delivery, and patient outcomes, including safety</li> <li>i. Use of aggregated/analyzed data to develop action plans for reduction in risk for Sentinel Events</li> <li>j. Proactive identification of potential risk for unanticipated adverse events (Hazard Vulnerability Analysis, Failure Mode &amp; Effects Analysis)</li> <li>k. Documentation of audit results, trend reports, process improvement project results, QAPI committee meetings and any other QAPI activities.</li> </ol> </li> </ol> <p>4) Stated in our 2018 QAPI plan and policies: “The Board of Directors regularly reviews elements of QAPI activities including data collection and analysis; performance improvement team activities and results; and regulatory standard compliance.” Our practice is that QAPI results are reviewed at every other board meeting.</p>
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		<p>5) Policy #5-012.1 defines and outlines the procedure for identifying and reporting an unusual occurrence or incident. Incidents must be reported to the supervisor immediately and instruction from the supervisor regarding next steps followed. The written report must be prepared and forwarded within 24 hours.</p>
<p><b>Governing Body-responsible for ensuring that one or more individual(s) who are responsible for operating the QAPI program are designated</b></p>	<p>10.07.21.09D(4) Identify the individual responsible for performing the quality assurance functions as set forth in this regulation</p>	<p>Policy 5002.1 states: The Board of Directors accepts overall responsibility for the QAPI program and designates a responsible person to manage it.</p> <p>Coastal Hospice has a designated full time Manager of Quality and Education and she supervises an Education Coordinator.</p>

## **Executive Summary**

### **Overview**

Evolve Consulting conducted a beds need analysis to assist Coastal Hospice in determining the potential for a new residential care facility. This report includes statistical data provided by Coastal Hospice, research conducted by Evolve Consulting, conclusions, and recommendations as a result of the analysis.

To conduct the evaluation, the following objectives were completed:

- A review of census figures to determine population data in Coastal Hospice's primary and secondary service areas.
- A review of mortality rates and causes to determine possible patients in Coastal Hospice's primary and secondary service areas.
- A review of competitors in Coastal Hospice's primary service area.

## **Scope of Study**

Evolve Consulting Group, Inc. completed both a residential bed needs analysis and a general inpatient bed needs analysis. The residential bed needs analysis was completed at the request of Coastal Hospice and is the main focus of this report. The general inpatient bed needs analysis was completed at the discretion of Evolve Consulting Group, Inc. and was used to verify the current inpatient needs of Coastal Hospice. At the present time, Coastal Hospice operates a 14 bed general inpatient facility.

The following report includes detailed statistics and data projections through the year 2015. This allows Coastal Hospice to accurately plan for the future and to adequately serve their community.

## **Determination of Need**

In order to determine the need for a free standing residential care facility, many variables must be considered. Evolve Consulting Group, Inc. has reviewed census data, death rate trends, competitor's activities, and Coastal Hospice's potential to capture new referrals.

To determine Coastal Hospice's potential for growth through 2015, the variables described above were carefully reviewed. Although Coastal Hospice is a deep rooted and long standing hospice provider, a large number of potential patients that may benefit from a residential facility are being referred to nursing homes and other alternative locations, eroding Coastal Hospice's market share and census. Therefore, continued marketing and aggressive outreach efforts must be continued and new efforts implemented to help sustain Coastal Hospice's market share and allow for market growth in existing service areas.

## **Data Trends**

Over the past five years (2004-2008) the number of patients admitted by Coastal Hospice has increased by an average of 5.60% per year, while the average number of patient days over the same time period has increased by 5.04% and the average daily census has increased by 5.06%. The reported ALOS (average length of stay) has decreased by an average of -8.49% per year since 2004 to an ALOS of 39.61 days in 2008 which is 28 days below the national average of 67 days\*. From 2004-2005, the ALOS dropped by almost 33%, this is a major concern.

\* From NHPCO's 2008 Facts and Figures

All projections assume a 90% occupancy rate. Actual occupancy rates could alter the number of beds needed.

\* From NHPCO's 2005 National Data Set, most recent information available.

## **Competition**

Coastal Hospice operates in a CON state. At this time, there are no other Hospice competitors in their primary service area. However, the main source of competition for patients that would utilize the residential facility is local nursing homes. Berlin nursing home is located directly across the street from Atlantic General Hospital and is the main source of competition.

It has also been brought to the attention of Evolve Consulting Group, Inc. that in Worcester County, where the facility may be constructed, the county may build their own facility and may try and prevent Coastal Hospice from constructing a facility there. This is significant because Worcester County may be the main source of patients for the proposed residential facility. This situation must be monitored carefully and any change in this situation may alter Evolve Consulting Group's recommendation. An attempt to negotiate a contract with Worcester County officials, guaranteeing their residents a certain number of beds in your facility, may eliminate or delay this major competitor.

## **Recommendation**

Evolve Consulting Group, Inc. recommends constructing a 12 bed residential care facility with plans to expand the facility within 5 years of completion, depending on the introduction of competing facilities. The current economic crisis the country is experiencing may limit the size of your residential care facility. While this study gives a very objective view of your bed needs, your Hospice must consider all of the factors. Even though your community may be best served by a 12 bed residential care facility, Coastal Hospice may not be able to afford to subsidize a building of that size. Those decisions are left to the discretion of Coastal Hospice.

Since your Hospice is not fully utilizing all of your current General Inpatient Beds at this time, you may consider petitioning the State in order to allow you to convert those unused beds into "swing" beds. These beds could be used for either residential beds or General Inpatient Beds. This allows Coastal Hospice to immediately provide residential care, removes most, if not all, upfront costs, and still allows Coastal Hospice the ability to use the beds as General Inpatient Beds if needed.

## Bed Needs

Using the traditional methodology to determine the number of general inpatient beds needed to effectively serve Coastal Hospice's primary and secondary service areas, 3.69 acute cancer beds (45% market share) and 4.31 acute non-cancer beds (15% market share), for a total of 8.00 beds, would most likely be needed in 2010. 2009 - we were btw 8 - 9 ip + ADC

These calculations take into account the changing population sizes and number of deaths from Coastal Hospice's primary and secondary service areas.

Using the same methodology, by 2015 the beds needed to effectively serve Coastal Hospice's primary and secondary service areas would be, 3.95 acute cancer beds (50% market share) and 6.53 acute non-cancer beds (20% market share), for a total of 10.48 beds, rounded up to 11.00.

The projected market share values used to determine the number of beds needed is what Evolve Consulting Group, Inc. feels will be the most likely scenario. However, many different factors can affect the market share served by Coastal Hospice, therefore, both a worst case and best case scenario are also offered. The recommendations provided by Evolve Consulting Group, Inc. are based on projected population sizes and projected death rates. All figures are subject to change due to circumstances outside of our control, therefore, we can assume no responsibility for these changes.

The number of patients that may be admitted into a residential bed facility has been estimated at 12 patients per month in 2008. As per information provided by Coastal Hospice, from Atlantic General Hospital, 10 patients a month that could benefit from residential care will be discharged from Atlantic General Hospital. Conservative figures of 2 other patients per month are estimated to be admitted into the residential care program from the community. The growth rate of patients per year is estimated at 5.60%, the same growth rate as patient admits, on average, from 2004 to 2008. The average length of stay in the residential unit is estimated at 21.6 days\*. The first year of operation is believed to be 2011. Evolve Consulting Group, Inc. recommends a residential facility of 11.15 beds, rounded up to 12 beds, be constructed at that time.

The main limiting factor of a residential facility is money. In the majority of communities, residential facilities must be subsidized. Finding a source to subsidize this residential facility, especially in these economic times, is key. Most communities with residential care beds experience a waiting list as the desire to utilize this type of service is great. The challenge is to determine which patients/families are in real need of this service.

The projected 2008 populations of Coastal Hospice's primary and secondary service areas range in size from 26,175 persons (Somerset County) up to 188,632 persons (Sussex County) with a total projected 2008 population of 430,240 persons.

The total projected number of malignant neoplasm deaths in Coastal Hospice's primary and secondary service areas in 2008 is 1,064 with an average annual decrease in malignant neoplasm fatalities of -0.65% per year, per county. The total projected number of non-malignant neoplasm deaths in Coastal Hospice's primary and secondary service areas in 2008 is 3,505 with an average annual decrease in non-malignant neoplasm fatalities of -0.09% per year, per county.

The projected decrease in the number of deaths within Coastal Hospice's primary and secondary service areas will decrease the potential patient pool from which Coastal Hospice will be able to draw. New and continuing marketing strategies must be implemented and continued in order to capture the largest patient census available.

#### **Market Share**

Coastal Hospice has served an average of 326.20 patients with a malignant neoplasm diagnosis, per year, from 2004-2008. The average number of malignant neoplasm deaths, per year, from 2004-2008 was 786.00. This gives Coastal Hospice a market share of 41.50%. It is not unrealistic to expect to serve 55%-65% of the malignant neoplasm deaths which leaves Coastal Hospice room to grow. Evolve Consulting Group, Inc. predicts Coastal Hospice to have a market share of 45% of malignant neoplasm deaths in 2010 which translates to a projected census of 346.30 malignant neoplasm patients.

Coastal Hospice has served an average of 238.80 patients, per year, with a non-malignant neoplasm diagnosis from 2004-2008. The average number of non-malignant neoplasm deaths from 2004-2008 was 2,318.72. This gives Coastal Hospice a market share of 10.30%. It is not unrealistic to expect to serve up to 30% of the non-malignant neoplasm deaths which leaves Coastal Hospice room to grow. Evolve Consulting Group, Inc. predicts Coastal Hospice to have a market share of 15% of non-malignant neoplasm deaths in 2010 which translates to a projected census of 404.48 non-malignant neoplasm patients.

Total 750

*we exceeded  
in 09 -  
820 unduplicated  
pts.*



**2008**

Evolve Consulting Group,  
Inc.

Cole Mullinax

**[STATISTICAL ANALYSIS]**

**NUMBER OF PATIENTS ADMITTED BY YEAR  
5 YEAR TREND**

<b>Year</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>Patient Admissions</b>					
Month					
January	50	61	46	44	40
February	58	49	36	43	29
March	50	61	45	55	54
April	52	50	36	31	34
May	55	67	43	45	31
June	58	70	39	36	36
July	56	59	38	42	31
August	54	52	58	31	38
September	52	53	43	47	39
October		49	51	39	42
November		65	50	47	27
December		67	54	43	32
Total # Admits	646.67	703.00	539.00	503.00	433.00
 <b>% Growth Over Previous Year</b>					
Total % Growth	-8.01%	30.43%	7.16%	16.17%	NA
Average annual growth for the period of 2004 to 2008	5.60%				

**NOTES:**

Duplicates may be included in above details due to readmissions.

Patient Census Data supplied by: Kevin Ireland

Total 2008 Patient admits are projected\*

**NUMBER OF PATIENT DAYS\***  
**5 YEAR TREND**

<b>Year</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>Patient Days</b>					
<b>Month</b>					
January	2,397.00	1,898.00	1,986.00	1,855.00	2,085.00
February	2,237.00	1,906.00	1,704.00	1,618.00	1,919.00
March	2,375.00	2,074.00	1,848.00	2,023.00	2,256.00
April	2,244.00	2,221.00	1,909.00	1,758.00	2,330.00
May	2,284.00	2,363.00	2,082.00	1,665.00	2,240.00
June	2,385.00	2,727.00	1,950.00	1,469.00	1,804.00
July	2,399.00	2,865.00	2,029.00	1,903.00	1,817.00
August	2,489.00	2,356.00	2,041.00	1,813.00	1,951.00
September	2,276.00	2,320.00	1,793.00	1,879.00	1,715.00
October		2,365.00	1,805.00	1,864.00	1,991.00
November		2,383.00	1,946.00	1,908.00	1,605.00
December		2,459.00	2,052.00	2,110.00	1,804.00
<b>Total Program Patient Days</b>					
Home Care**	28,114.67	27,937.00	23,145.00	21,865.00	23,517.00
<b>% Growth Over Previous Year</b>					
Home Care**	0.64%	20.70%	5.85%	-7.02%	N/A
<b>Average annual growth for the period of 2004 to 2008</b>	5.04%				

**NOTES:**

No duplicates are included in above totals.

Patient Census Data supplied by: Kevin Ireland

\* Data by month not available. Annual totals utilized.

\*\* May include patient days in nursing facilities. Total patient days are projected.

**AVERAGE DAILY CENSUS BY MONTH\***  
**YEARS 2004-2008**

<b>Year</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>Month</b>					
January	77.30	61.20	64.10	59.80	67.30
February	77.10	68.10	60.90	57.80	66.20
March	76.60	66.90	59.60	65.30	72.50
April	74.80	74.00	63.60	58.60	77.70
May	73.70	76.20	67.20	53.70	72.30
June	79.50	90.90	65.00	49.00	60.10
July	77.40	92.40	65.50	61.40	58.60
August	80.30	76.00	65.80	58.50	62.90
September	75.90	77.30	59.80	62.60	58.40
October		76.30	58.20	60.10	64.20
November		79.40	64.90	63.60	53.50
December		79.30	66.20	68.10	58.20

**Total Daily Census Per Year**  
**Total Daily Census**

923.47	918.00	760.80	718.50	771.90
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	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
Average Daily Census by Year	76.96	76.50	63.40	59.88	64.33
% Growth Over Previous Year	0.60%	20.66%	5.89%	-6.92%	N/A

5 year average daily census	69.18
5 year average % growth	5.06%

**NOTES:**

Patient Census Data Supplied By: Kevin Ireland  
2008 Totals are projected\*

**PATIENT PROFILES - CANCER VS. NON-CANCER ADMITS  
2004-2008**

<b>YEAR</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>Patients by Diagnosis</b>					
Cancer related diagnosis	332.00	397.00	303.00	325.00	274.00
Non-cancer diagnosis	315.00	306.00	236.00	178.00	159.00
Total # Combined Admits	647.00	703.00	539.00	503.00	NA
2004-2008 average cancer related admits		<b>326.20</b>	<b>57.73%</b>		
2004-2008 average non-cancer related admits		<b>238.80</b>	<b>42.27%</b>		
<b>% Growth Over Previous Year</b>					
Cancer related diagnosis	-16.37%	31.02%	-6.77%	NA	
Non-cancer diagnosis	2.94%	29.66%	32.58%	NA	
Cancer related average annual % growth in admits for the period of 2004-2008				<b>2.63%</b>	
Non-cancer average annual % growth in admits for the period of 2004-2008				<b>21.73%</b>	
<b>Ratio of Patients by Diagnosis to Total Admits</b>					
Cancer related diagnosis	51.31%	56.47%	56.22%	64.61%	NA
Non-cancer diagnosis	48.69%	43.53%	43.78%	35.39%	NA
<b>Annual Growth Trend in Patient Ratios</b>					
Cancer related diagnosis	-9.13%	0.46%	-13.00%	NA	
Non-cancer diagnosis	11.85%	-0.59%	23.73%	NA	
Cancer related average annual growth trend in admits from 2004-2008				<b>-7.22%</b>	
Non-cancer related average annual growth trend in admits from 2004-2008				<b>11.66%</b>	

**Notes:**

Duplicates may be included in above totals due to readmissions.

Patient Census Data supplied by: Kevin Ireland

**AVERAGE LENGTH OF STAY / MEDIAN LENGTH OF STAY  
5 YEAR TREND**

<b>Year</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
<b>ALOS</b>					
Patient Days*	28,115	27,937	23,145	21,865	23,517
Total Admissions	647	703	539	503	433
Calculated ALOS Total Program	43.45	39.74	42.94	43.47	54.31
Reported ALOS**	39.61	39.34	41.93	40.25	59.75
<b>% Growth over Previous Year</b>					
Home Care	0.69%	-6.18%	4.17%	-32.64%	N/A
Average Annual ALOS Growth 2004-2008**	<b>-8.49%</b>				
<b>MLOS</b>					
Home Care*	13.00	13.00	14.00	14.00	21.00
<b>% Growth over Previous Year</b>					
Home Care	0.00%	-7.14%	0.00%	-33.33%	
Average Annual MLOS Growth 2004-2008**	<b>-10.12%</b>				

Duplicates may be included in above totals.

Patient Census Data supplied by: Kevin Ireland

\* May include patient days in nursing facilities.

\*\* There is a variance between the calculated ALOS and the reported ALOS. The calculated ALOS may be due to admissions from previous years effecting current year. The reported ALOS stay is used herein.

## POPULATION CALCULATIONS 2003-2007 With Projections

**State(s) Served:** Maryland

**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**Number of Counties Served:** 4

Year	2003	2004	2005	2006	2007
<b>County</b>					
Wicomico	87,320.00	88,637.00	90,450.00	92,465.00	93,600.00
Worcester	48,710.00	48,905.00	48,833.00	49,162.00	49,374.00
Dorchester	30,479.00	30,872.00	31,140.00	31,417.00	31,846.00
Somerset	25,429.00	25,642.00	25,564.00	26,814.00	26,016.00

### % Growth Over Previous Year

Wicomico	N/A	1.51%	2.05%	2.23%	1.23%
Worcester	N/A	0.40%	-0.15%	0.67%	0.43%
Dorchester	N/A	1.29%	0.87%	0.89%	1.37%
Somerset	N/A	0.84%	-0.30%	4.89%	-2.98%

### Average Annual Growth in Population

Wicomico	1.75%
Worcester	0.34%
Dorchester	1.10%
Somerset	0.61%

### Projected Population Data

	2008	2010	2015
Wicomico	95,240.00	98,607.00	107,554.00
Worcester	49,542.00	49,879.00	50,731.00
Dorchester	32,197.00	32,912.00	34,767.00
Somerset	26,175.00	26,496.00	27,317.00

Census data and trends in population changes provided by The U.S Census Bureau.

Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.

Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Health.

# **POPULATION CALCULATIONS** **2003-2007 With Projections**

**State(s) Served:** Delaware and Virginia  
**Secondary Counties Served:** Sussex, DE and Accomack, VA

**Number of Counties Served:** 2

<b>Year</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
<b>County</b>					
Sussex, DE	167,903.00	171,502.00	175,770.00	180,039.00	184,291.00
Accomack, VA	38,610.00	38,710.00	38,743.00	38,614.00	38,485.00

## **% Growth Over Previous Year**

Sussex, DE	N/A	2.14%	2.49%	2.43%	2.36%
Accomack, VA	N/A	0.26%	0.09%	-0.33%	-0.33%

## **Average Annual Growth In Population**

Sussex, DE	2.36%
Accomack, VA	-0.08%

## **Projected Population Data**

	<b>2008</b>	<b>2010</b>	<b>2015</b>
Sussex, DE	188,632	197,624	222,023
Accomack, VA	38,454	38,392	38,237

Census data and trends in population changes provided by The U.S Census Bureau.  
 Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.  
 Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Health.



**DEATH RATE CALCULATIONS  
MALIGNANT NEOPLASMS ONLY  
2000-2004 With Projections**

**State(s) Served:** Maryland  
**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset  
**Number of Counties Served:** 4

**Average Cancer Deaths From The Period 2000-2004 (Most recent data)**

County	
Wicomico	195.00
Worcester	151.00
Dorchester	87.00
Somerset	67.00

**% Growth Over Reported Period**

Wicomico	-0.70%
Worcester	-0.50%
Dorchester	-0.90%
Somerset	-0.40%

**Projected Cancer Deaths**

	2008	2010	2015
Wicomico	194.00	191.00	184.00
Worcester	150.00	149.00	145.00
Dorchester	86.00	85.00	81.00
Somerset	67.00	66.00	65.00

Census data and trends in population changes provided by The U.S Census Bureau.  
 Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.  
 Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Public Health.

**DEATH RATE CALCULATIONS  
MALIGNANT NEOPLASMS ONLY  
2000-2004 With Projections**

**State(s) Served:** Delaware and Virginia  
**Secondary Counties Served:** Sussex, DE and Accomack, VA  
**Number of Counties Served:** 2

**Average Cancer Deaths From The Period 2000-2004 (Most recent data)**

**County**

Sussex, DE 458.00  
 Accomack, VA 114.00

**% Growth Over Reported Period**

Sussex, DE -1.00%  
 Accomack, VA -0.40%

**Projected Cancer Deaths**

	<b>2008</b>	<b>2010</b>	<b>2015</b>
Sussex, DE	453.00	444.00	423.00
Accomack, VA	114.00	113.00	110.00

Census data and trends in population changes provided by The U.S Census Bureau.  
 Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.  
 Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and

**DEATH RATE CALCULATIONS  
ALL DEATHS EXCLUDING CANCER  
2003-2007 With Projections**

**State(s) Served:** Maryland  
**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset  
**Number of Counties Served:** 4

**Deaths, Excluding Cancer Deaths, From The Period 2003-2007**

<b>Year County</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>
Wicomico	637	625	669	677	758
Worcester	422	383	365	413	427
Dorchester	306	261	299	285	285
Somerset	224	191	165	187	176

**% Growth Over Previous Year**

Wicomico	N/A	-1.92%	6.58%	1.18%	10.69%
Worcester	N/A	-10.18%	-4.93%	11.62%	3.28%
Dorchester	N/A	-17.24%	12.71%	-4.91%	0.00%
Somerset	N/A	-17.28%	-15.76%	11.76%	-6.25%

**Average Annual Growth In Death Rate**

Wicomico	4.13%
Worcester	-0.05%
Dorchester	-2.36%
Somerset	-6.88%

**Projected Number Of Deaths Excluding Cancer Deaths**

	<b>2008</b>	<b>2010</b>	<b>2015</b>
Wicomico	789	856	1,048
Worcester	427	426	425
Dorchester	278	265	235
Somerset	164	142	100

Census data and trends in population changes provided by The U.S Census Bureau.  
 Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.  
 Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Public Health.



**DEATH RATE CALCULATIONS  
ALL DEATHS EXCLUDING CANCER  
2002-2006 With Projections**

**State(s) Served:** Maryland  
**Secondary Counties Served:** Sussex, DE and Accomack, VA  
**Number of Counties Served:** 2

**Deaths, Excluding Cancer Deaths, From The Period 2002-2006**

<b>Year</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
<b>County</b>					
Sussex, DE	1293	1,366	1,366	1,487	1,576
Accomack, VA	112	125	107	129	116

**% Growth Over Previous Year**

Sussex, DE	N/A	5.34%	0.00%	8.14%	5.66%
Accomack, VA	N/A	10.40%	-16.82%	17.05%	-11.21%

**Average Annual Growth in Death Rate**

Sussex, DE	4.79%				-0.09%
Accomack, VA	-0.14%			-0.52%	

**Projected Number Of Deaths Excluding Cancer Deaths**

	<b>2008</b>	<b>2010</b>	<b>2015</b>
Sussex, DE	1,731	1,900	2,401
Accomack, VA	116	115	114

Census data and trends in population changes provided by The U.S Census Bureau.  
 Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.  
 Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Public Health.

**2004-2008 AVERAGE MARKET SHARE CALCULATIONS  
PERCENT OF MARKET METHOD  
MALIGNANT NEOPLASMS ONLY**

**State(s) Served:** Maryland

**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**2004-2008 AVERAGE**

Total cancer deaths for the Principal Service Area counties:

<b>Wicomico</b>	195.00	deaths
<b>Worcester</b>	151.00	deaths
<b>Dorchester</b>	87.00	deaths
<b>Somerset</b>	67.00	deaths

**Total 500.00 malignant malignant neoplasm county deaths**

Total cancer deaths for the Secondary Service Area counties:

\*Total reduced by 50% due to being the secondary service area

<b>Sussex, DE</b>	458.00	deaths
<b>Accomack, VA</b>	114.00	deaths

**Total 286.00 malignant malignant neoplasm county deaths**

**2004-2008 Market Share**

Average # of Cancer Patients from 2004-2008	326.20
Total malignant neoplasm county deaths	786.00
Market Share (2004-2008) of malignant neoplasms	<b>41.50%</b>

**2004-2008 Market Share Potential**

Possible Average # of Patients from 2004-2008	<b>353.70</b>
Total malignant neoplasm county deaths	786.00
Potential Market Share of malignant neoplasms	45.00%

The market share indicates there is potential for growth. Similar programs in areas with little or no competition have experienced patient share of market in excess of 65%. The 45% "potential" figure used herein is conservative.



**PROJECTED 2010 and 2015 MARKET SHARE CALCULATIONS  
PERCENT OF MARKET METHOD  
MALIGNANT NEOPLASMS ONLY**

**State(s) Served:** Maryland

**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**2010 (Projected)**

**2015 (Projected)**

Total cancer deaths for the Principal Service Area counties:

<b>Wicomico</b>	<b>191.00</b>	deaths
<b>Worcester</b>	<b>149.00</b>	deaths
<b>Dorchester</b>	<b>85.00</b>	deaths
<b>Somerset</b>	<b>66.00</b>	deaths

<b>Wicomico</b>	<b>184.00</b>	deaths
<b>Worcester</b>	<b>145.00</b>	deaths
<b>Dorchester</b>	<b>81.00</b>	deaths
<b>Somerset</b>	<b>65.00</b>	deaths

**Total 491.00 deaths**

**475.00 deaths**

Total cancer deaths for the Secondary Service Area counties:

\*Total reduced by 50% due to being the secondary service area

<b>Sussex, DE</b>	<b>444.00</b>	deaths
<b>Accomack, VA</b>	<b>113.00</b>	deaths

<b>Sussex, DE</b>	<b>423.00</b>	deaths
<b>Accomack, VA</b>	<b>110.00</b>	deaths

**Total 278.50 deaths**

**266.50 deaths**

**Market Share Potential**

Potential # of Patients	in 2010	<b>346.3</b>	in 2015	<b>370.8</b>
Total malignant neoplasm county deaths		769.5		741.5
Potential Market Share of malignant neoplasms		45.00%		50.00%

The market share indicates there is potential for growth. Similar programs in areas with little or no competition have experienced patient share of market in excess of 65%. The 55% "potential" figure used herein is conservative.

**2002-2006 AVERAGE MARKET SHARE CALCULATIONS  
PERCENT OF MARKET METHOD  
ALL DEATHS EXCLUDING CANCER DEATHS**

**State(s) Served:** Maryland  
**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**2004-2008 AVERAGE**

Total non-cancer deaths for the Principal Service Area counties:

<b>Wicomico</b>	<b>673.20</b>	deaths
<b>Worcester</b>	<b>402.00</b>	deaths
<b>Dorchester</b>	<b>287.20</b>	deaths
<b>Somerset</b>	<b>188.60</b>	deaths

**Total**                    **1,551.00**    **non-cancer deaths**

Total cancer deaths for the Secondary Service Area counties:

\*Total reduced by 50% due to being the secondary service area

<b>Sussex, DE</b>	<b>1417.64</b>	deaths
<b>Accomack, VA</b>	<b>117.80</b>	deaths

**Total**                    **767.72**    **non-cancer deaths**

**2004-2008 Market Share**

Average # of Non-Cancer Patients from 2004-2008	238.80
Total non-cancer deaths	2,318.72
Market Share (2004-2008) of non-cancer deaths	<b>10.30%</b>

**2004-2008 Market Share Potential**

Average # of Patients from 2004-2008	<b>347.8</b>
Total non-cancer deaths	2,318.72
Potential Market Share of non-cancer deaths	<b>15.00%</b>

The market share indicates there is significant potential for growth. Similar programs in areas with little or no competition have experienced patient share of market in excess of 30%.

**PROJECTED 2010 and 2015 MARKET SHARE CALCULATIONS  
PERCENT OF MARKET METHOD  
ALL DEATHS EXCLUDING CANCER DEATHS**

**State(s) Served:** Maryland  
**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**2010 (Projected)**

**2015 (Projected)**

Total non-cancer deaths for the Principal Service Area counties:

<b>Wicomico</b>	856.00	deaths	<b>Wicomico</b>	1048	deaths
<b>Worcester</b>	426.00	deaths	<b>Worcester</b>	425	deaths
<b>Dorchester</b>	265.00	deaths	<b>Dorchester</b>	235	deaths
<b>Somerset</b>	142.00	deaths	<b>Somerset</b>	100	deaths
<b>Total</b>	<b>1689.00</b>	<b>deaths</b>		<b>1,808.00</b>	<b>deaths</b>

Total cancer deaths for the Secondary Service Area counties:

\*Total reduced by 50% due to being the secondary service area

<b>Sussex, DE</b>	1,900.00	deaths	<b>Sussex, DE</b>	2,401.00	deaths
<b>Accomack, VA</b>	115.00	deaths	<b>Accomack, VA</b>	114.00	deaths
<b>Total</b>	<b>1,007.50</b>	<b>deaths</b>	<b>Total</b>	<b>1,257.50</b>	<b>deaths</b>

**Market Share Potential**

Potential # of Patients	in 2010	<b>404.48</b>	in 2015	<b>613.10</b>
Total non-cancer deaths		2,696.50		3,065.50
Potential Market Share of non-cancer deaths		15%		20%

The market share indicates there is significant potential for growth. Similar programs in areas with little or no competition have experienced patient share of market in excess of 30%.

## Death Rate and Population Calculations

**State(s) Served:** Maryland

**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**Projected:** 2010

County	Cancer		Non-Cancer	
	Deaths	Population	Deaths	Population
<b>Wicomico</b>	191	98,607	856	98,607
Death rate per 100,000 people	<b>194</b>		<b>868</b>	
<b>Worcester</b>	149	49,879	426	49,879
Death rate per 100,000 people	<b>299</b>		<b>854</b>	
<b>Dorchester</b>	85	32,912	265	32,912
Death rate per 100,000 people	<b>258</b>		<b>805</b>	
<b>Somerset</b>	66	26,496	142	26,496
Death rate per 100,000 people	<b>249</b>		<b>536</b>	

**Secondary Counties Served:** Sussex, DE and Accomack, VA

County	Cancer		Non-Cancer	
	Deaths	Population	Deaths	Population
<b>Sussex, DE</b>	444	197,624	1,900	197,624
Death rate per 100,000 people	<b>225</b>		<b>961</b>	
<b>Accomack, VA</b>	113	38,392	115	38,392
Death rate per 100,000 people	<b>294</b>		<b>300</b>	

**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**WORST CASE SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	191.00	Sussex, DE	222.00
Worcester	149.00	Accomack, VA	56.50
Dorchester	85.00		
Somerset	66.00		

**Total Projected Cancer Deaths 769.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 41.50% market share**

**Projected Hospice Patient Volume**

Wicomico	79.27	Sussex, DE	92.13
Worcester	61.84	Accomack, VA	23.45
Dorchester	35.28		
Somerset	27.39		

**Total Projected Hospice Patient Volume 319.35**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 111.77**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 1,117.73**

**Projected Occupancy Rate: 90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 3.40 cancer acute beds supported**

**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER DEATHS**  
**WORST CASE SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	856.00	Sussex, DE	950.00
Worcester	426.00	Accomack, VA	57.50
Dorchester	265.00		
Somerset	142.00		

**Total Projected Cancer Deaths 2,696.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 10.30% market share**

**Projected Hospice Patient Volume**

Wicomico	88.16	Sussex, DE	97.84
Worcester	43.87	Accomack, VA	5.92
Dorchester	27.29		
Somerset	14.62		

**Total Projected Hospice Patient Volume 277.71**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 97.20**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 971.97**

**Projected Occupancy Rate: 90%**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 2.96 acute beds supported**

**Total Current Bed Need**

Acute Cancer Bed Need	3.40
Non-Cancer Bed Need	2.96
<b>Total Bed Need</b>	<b>6.36</b>



**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**BEST CASE SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	191.00	Sussex, DE	222.00
Worcester	149.00	Accomack, VA	56.50
Dorchester	85.00		
Somerset	66.00		

**Total Projected Cancer Deaths 769.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 55% market share**

**Projected Hospice Patient Volume**

Wicomico	105.05	Sussex, DE	122.1
Worcester	81.95	Accomack, VA	31.075
Dorchester	46.75		
Somerset	36.30		

**Total Projected Hospice Patient Volume 423.23**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 148.13**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 1,481.29**

**Projected Occupancy Rate: 90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 4.51 cancer acute beds supported**

**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER DEATHS**  
**BEST CASE SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	856.00	Sussex, DE	950.00
Worcester	426.00	Accomack, VA	57.50
Dorchester	265.00		
Somerset	142.00		

**Total Projected Cancer Deaths 2,696.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 25% market share**

**Projected Hospice Patient Volume**

Wicomico	214.00	Sussex, DE	237.50
Worcester	106.50	Accomack, VA	14.38
Dorchester	66.25		
Somerset	35.50		

**Total Projected Hospice Patient Volume 674.13**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 235.94**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 2,359.44**

**Projected Occupancy Rate: 90%**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 7.18 acute beds supported**

**Total Current Bed Need**

Acute Cancer Bed Need	4.51
Non-Cancer Bed Need	7.18
<b>Total Bed Need</b>	<b>11.69</b>

**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**MOST LIKELY SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	191.00	Sussex, DE	222.00
Worcester	149.00	Accomack, VA	56.50
Dorchester	85.00		
Somerset	66.00		

**Total Projected Cancer Deaths 769.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 45% market share**

**Projected Hospice Patient Volume**

Wicomico	85.95	Sussex, DE	99.90
Worcester	67.05	Accomack, VA	25.43
Dorchester	38.25		
Somerset	29.70		

**Total Projected Hospice Patient Volume 346.28**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 121.20**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 1,211.96**

**Projected Occupancy Rate: 90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 3.69 cancer acute beds supported**

**FIRST YEAR OF OPERATION (Projected): 2010**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER DEATHS**  
**MOST LIKELY SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	856.00	Sussex, DE	950.00
Worcester	426.00	Accomack, VA	57.50
Dorchester	265.00		
Somerset	142.00		

**Total Projected Non-Cancer Deaths 2,696.50 Possible hospice patients**

**Projected Hospice Patient Volume Projected 15% market share**

**Projected Hospice Patient Volume**

Wicomico	128.40	Sussex, DE	142.50
Worcester	63.90	Accomack, VA	8.63
Dorchester	39.75		
Somerset	21.30		

**Total Projected Hospice Patient Volume 404.48**

**Projected Hospice Patient Volume x Percentage of Hospice Patients who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care: 35.0%**

**Total Projected Hospice Inpatient Volume = 141.57**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay = 1,415.66**

**Projected Occupancy Rate: 90%**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of 4.31 acute beds supported**

**Total Bed Need in 2010**

Acute Cancer Bed Need	3.69
Non-Cancer Bed Need	4.31
<b>Total Bed Need</b>	<b>8.00</b>

**PROJECTED NUMBER OF INPATIENT CARE DAYS  
2010 (Projected)**

	<b>Worst Case</b>	<b>Best Case</b>	<b>Most Likely</b>
<b>Acute cancer projected inpatient days:</b>	1,117.73	1,481.29	1,211.96
<b>Non-cancer projected inpatient days:</b>	971.97	2,359.44	1,415.66
<b>Total projected inpatient care days:</b>	2,089.71	3,840.73	2,627.63

<b>Patient Days</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
	28,115	27,937	23,145	21,865	23,517

<b>% Growth Over Previous Year:</b>	0.64%	20.70%	5.85%	-7.02%	N/A
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<b>Average Annual Growth:</b>	5.04%
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<b>Projected Number Of Patient Days During 2010 (Projected):</b>	31,021.46
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	<b>Worst Case</b>	<b>Best Case</b>	<b>Most Likely</b>
<b>% of Patient Days Spent In Inpatient Care:</b>	6.74%	12.38%	8.47%
<b>Maximum % Of Patient Days Allowed In Inpatient Care:</b>	20%	20%	20%
<b>Possible Patient Days Allowed In Inpatient Care (Projected):</b>	6,204	6,204	6,204

**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**WORST CASE SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	184.00	Sussex, DE	211.50
Worcester	145.00	Accomack, VA	55.00
Dorchester	81.00		
Somerset	65.00		

**Total Projected Cancer Deaths                      741.50   Possible hospice patients**

**Projected Hospice Patient Volume                      Projected   41.50%   market share**

Wicomico	76.36	Sussex, DE	87.78
Worcester	60.18	Accomack, VA	22.83
Dorchester	33.62		
Somerset	26.98		

**Total Projected Hospice Patient Volume                      307.73**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:                      35.0%**

**Total Projected Hospice Inpatient Volume =                      107.71**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =                      1,077.06**

**Projected Occupancy Rate:                      90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of                      3.28   cancer acute beds supported**

**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER**  
**WORST CASE SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	1,048.00	Sussex, DE	1200.50
Worcester	425.00	Accomack, VA	57.00
Dorchester	235.00		
Somerset	100.00		

**Total Projected Cancer Deaths**                      **3065.50 Possible hospice patients**

**Projected Hospice Patient Volume**                      **Projected    10.30%    market share**

Wicomico	107.93	Sussex, DE	123.64
Worcester	43.77	Accomack, VA	5.87
Dorchester	24.20		
Somerset	10.30		

**Total Projected Hospice Patient Volume**                      **315.71**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:**                      **35.0%**

**Total Projected Hospice Inpatient Volume =**                      **110.50**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =**                      **1,104.98**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of        3.36        acute beds supported**

**Total Bed Need In 2015**

Acute Cancer Bed Need	3.28
Non-Cancer Bed Need	3.36
<b>Total Bed Need</b>	<b>6.64</b>

**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**BEST CASE SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	184.00	Sussex, DE	211.50
Worcester	145.00	Accomack, VA	55.00
Dorchester	81.00		
Somerset	65.00		

**Total Projected Cancer Deaths                      741.50   Possible hospice patients**

**Projected Hospice Patient Volume                      Projected      65%      market share**

Wicomico	119.60	Sussex, DE	137.48
Worcester	94.25	Accomack, VA	35.75
Dorchester	52.65		
Somerset	42.25		

**Total Projected Hospice Patient Volume                      481.98**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:                      35.0%**

**Total Projected Hospice Inpatient Volume =                      168.69**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =                      1,686.91**

**Projected Occupancy Rate:                      90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of              5.14      cancer acute beds supported**



**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER**  
**BEST CASE SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	1,048.00	Sussex, DE	1200.50
Worcester	425.00	Accomack, VA	57.00
Dorchester	235.00		
Somerset	100.00		

**Total Projected Cancer Deaths                      3,065.50   Possible hospice patients**

**Projected Hospice Patient Volume                      Projected      35%      market share**

Wicomico	366.80	Sussex, DE	420.175
Worcester	148.75	Accomack, VA	19.95
Dorchester	82.25		
Somerset	35.00		

**Total Projected Hospice Patient Volume                      1,072.93**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:                      35.0%**

**Total Projected Hospice Inpatient Volume =                      375.52**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =                      3,755.24**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of              11.43      acute beds supported**

**Total Bed Need In 2015**

Acute Cancer Bed Need	5.14
Non-Cancer Bed Need	11.43
<b>Total Bed Need</b>	<b>16.57</b>

**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**MALIGNANT NEOPLASMS**  
**MOST LIKELY SCENARIO**

**Malignant Neoplasms Beds**

**Cancer Deaths (Possible Hospice Patients)**

Wicomico	184.00	Sussex, DE	211.50
Worcester	145.00	Accomack, VA	55.00
Dorchester	81.00		
Somerset	65.00		

**Total Projected Cancer Deaths**                      **741.50**   **Possible hospice patients**

**Projected Hospice Patient Volume**                      **Projected**      **50%**      **market share**

Wicomico	92.00	Sussex, DE	105.75
Worcester	72.50	Accomack, VA	27.50
Dorchester	40.50		
Somerset	32.50		

**Total Projected Hospice Patient Volume**                      **370.75**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:**                      **35.0%**

**Total Projected Hospice Inpatient Volume =**                      **129.76**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =**                      **1,297.63**

**Projected Occupancy Rate:**                      **90%**

**Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of**      **3.95**      **cancer acute beds supported**

**HOSPICE BED NEED 2015 (Projected)**  
**TRADITIONAL METHODOLOGY**  
**ALL DEATHS EXCLUDING CANCER**  
**MOST LIKELY SCENARIO**

**Non-Cancer Deaths (Possible Hospice Patients)**

Wicomico	1,048.00	Sussex, DE	1200.50
Worcester	425.00	Accomack, VA	57.00
Dorchester	235.00		
Somerset	100.00		

**Total Projected Cancer Deaths                      3,065.50   Possible hospice patients**

**Projected Hospice Patient Volume                      Projected      20%      market share**

Wicomico	209.60	Sussex, DE	240.10
Worcester	85.00	Accomack, VA	11.40
Dorchester	47.00		
Somerset	20.00		

**Total Projected Hospice Patient Volume                      613.10**

**Projected Hospice Patient Volume x Percentage of Hospice Patients  
who need Inpatient Care = Projected Hospice Inpatient Volume**

**% of Hospice Patients who need Inpatient Care:                      35.0%**

**Total Projected Hospice Inpatient Volume =                      214.59**

**Projected Patient Days = Inpatient Vol. x Avg. Length of Stay =                      2,145.85**

**Non-Cancer Acute Bed Need = (Projected Patient Days / Days in a year) / Proj. Occupancy**

**Total of              6.53      acute beds supported**

**Total Bed Need In 2015**

Acute Cancer Bed Need	3.95
Non-Cancer Bed Need	6.53
<b>Total Bed Need</b>	<b>10.48</b>

**PROJECTED NUMBER OF INPATIENT CARE DAYS  
2015 (Projected)**

	<b>Worst Case</b>	<b>Best Case</b>	<b>Most Likely</b>
<b>Acute cancer projected inpatient days:</b>	1,077.06	1,686.91	1,297.63
<b>Non-cancer projected inpatient days:</b>	1,104.98	3,755.24	2,145.85
<b>Total projected inpatient care days:</b>	2,182.04	5,442.15	3,443.48

**Patient Days**

	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>	<b>2004</b>
	28,115	27,937	23,145	21,865	23,517
<b>% Growth Over Previous Year:</b>	0.64%	20.70%	5.85%	-7.02%	N/A
<b>Average Annual Growth:</b>	5.04%				

**Projected Number Of Patient Days 2015 (Projected):**

39,672

actual 55297.5

	<b>Worst Case</b>	<b>Best Case</b>	<b>Most Likely</b>
<b>% of Patient Days Spent In Inpatient Care:</b>	5.50%	13.72%	8.68%
<b>Maximum % Of Patient Days Allowed In Inpatient Care:</b>	20%	20%	20%
<b>Possible Patient Days Allowed In Inpatient Care (Projected):</b>	7,934	7,934	7,934

**SUMMARY OF GIP BEDS NEEDED  
2010 and 2015 (Projected)**

**Total Bed Need In 2010 (Projected)**

Acute Cancer Bed Need	3.69
Non-Cancer Bed Need	4.31
<b>Total Bed Need</b>	<b>8.00</b>

**Total Bed Need In 2015 (Projected)**

Acute Cancer Bed Need	3.95
Non-Cancer Bed Need	6.53
<b>Total Bed Need</b>	<b>10.48</b>

## RESIDENTIAL BEDS NEEDED

Projected from 2008-2016

**State(s) Served:** Maryland

**Principal Counties Served:** Wicomico, Worcester, Dorchester, Somerset

**Number of Counties Served:** 4

### # of Patients Served

Year	2008	2009	2010	2011	2016
<b>Primary Service Area</b>					
Admitted from hospital	120.00	126.72	133.82	141.32	175.72
Other admits	24.00	25.34	26.76	28.26	35.14

### Average Annual Growth

Patient Growth 5.60%

### Average Length of Stay

Avg. Residential Length of Stay 21.6

Total Patient Days	2008	2009	2010	2011	2016
Residential Patients	3,110.40	3,284.69	3,468.74	3,663.11	4,554.58

**Days Per Year:** 365

**Occupancy Rate:** 90.00%

Total Residential Beds	2008	2009	2010	2011	2016
All Residential Patients	9.47	10.00	10.56	11.15	13.86

Census data and trends in population changes provided by The U.S Census Bureau.

Cancer death rates and trends in cancer diagnosis' provided by The National Cancer Institute.

Non-Cancer death rates and trends in non-cancer deaths provided by The Maryland Department of Health and Mental Hygiene, Delaware Department of Health and Social Services, and Virginia Department of Health.

## **UNITED STATES HOSPICE STATISTICS**

Number of Hospices in U.S (2006) 4,500+

Patient Count (2006 estimate) 1.3 million (up from 700,000 in 2000)

Medicare Certification (2006) 92.6%

### ORGANIZATIONAL MODELS (2005)

Independent	34% (down from 40% in 1993)
Hospital Based	30% (down from 37% in 1993)
HHA Based	19% (down from 21% in 1993)
Nursing and Home Based	1%
Other & Unidentified	16%

Nonprofit	49% (down from 89% in 1993)
Government agencies	5% (down from 6% in 1993)
For Profit	46% (up from 5% in 1993)

### OPERATIONAL BUDGET SIZE (2005)

<\$250,000	24%
\$250,000 - 499,000	12%
\$500,000 - 999,999	11%
\$1 - 3.9 Million	15%
\$4 - 6.9 Million	3%
\$7 - 9.9 Million	1%
> \$10 Million	1%
Unidentified	33%

### PATIENT INFORMATION (2006)

#### Admitting Diagnosis

Cancer	44.1%
Non-Cancer	55.9%
Heart Disease	12.2%
Debility Unspecified	11.8%
Dementia	10.0%
Lung Disease	7.7%
Stroke or Coma	3.4%
Kidney Disease	2.9%
Motor Nuron Disease	2.0%
Liver Disease	1.8%
HIV/AIDS	0.5%
Other Diagnoses	3.7%

#### Patient Saturation

Approximately 36% of all deaths in the United States, in 2006, were under the care of a hospice program.

Length of Stay (LOS)

2006 average	59.8 days
2006 median	20.6 days

Revenue Source (2006)

Medicare	83.70%
Private Insurance	8%
Medicaid	5.30%
Other	3%

PATIENT PROFILE (2006)

Race and Age

Race

Caucasian	80.9%
Multiracial	8.8%
African American	8.2%
Pacific Islander	1.8%
Other	0.3%

Age

0-34 yrs.	0.9%
35-64 yrs.	17.3%
65-74 yrs.	17.1%
75-84 yrs.	31.4%
85+ yrs.	33.2%

Place of Death (2006)

"Home"	74.1%
Hospice Facility	17.0%
Hospital	8.8%

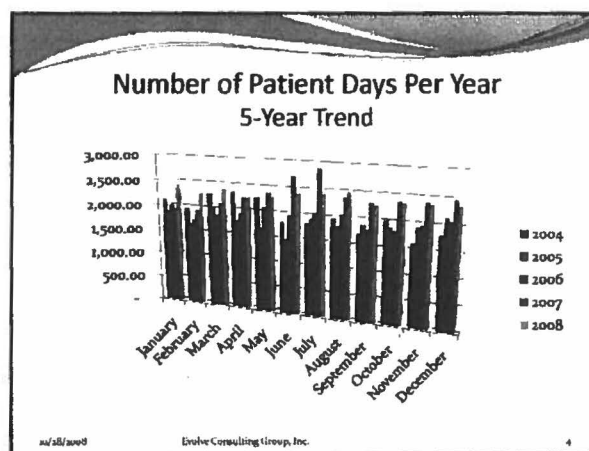
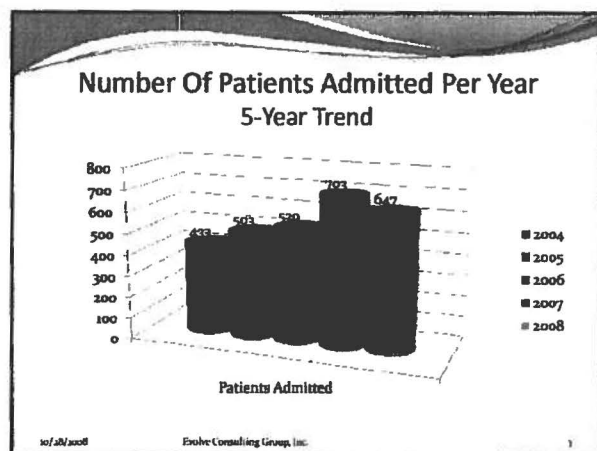
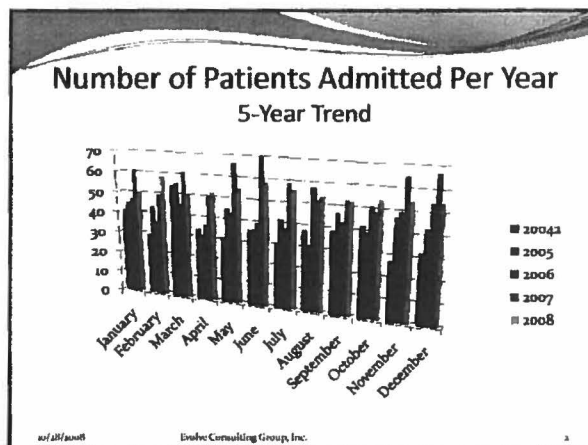
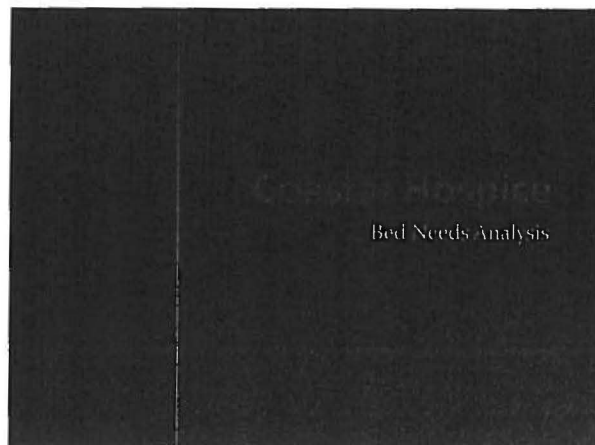


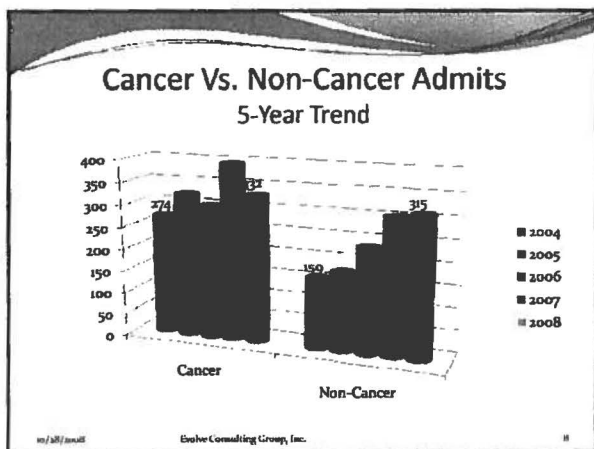
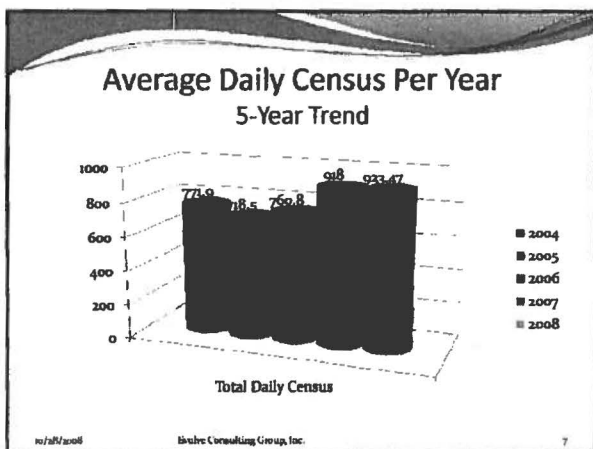
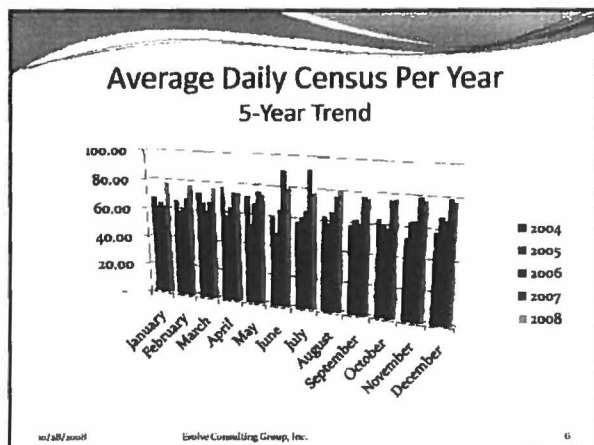
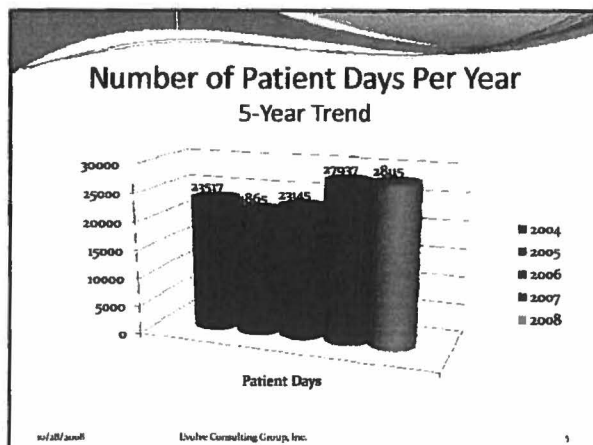
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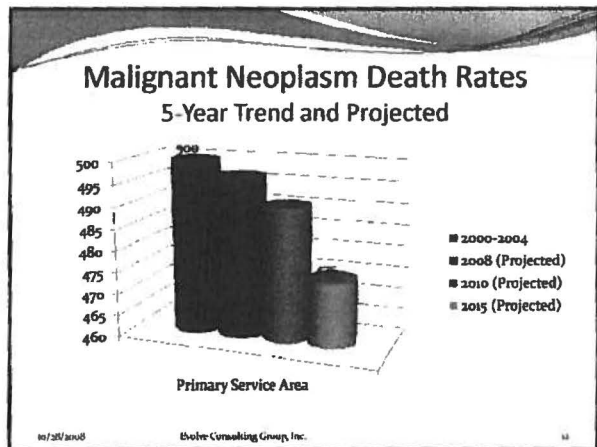
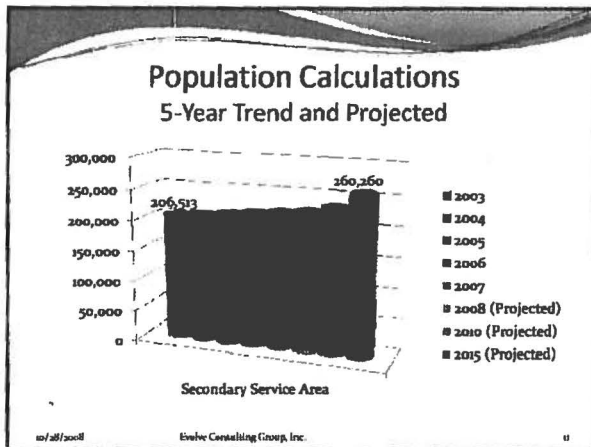
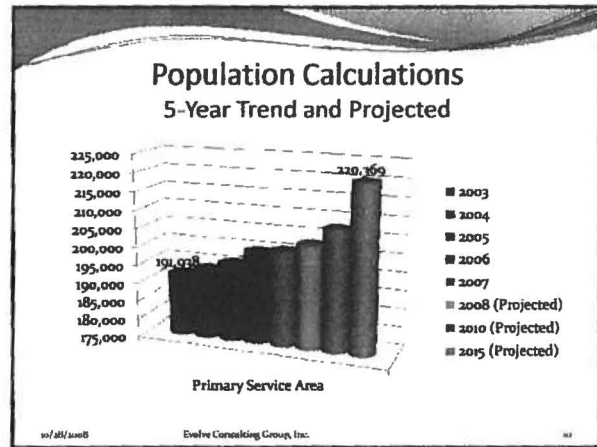
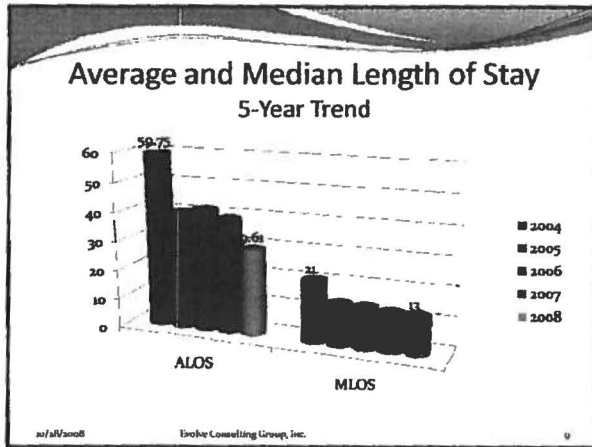
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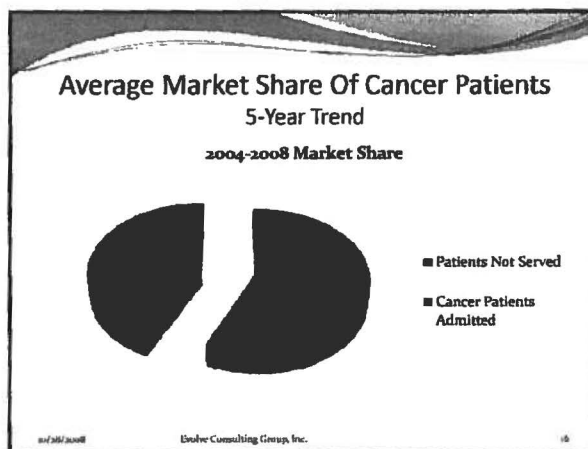
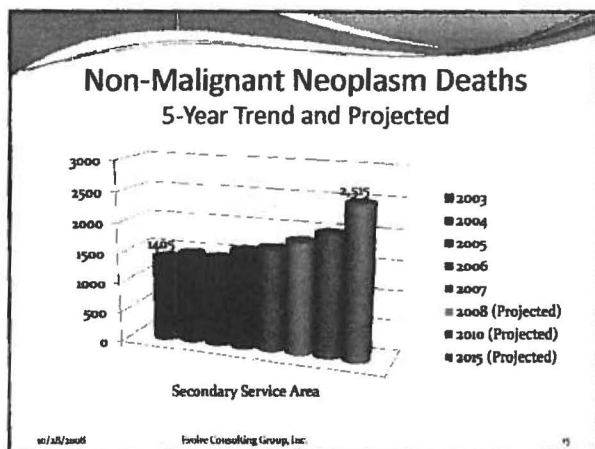
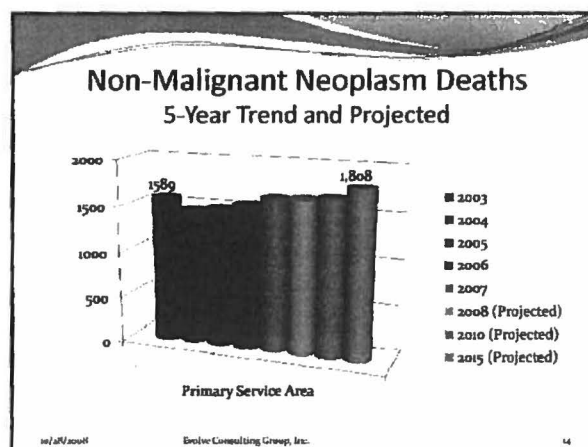
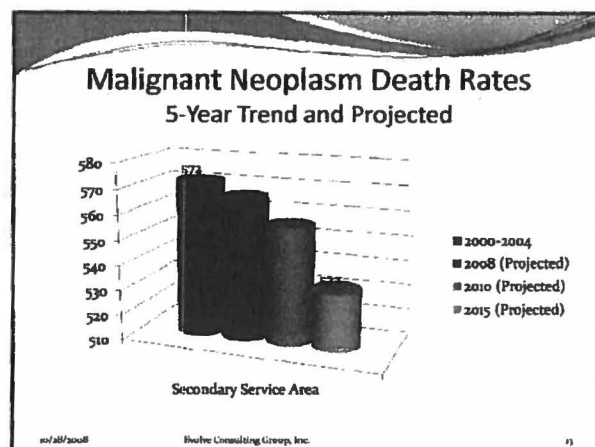
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**[GRAPHICAL ILLUSTRATIONS]**

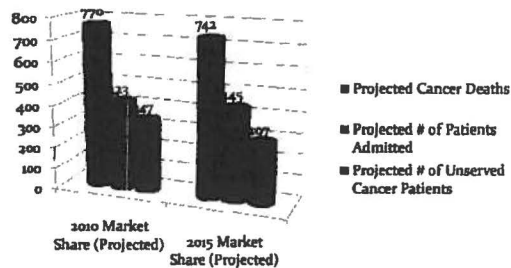








### Average Market Share Of Cancer Patients 2010 and 2015 Projected



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### Average Market Share Of Non-Cancer Patients 5-Year Trend

2004-2008 Market Share

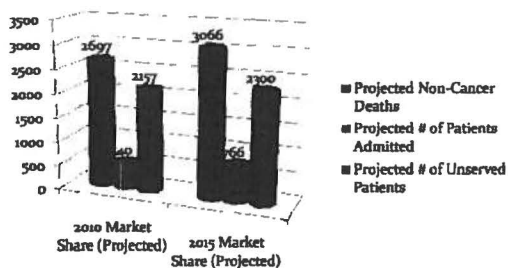


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### Avg. Market Share Of Non-Cancer Patients 5-Year Trend and Projected

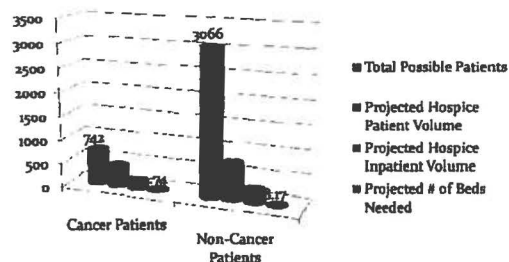


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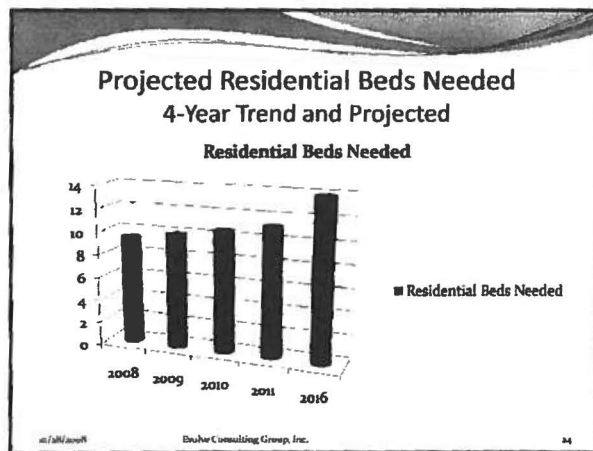
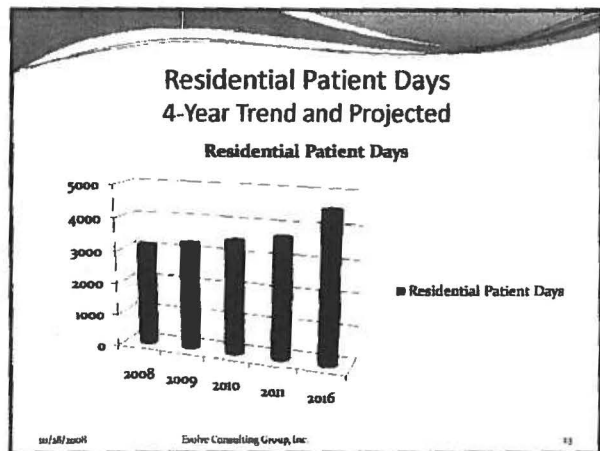
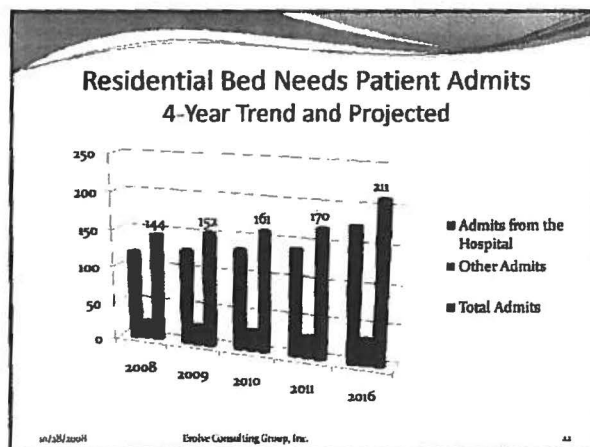
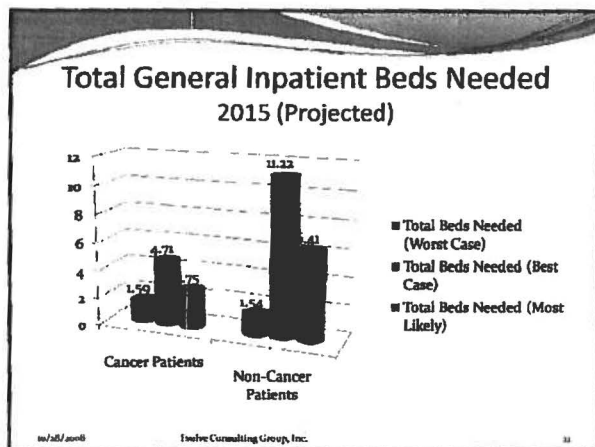
### Total General Inpatient Beds Needed 2015 (Projected)



10/28/2008

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20



## End-of-Life Care at a Community Cancer Center

By David E. Cowall, MD, Bennett W. Yu, MD, Sandra L. Heineken, RN, BSN, OCN, Elizabeth N. Lewis, CTR, Vishal Chaudhry, MS, and Joan M. Daugherty, RN, MS

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### Abstract

**Purpose:** The evidence-based use of resources for cancer care at end of life (EOL) has the potential to relieve suffering, reduce health care costs, and extend life. Internal benchmarks need to be established within communities to achieve these goals. The purpose for this study was to evaluate data within our community to determine our EOL cancer practices.

**Methods:** A random sample of 390 patients was obtained from the 942 cancer deaths in Wicomico County, Maryland, for calendar years 2004 to 2008. General demographic, clinical event, and survival data were obtained from that sample using cancer registry and hospice databases as well as manual medical record reviews. In addition, the intensity of EOL cancer care was assessed using previously proposed indicator benchmarks.

The significance of potential relationships between variables was explored using  $\chi^2$  analyses.

**Results:** Mean age at death was 70 years; 52% of patients were male; 34% died as a result of lung cancer. Median survival from diagnosis to death was 8.4 months with hospice admission and 5.8 months without hospice ( $P = .11$ ). Four of eight intensity-of-care indicators (ie, intensive care unit [ICU] admission within last month of life, > one hospitalization within last month of life, hospital death, and hospice referral < 3 days before death) all significantly exceeded the referenced benchmarks. Hospice versus nonhospice admissions were associated ( $P < .001$ ) with ICU admissions (2% v 13%) and hospital deaths (2% v 54%).

**Conclusion:** These data suggest opportunities to improve community cancer center EOL care.

### Introduction

Almost half of all patients with cancer will either present with, or will ultimately develop, incurable metastatic disease.<sup>1</sup> Despite these large numbers, minimal resources are devoted to the relief of suffering in these patients.<sup>2</sup> In addition, the use of anticancer therapies near death has been characterized by extensive resource use and lack of hospice services.<sup>3-5</sup> In this era of health care reform, the application of evidence-based use of resources for cancer care at end of life (EOL) may result in less aggressive care,<sup>6</sup> improved quality of life (QOL), and reduced health care costs.<sup>7-10</sup>

Wicomico County (WC), Maryland, provides a unique opportunity to evaluate EOL care and the impact of hospice because of its geography and demographics. According to the US Census Bureau,<sup>11</sup> the 2010 WC population was 99,000. White persons accounted for 69%; African American persons, 24%; Hispanic persons, 5%; and persons below poverty level, 13%. Median annual household income in 2009 was \$46,000. WC is served by a single hospital, Peninsula Regional Medical Center (PRMC) with its associated cancer facility The Richard A. Henson Cancer Institute (RAHCI), and by a single hospice, Coastal Hospice (CH). The county is located on a peninsula that is geographically isolated by water and distance from large urban medical centers. Terminally ill patients with cancer who live in WC are therefore likely to receive almost all of their EOL care at PRMC and/or CH.

The Dartmouth Atlas<sup>12</sup> provides a searchable Web-based tool that allows analysis of Medicare beneficiary EOL cancer care by region or hospital for the years 2003 to 2007. WC represents 51% of the PRMC service area. According to Dart-

mouth Atlas data, 29% of patients with cancer in the PRMC service area died in the hospital, 62% were hospitalized in the last month of life, 18% were in the intensive care unit (ICU) in the last month of life, and 51% were admitted to hospice. In comparison, Beebe Medical Center in Lewes, Delaware, has a similar size catchment area and demographics. At that institution, there were 24% hospital deaths, 61% hospitalized in the last month of life, 30% in ICU in the last month of life, and 66% admitted to hospice. Another source of data is the Quality Oncology Practice Initiative (QOPI), which is a voluntary program developed by the American Society of Clinical Oncology.<sup>13,14</sup> One optional module measures EOL care. The QOPI data set does not provide information on some of the intensity of care EOL indicators examined in this study.

Measures that use existing administrative data to assess the intensity of EOL care in patients with cancer have been published previously.<sup>15-17</sup> In one study,<sup>18</sup> putative benchmarking standards and statistical variation were evaluated. A variety of indicators using Medicare claims from more than 48,000 cancer deaths in 11 regions of the United States were based on the Surveillance, Epidemiology, and End Results database.<sup>19,20</sup> Benchmarks were calculated based on the top-performing decile in each indicator. One follow-up study applied these measures to objective data documenting EOL practices that occurred in 264 cancer deaths at a Veterans Administration medical center.<sup>21</sup> In another study, somewhat different benchmarks for EOL care were applied to a community oncology practice.<sup>22</sup>

The primary purpose of this study was to evaluate our data and define the EOL cancer practices in WC. These data are



unique in that they are community initiated, have integrated data not measured in other studies, and are repeatable. It is our goal that these data will provide feedback to those who care for patients with cancer, thus encouraging them to provide more concurrent palliative and hospice care in a more timely fashion.

## Methods

### Study Design

In this retrospective death study, we measured the intensity of EOL cancer care in WC using published performance guidelines.<sup>17</sup> Existing administrative data from cancer deaths were examined. The intensity of EOL care in these patients was then measured and benchmarked against these guidelines. Additional information obtained included general demographic information, proportion receiving radiation therapy (XRT) in the last 14 days of life, proportion starting XRT in the last month of life, and survival data.

### Patients

Our population consisted of 942 analytic patients from the PRMC Cancer Registry who died in calendar years 2004 to 2008 and lived in WC. Analytic patients are defined by the American College of Surgeons as those who received their initial diagnosis and/or received part or all of first-course treatment or a decision not to treat and/or were transferred at the reporting facility.<sup>23</sup> All reported hospital-related events including emergency room visits, ICU admissions, and hospital deaths occurred at PRMC. This review should have captured most relevant care.

None of the patients in this study are living. They are not classified as human subjects, and institutional review board review was therefore not required. However, to comply with the National Institutes of Health privacy and research policies,<sup>24</sup> we stipulate that the deceased patients' protected health information was sought solely for research purposes. Decedents' protected health information was necessary for this research project, and documentation was provided from the cancer registry showing that these individuals are indeed dead.

### Data Collection

The RAHCI/PRMC patient data were obtained using METRIQ (Elekta, Stockholm, Sweden). Case findings were accomplished by review of all pathology reports, cytology reports, and medical records coded malignant per the International Classification of Diseases, ninth revision. Pathology and cytology reports with a malignant diagnosis were then provided to the cancer registry.

The cancer registry staff reviewed the randomly selected medical records. The review was accomplished using RAHCI and CH electronic medical records (Horizon Patient Folder [McKesson, San Francisco, CA] and Allscripts [Allscripts Healthcare Solutions, Chicago, IL], respectively). The registry staff also manually reviewed outpatient records at the appropriate physicians' offices to obtain information not available in the medical record at PRMC. After completion of each case report

form, a unique anonymous identifier was applied to each form. The coded file linking these identifiers to patients is maintained in a computer password-protected file that can be accessed only by the cancer registry and cancer institute directors.

This study included all analytic patients who resided in WC and were accessioned during the time period of calendar years 2004 through 2008. WC is defined by the following zip codes: 21801, 21802, 21803, 21804, 21810, 21814, 21822, 21826, 21830, 21837, 21840, 21849, 21850, 21852, 21856, 21861, 21865, 21874, and 21875. Patients were randomly selected from registry data entered before April 10, 2010.

### Statistical Analyses

In an effort to reduce the probability of introducing sampling bias, a conservatively large sample size of 390 was calculated based on a hypothetical confidence level of 99% of potential parameters to be compared, rather than the more typical 95%. The 99% confidence level was used to calculate a sample size that would present results with at most a 5% margin of error. To maximize the sample size within these parameters, it was assumed that the response distribution was 50%. For survival, the Mood's median test was used to compare median survival between hospice and nonhospice. The sample was selected using randomly generated integers from Minitab statistical software (State College, PA). Confidence level and margin of error were calculated using standard formulas from the Web tool provided by Creative Research Systems (Petaluma, CA).

Statistical analyses of the data included generation of descriptive statistics for the indicators for comparison against published benchmarks.<sup>17</sup> Furthermore, univariate analyses were generated to explore the significance of relationships between variables as well as within and between population subsets

**Table 1.** Patient Characteristics

Characteristic	Total (N = 390)		Hospice (n = 211)		No Hospice (n = 179)	
	No.	%	No.	%	No.	%
Sex						
Male	204	52	112	53	92	51
Female	186	48	99	47	87	49
Mean age, years	—		70		70	
Median survival from diagnosis, months	—		8.4		5.8	
Primary cancer site						
Lung	134	34	82	39	52	29
Colorectal	49	13	26	12	23	13
Other noncolorectal GI	47	12	24	11	23	13
Hematologic	30	8	18	9	12	7
Pancreatic	25	6	13	6	12	7
Breast	15	4	7	5	8	4
Gynecologic	13	3	6	3	7	4
Prostate	7	2	5	2	2	1
Other	70	18	30	13	40	22

**Table 2.** Intensity-of-Care Indicators

Indicator	Benchmark*	Performance	No.	99% CI (% yes)
Proportion receiving chemotherapy in last 14 days of life	< 0.10	0.08	390	0.046 to 0.118
Proportion starting new chemotherapy in last month of life	< 0.02	0.03	390	0.014 to 0.064
> One emergency room visit in last month of life	< 0.04	0.02	389	0.007 to 0.047
Admission to ICU in last month of life	< 0.04	0.08	390	0.046 to 0.118
Death in acute care hospital	< 0.17	0.26	390	0.204 to 0.320
Admission to hospice	> 0.55	0.54	389	0.475 to 0.606
Death < 3 days after admission to hospice	< 0.08	0.19	211	0.125 to 0.268
> One hospitalization in last month of life	< 0.04	0.11	389	0.073 to 0.157
Received XRT in last 14 days of life	N/A	0.05	390	0.029 to 0.090
Started XRT in last month of life	N/A	0.04	390	0.021 to 0.078

Abbreviations: ICU, intensive care unit; NA, not applicable; XRT, radiation therapy.

\* Indicator benchmarks per Earle et al.<sup>18</sup>

using standard statistical tests (ie,  $\chi^2$  and Fisher's exact tests) as appropriate.

## Results

### Baseline Patient Characteristics

General demographic information, the proportion of patients admitted to hospice within each cancer type, and whether they were referred to hospice are listed in Table 1. Side-by-side comparisons are provided to compare the population subsets that were and were not admitted to hospice. Median hospice length of stay was 14 days. The mean length of stay was 46 days.

### EOL Care

The intensity of EOL care in our retrospective sample of deceased patients was evaluated using the eight published indicators, their associated benchmarks, and 99% CIs (Table 2). Four intensity-of-care indicators significantly exceeded the benchmarks. They included: ICU admission in the last month of life, > one hospitalization in the last month of life, hospital death, and hospice admission < 3 days before death. There are no benchmarking data available for the two XRT indicators reported in Table 2.

As seen in Table 3, hospice admissions were associated ( $P < .001$ ) with fewer ICU admissions (2% v 13%) and reduced number of hospital deaths (2% v 54%). The  $P$  values for other pairs of indicators were all  $> .05$  and are therefore not shown. Despite receiving less aggressive EOL care, patients admitted to hospice did not have significantly different survival than those who were not, with median survival from diagnosis to death at 8.4 months with hospice admission and 5.8 months without (Mood's median test  $P = .11$ ).

## Discussion

This study sought to evaluate community data to improve care for our patients with incurable cancer. The only overall difference noted between our patient sample and the American Cancer Society demographic data was our low number

**Table 3.** Associations Between Hospice Admission and Intensity-of-Care Indicators

Indicator	Hospice Admission				P*
	Yes		No		
	No.	%	No.	%	
Admission to ICU in last month of life					< .001
Yes	6	2	24	13	
No	205	98	155	87	
Death in acute care hospital					< .001
Yes	5	2	96	54	
No	206	98	83	48	
> One hospitalization in last month of life					.088
Yes	18	8.5	25	14	
No	193	91.5	154	86	

Abbreviation: ICU, intensive care unit.

\* Per  $\chi^2$  test of association.

of prostate cancer deaths.<sup>25</sup> Although our data are retrospective, the patient characteristics of the subsets hospice and no hospice (Table 1) were similar in age, sex, survival, and tumor type. Four of the eight indicators of intensity of EOL cancer care (multiple EOL hospitalizations, EOL ICU use, hospital death, and late hospice admission) significantly exceeded benchmarks in our sample population (Table 2). The two XRT indicators did not have associated benchmarks, although the results were similar to chemotherapy data. Hospice admission did not significantly alter survival and was associated with reduced probabilities of ICU admission at EOL and hospital death (Table 3).

In this era of personalized cancer care, the model of simply applying one line of antineoplastic therapy after another in the setting of incurable disease can no longer be supported by objective data. In many cases, late-line cancer therapy is provided without clear evidence of benefit, yet with the possibility of toxicity or detriment to QOL. Measuring benefit as disease response or time to progression may not result in improved

QOL or survival.<sup>26</sup> Approximately one in three patients are referred to hospice within the last week of life and one in 10 within the last day. These late referrals translate into increased unmet care needs.<sup>6</sup>

Hospice care is designed to provide palliative care to terminally ill patients and their families. This includes meeting their physical, social, emotional, and spiritual needs.<sup>19</sup> Emerging evidence suggests that realistic conversations between physicians and patients with metastatic cancer regarding prognosis and the benefits of hospice and palliative care occur late in the course of illness or not at all.<sup>26</sup> A retrospective review of Medicare paid claim databases demonstrated a survival benefit with hospice care, particularly in lung, pancreatic, and colorectal cancers.<sup>27</sup> A recent randomized prospective trial of early palliative care in patients with metastatic lung cancer showed better QOL, fewer depressive symptoms, and improved survival in the palliative care group.<sup>28,29</sup>

There is a growing body of evidence indicating that hospice admission is associated with decreased health care costs among patients with cancer.<sup>8</sup> The ability to directly measure health care costs from diagnosis to death in our patients who were and were not referred to hospice would have been a valuable addition to our study. Unfortunately, cost data were not available during the time period of our study. Currently, Maryland is the only state with a health care commission (ie, the Maryland Health Service Cost Review Commission).<sup>30</sup> This commission regulates hospitals similarly to public utilities. It establishes charges per patient case, and all payers must pay in accordance with these charges. As a result, actual costs of hospital care may not directly correlate with hospital charges to payers. Actual costs are now being captured and can be used in subsequent studies.

Early concurrent palliative care and earlier hospice admission may improve QOL as a result of better symptom management and the avoidance of aggressive and/or toxic therapies at EOL.<sup>31</sup> Hospital deaths and ICU admissions within the last month of life in our study may represent surrogates for reduced QOL and increased health care costs. Future studies need to look at whether hospice is the intervention that reduces aggressive EOL care or whether patients who accept hospice would have opted for less aggressive care anyway.

The data suggest therapeutic opportunities to improve the quality of EOL cancer care in our community. After reviewing the results of our study, we are forming a task force of oncologists and other health care professionals at our facility to evaluate the results of our EOL cancer study. The goal of this task force is to develop and implement an action plan that will improve EOL cancer care in our community. The final plan decisions have not yet been established at the time of this publication. However, two plan elements are already being performed. First, our data have been presented to the medical staff in several forums. Measuring and sharing performance data with physicians may result in some improvements in EOL care.<sup>15,16</sup> Second, the Education in Pal-

liative EOL Care curriculum from the American Medical Association is being taught to the medical staff with emphasis on oncologists at three to four modules per year. RAHCI has participated in QOPI since 2008, and the EOL module is under consideration for activation. Also under consideration is the implementation of an oncology medical home modeled after a southeastern Pennsylvania private practice,<sup>32</sup> where the medical oncology practice becomes the central coordinator of care throughout all phases of treatment, from diagnosis to survivorship. This plan should provide for early referral of patients who may benefit from concurrent palliative care and earlier transition to hospice services when patients no longer have a reasonable probability of benefit from antineoplastic therapies. It is our hope that this study will result in a new model of care for patients with cancer at EOL and their families that can be integrated within the existing health care structures of our community. After implementation of the plan, we will again measure our performance using the same benchmarks.

*Accepted for publication on January 18, 2012.*

#### Acknowledgment

We thank Dorothy M. Osterhout, BA, and Nancy J. Mayonado, MS, for their excellent technical assistance.

#### Author's Disclosures of Potential Conflicts of Interest

Although all authors completed the disclosure declaration, the following author(s) and/or an author's immediate family member(s) indicated a financial or other interest that is relevant to the subject matter under consideration in this article. Certain relationships marked with a "U" are those for which no compensation was received; those relationships marked with a "C" were compensated. For a detailed description of the disclosure categories, or for more information about ASCO's conflict of interest policy, please refer to the Author Disclosure Declaration and the Disclosures of Potential Conflicts of Interest section in Information for Contributors.

**Employment or Leadership Position:** Vishal Chaudhry, Peninsula Regional Medical Center (C) **Consultant or Advisory Role:** None **Stock Ownership:** None **Honoraria:** None **Research Funding:** None **Expert Testimony:** None **Other Remuneration:** None

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DOI: 10.1200/JOP.2011.000451; published online ahead of print at jop.ascopubs.org on May 22, 2012.

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## Addenda 20

**Instructions:** Complete **Table 2A** for the Entire General Hospice Program, including the proposed project, and **Table 2B** for the proposed project only using the space provided on the following pages. **Only existing facility applicants should complete Table 2A. All Applicants should complete Table 2B.** Please indicate on the Table if the reporting period is Calendar Year (CY) or Fiscal Year (FY).

**TABLE 2A: STATISTICAL PROJECTIONS – ENTIRE Hospice Program**

Fiscal Years beginning July 1	Two Current Years	Most Actual	Projected years – ending with first year at full utilization			
<b>CY or FY (circle)</b>	2016	2017	2018_	2019_	20__	20__
Admissions	1043	1113	1168	1227		
Deaths	936	992	1042	1093		
Non-death discharges	94	123	115	120		
Patients served	1186	1292	1356	1424		
Patient days	58771	72116	75555	79205		
Average length of stay	49.6	56	56	56		
Average daily hospice census	160.6	197.6	207	217		
<b>Visits by discipline</b>						
Skilled nursing	10485	13479	14153	14861		
Social work	4183	5644	5926	6223		
Hospice aides	11047	14047	14749	15487		
Physicians - paid	2404	2924	3070	3224		
Physicians - volunteer	0	0	0	0		
Chaplain	5298	5327	5593	5873		
Other clinical ( <b>Therapies and Music</b> )	305	351	369	387		
<b>Licensed beds</b>						
Number of licensed GIP beds	14 dual license	14 dual license	14 dual license	14 dual license		
Number of licensed Hospice House beds	0	0	0	12		
<b>Occupancy %</b>						
GIP(inpatient unit)	76%	76%	76%	76%		
Hospice House				91.7%		



**TABLE 3: REVENUES AND EXPENSES - ENTIRE Hospice Program** (including proposed project)

	Two Most Recent Years -- Actual		Current Year Projected	Projected Years (ending with first full year at full utilization)			
CY or <b>FY</b> (Circle)	2015	2016	2017	2018	2019	20__	20__
<b>1. Revenue</b>							
a. Inpatient services	1,524,040	1,701,575	2,042,629	1,879,126	1,973,082		
b. Hospice house services	259,518	500,943	410,140	604,364	2,214,176		
c. Home care services	7,217,654	8,374,366	11,106,797	11,574,283	11,724,388		
d. Gross Patient Service	9,001,212	10,576,884	13,559,566	14,057,773	15,911,646		
e. Allowance for Bad Debt	(14,521)	(105,573)	(305,791)	(61,173)	(64,232)		
f. Contractual Allowance	(214,668)	(248,178)	(894,939)	(1,099,614)	(1,210,790)		
g. Charity Care	(445,843)	(430,046)	(789,148)	(519,236)	(911,757)		
h. Net Patient Services	8,326,180	9,793,087	11,569,688	12,377,750	13,724,867		
i. Other Operating	20,266	71,302	21,983	28,150	29,558		
j. Net Operating Revenue	8,346,446	9,864,389	11,591,671	12,405,900	13,754,425		
<b>2. Expenses</b>							
a. Salaries, Wages, and Professional Fees, (including fringe benefits)	6,344,453	6,896,122	8,173,019	8,488,045	9,442,320		
b. Contractual Services	1,753,130	2,074,745	2,336,829	2,544,668	2,978,813		
c. Interest on Current Debt	654	268	8	550	577		
d. Interest on Project Debt	-	-	-	29,040	68,687		
e. Current Depreciation	81,601	81,197	67,520	44,269	20,554		
f. Project Depreciation	-	-	27,642	51,031	262,950		
g. Current Amortization	-	-	-	-	-		
h. Project Amortization	-	-	-	-	-		
i. Supplies	323,478	383,975	404,418	472,590	517,365		
j. Other Expenses (Specify)	-	-	-	-	-		
k. Total Operating Expenses	8,503,316	9,436,307	11,009,436	11,630,193	13,291,266		
<b>3. Income</b>							
a. Income from Operation	(156,870)	428,082	582,235	775,707	463,159		
b. Non-Operating Income	1,210,871	971,034	1,867,826	1,551,941	1,057,003		
c. Subtotal	1,054,001	1,399,116	2,450,061	2,327,648	1,520,162		
d. Income Taxes	-	-	-	-	-		
e. Net Income (Loss)	1,054,001	1,399,116	2,450,061	2,327,648	1,520,162		

## GOVERNING BODY

Policy No: 6-003.1

**PURPOSE**

To outline the roles and responsibilities of the Board of Directors

**POLICY**

As the governing body of Coastal Hospice, Inc., the Board of Directors shall recognize its full legal authority and responsibility for the operation of Coastal Hospice, Inc., including its hospice and its other programs, and function according to its *Bylaws* and these *Policies and Procedures*.

**PROCEDURE: The Board of Directors will**

1. Review its *Bylaws* approximately annually. It may delegate this review to the Bylaws Committee.
2. Appoint a qualified President.
3. Establish processes for effective communication with the President and for his or her performance evaluation.
4. In accord with Medicare Conditions of Participation for Hospice, recognize an Administrative Interdisciplinary Group (Administrative IDG), appointed by the President, to review and recommend hospice policies and procedures, and to assist in identifying goals and in measuring the hospice's success in achieving them.
5. Routinely monitor the organization's fiscal affairs and the financial position.
6. Ensure that:
  - a. An ongoing program for quality assessment improvement and patient safety is defined, implemented, maintained, and evaluated annually, and
  - b. The hospice-wide quality assessment and performance improvement (QAPI) efforts address priorities for improved quality of care and patient safety, and that all improvement actions are evaluated for effectiveness, and
  - c. The QAPI program reflects the complexity of the organization and the scope of its services, and
  - d. The QAPI program reflects all hospice services, including those provided under contract, and
  - e. The QAPI program focuses on indicators related to improved palliative outcomes, and
  - f. Coastal Hospice takes actions to demonstrate improvement in hospice performance, and
  - g. Coastal Hospice maintains documentary evidence of its quality assessment and performance improvement program, and
  - h. One or more individual(s) who are responsible for operating the QAPI program are designated.
7. Document that it consistently reviews relevant findings of performance and safety improvement activities as well as other information relevant to the quality of patient care (e.g., unusual occurrences in care or service).
8. Authorize adequate resources and support to establish and maintain the hospice-wide QAPI program.
9. Implement a written conflict of interest policy that includes guidelines for disclosing any existing or potential conflict of interest.
10. Provide for the orientation of new Board members to their responsibilities:
  - a. In improving organizational safety and performance;
  - b. As defined by the Board's *By Laws* and Coastal Hospice's *Articles of Incorporation*; and
  - c. As defined in Hospice State and Federal regulation

Reviewed 9/15/96, 12/03/96; 4/97; 6/98; 10/99; 2/16/00, 9/01, 6/02, 4/03, 7/04, 2/06, 4/06, 2/07, 2/08; 11/08, 1/09, 12/14	
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11. Elect the following officers in accordance with its *Bylaws*:

- a. Chairman
- b. Vice Chairman
- c. Secretary and Treasurer (who may be one person)

A list of current names and addresses of the Board of Directors is in *Addendum 7-003.B*.

*Revised: 7/04; 2/07; 11/08*

Reviewed 9/15/96, 12/03/96; 4/97; 6/98; 10/99; 2/16/00, 9/01, 6/02, 4/03, 7/04, 2/06, 4/06, 2/07, 2/08; 11/08, 1/09, 12/14
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## PERFORMANCE AND SAFETY IMPROVEMENT PROGRAM

Policy No. 5-002.1

**PURPOSE:**

The purpose of the Performance and Safety Improvement Plan is to outline the means by which Coastal Hospice intends to monitor, evaluate and improve the quality of patient and family care; resolve identified problems; and seek opportunities for organizational improvement.

**POLICY**

The Performance and Safety Improvement (PSI) Program shall collect, analyze, and act upon data in order to improve the quality of care provided to patients. The Program shall examine information related to:

1. Quality Assessment and Performance Improvement (QAPI) as defined in Hospice Medicare Conditions of Participation
2. Organizational systems and processes
3. Quality and appropriateness of service delivery
4. Patient level data collected through on-going Comprehensive Assessments
5. Patient care measurable outcomes
6. Patient and family satisfaction
7. Environmental safety and infection control
8. Incidents and complaints
9. Risk assessments
10. Prevention of adverse events
11. External benchmarking

The Board of Directors accepts overall responsibility for the QAPI program and designates a responsible person to manage it. The President and Senior Management accept responsibility for:

1. identifying and assessing potential risk factors;
2. integrating safety priorities into daily operation;
3. assuring that patient level and organizational level data are collected, analyzed, and reported;
4. setting Performance and Safety Improvement priorities;
5. encouraging personnel involvement;
6. fostering a "culture of quality" within the organization; and
7. assuring adherence to Coastal Hospice's *Statement of Mission and Values*

**DEFINITION:** Coastal Hospice, Inc. adopts the Joint Commission's definition for Performance and Safety Improvement: "The continuous study and adaptation of a health care organization's functions and processes to increase the probability of achieving desired outcomes and to better meet the needs of individuals and other users of services."

**PROCEDURE:**

1. Those conducting Performance and Safety Improvement activities adhere to Coastal Hospice's confidentiality policies.
2. Performance and Safety Improvement monitoring and data collection encompasses key organizational functions as well as procedures, treatments, processes or other activities that significantly impact client care with respect to high risk aspects, high volume aspects and problem prone aspects.
3. Scope of the Performance and Safety Improvement Program includes, at minimum:
  - a. Ongoing collection and documentation of data to monitor organizational performance
  - b. Systematic aggregation and analysis of data
  - c. Analysis of identified undesirable patterns or trends
  - d. Identification and management of Sentinel Events
  - e. Use of information from data analysis to identify trends and develop/implement action plans for improvement

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16

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- in organizational processes, service delivery, and patient outcomes, including safety
  - f. Use of aggregated/analyzed data to develop action plans for reduction in risk for Sentinel Events
  - g. Proactive identification of potential risk for unanticipated adverse events (Hazard Vulnerability Analysis, Failure Mode & Effects Analysis)
  - h. Documentation of audit results, trend reports, process improvement project results, QAPI committee meetings and any other QAPI activities.

4. The Performance and Safety Improvement (PSI) Committee and staff work groups, participate in developing and monitoring evaluation and improvement mechanisms. Individual staff members are encouraged to participate in the Performance and Safety Improvement process, and report areas of concern for further investigation and monitoring.

5. Depending on a problem's cause, scope and severity, the PSI Committee:

- a. Identifies a person or group responsible for planning and implementing corrective action(s)
- b. Recommends corrective actions including:
- c. Changing systems, such as communication channels
- d. Changing structures by modifying procedures, staffing, equipment or forms
- e. Enhancing competence through continuing education, circulating information and scientific reports, reading professional literature, viewing instructional videos and listening to instructional audios
- f. Changing behaviors through informal counseling, performance appraisal and assignment changes
- g. Implementing Formal Plans *of Action* for identified indicators.
- h. Establishes time frames
- i. Monitors and evaluates patient level data and outcomes
- j. Reports results
- k. Evaluates effectiveness of action plans
- l. Determines additional need for monitoring

The PSI committee meets at least quarterly.

CH: 1/31/06; revised: 12/3/08

## DATA ANALYSIS &amp; REPORTING

Policy No. 5-016.1

**PURPOSE:**

To define processes for analyzing aggregated data so that current performance levels, patterns, and trends can be readily identified and reported.

**POLICY:**

Data collected and aggregated through the Performance and Safety Improvement process shall be routinely and systematically analyzed in order to:

1. Identify patterns or trends
2. Identify risk potential and probability
3. Identify/illustrate cause/effect relationships
4. Illustrate performance over time
5. Illustrate stability and predictability of processes
6. Compare outcomes with established expectations
7. Compare against benchmark "norms"
8. Determine/demonstrate variability
9. Determine/demonstrate affinity
10. Prioritize for decision-making
11. Isolate subsets for further investigation

Results of data analysis shall be graphically displayed for comparison purposes, and reported to the Performance and Safety Improvement Committee.

**PROCEDURE:**

1. Data is aggregated and analyzed at the frequency appropriate to the activity or process being studied, as determined by the Performance and Safety Improvement Committee and/or Senior Management.
2. Approved statistical tools and techniques are used to analyze and display data. *See Addendum 10-002.C : Performance and Safety Improvement Analysis Tools.*
3. At minimum, data analysis occurs/is performed:
  - a. When data comparisons indicate that levels of performance, patterns, or trends vary substantially from those expected.
  - b. For those topics chosen by leaders as Performance and Safety Improvement priorities.
  - c. When undesirable variation occurs which changes priorities.
  - d. For all serious medication errors and/or adverse drug events.
  - e. For all identified Sentinel Events.
  - f. For hazardous conditions defined by the organization as significantly increasing the likelihood of a serious adverse outcome. (Hazard Vulnerability Analysis)
  - g. To identify potential failure modes. (Failure Mode Effects Analysis)
  - h. To identify and implement changes that will improve the quality of care, treatment, and services.
  - i. To identify and implement changes that will improve patient safety, and reduce risk of Sentinel Events.
  - j. To evaluate changes made to improve processes or outcomes to ensure achievement of expected results.
  - k. For information developed from the following administrative functions:
    - i. Risk management
    - ii. Utilization review
    - iii. Quality control
    - iv. Infection control surveillance and reporting
    - v. Research and clinical trials
    - vi. Regulatory compliance surveys

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16



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4. Data analysis and graphing may be performed at any stage in the Plan-Do-Check-Act process, and by any individual or group assigned to Performance and Safety Improvement activities, and trained in data analysis techniques.
  5. Graphing and analysis of data may be performed internally, and/or by external benchmarking or quality initiative programs. All data aggregated and analyzed external to the organization, will be reviewed by Leadership and the Performance and Safety Improvement Committee, at minimum.
  6. All data collection, aggregation, analysis, and reporting is conducted in a manner consistent with organization policies/procedures intended to preserve confidentiality or privilege of information established by applicable law.

CH: 5/09

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16

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**PERFORMANCE AND SAFETY IMPROVEMENT ANALYSIS TOOLS****Policy No. 5-002.C****PURPOSE:**

To define tools for problem identification, data analysis, solution planning, and program evaluation within the Performance and Safety Improvement process.

**POLICY:**

The Performance and Safety Improvement Program shall use a variety of tools throughout the Plan-Do-Check-Act cycle to objectively measure performance, discover root causes of problems through evaluation, take corrective actions, and secure organizational achievement. Tools to be used include, but are not limited to the following:

- Brainstorming
- Cause-and-Effect Diagrams
- Task Lists
- Check Sheets
- Control Charts
- Flow Charts
- Affinity Diagrams
- Histograms
- Multivoting
- Pareto Charts
- Run Charts
- Scatter Diagrams
- Prioritization Matrixes

The Plan-Do-Check-Act format shall be used to address the problem identification, data analysis, solution planning, and result evaluation phases of the Performance and Safety Improvement process.

**PROCEDURE:**

1. Brainstorming may be used at any stage of the Performance and Safety Improvement process to generate lists of topics to assess process components, data to collect, problems, or potential solutions. Senior Management, the PSI Committee, and designated Focus Study Groups use the process during problem identification, data analysis, solution planning, and results evaluation phases.
2. Cause-and-effect diagrams are used to assist in identification and/or definition of problems or potential risk processes, determine causative factors and potential outcomes, and identify causes for variation in a process. Senior Management, the PSI Committee, and designated Focus Study Groups complete the diagrams during the problem identification and data analysis phases.
3. Task lists are useful at all stages of the Performance and Safety Improvement process to keep the team organized and on track and may be expanded into a plan of action format. Senior Management, the PSI Committee, and designated Focus Study Groups may use task lists in the problem identification, data analysis, solution planning, and results evaluation phases.
4. Check sheets are used to measure process frequency and identify trends over time. The PSI Committee and designated Focus Study Groups may use check sheets during the data analysis phase.
5. Control charts are used to identify and monitor process variations over time, and to distinguish special causes from common causes of variation. Attribute data is counted and plotted as discrete events within the process. Variable data is measured and plotted on a continuous scale, i.e. time, volume, or cost. Senior Management, the PSI Committee, and designated Focus Study Groups will use control charts during the problem identification, data analysis, and result evaluation phases.

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16

6. Flow charts are used to identify the steps of a process, and illustrate redundancies, inefficiencies, misunderstandings, waiting loops, and inspection/evaluation steps. Designated Focus Study Groups use flow charts during the problem identification, data analysis, and solution planning phases.
7. Affinity diagrams assist in the organization and grouping of ideas or issues under consideration. The PSI Committee and designated Focus Study Groups may use the diagrams during the problem identification and solution planning phases.
8. Histograms provide a summary of variables within a set of data, illustrate the distribution of the variables, and assist in determination of special/normal causes of variation in processes. Senior Management, the PSI Committee, and designated Focus Study Groups may use histograms during the data analysis phase.
9. Multivoting is an objective method for prioritization of ideas, tasks, issues, etc. Senior Management, the PSI Committee, and designated Focus Study Groups may use multivoting during the problem identification, data analysis, solution planning, and results evaluation.
10. Pareto charts depict in descending order the frequency of events being studied allowing the team to categorize occurrences and focus attention on the most frequent and/or most important. Standards for comparison are predetermined by the team, i.e. personnel resources, cost, or volume. Senior Management, the PSI Committee, and designated Focus Study Groups use pareto charts during the problem identification, data analysis, and results evaluation phases.
11. Run charts identify meaningful trends, shifts from the mean (benchmarking), and levels of performance over time. Senior Management and the PSI committee will use run charts during the problem identification, data analysis, and results evaluation phases.
12. Scatter diagrams may be used to test theories about cause and effect, analyze raw data, and/or monitor effectiveness of action plans, through illustration and identification of the correlation between variables or selected pairs of data. Senior Management and the PSI Committee may use the diagrams during the data analysis and results evaluation phases.
13. Prioritization matrixes, also known as selection grids, can assist the team in choosing options and/or reaching consensus via a predetermined weighted scoring system; and validates the group decision-making process. Senior Management, the PSI Committee, and designated Focus Study Groups may use the matrixes during the problem identification and solution planning phases.
14. Other tools which may be used in data analysis and solution planning include:
  - a. Gantt Charts (timetables)
  - b. Radar Charts
  - c. Force Field Analyses
  - d. Storyboards
  - e. Tree Diagrams

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16



## UNUSUAL OCCURRENCES

Policy No. 5-012.1

**PURPOSE**

To delineate the reporting, follow-up and feedback mechanism for *incidents* involving patients and personnel.

**POLICY**

1. Coastal Hospice, Inc. will maintain a system for generating Unusual Occurrence Reports and any follow-up corrective action. The purposes of the Unusual Occurrence Report are:
  - a. To facilitate the early detection of problems or compensable events.
  - b. To establish a foundation for early investigation of all potentially serious events.
  - c. To develop a database for long-range problem detection analysis and correction.
  - d. To enable cross reference with other risk detection systems.
2. All events or occurrences listed in *Addendum 5-012-B "Examples of Occurrences Reportable as Incidents"* must be reported as well as any other occurrences presenting risks to patients.
3. The Unusual Occurrence *Report* is not a part of the patient's clinical record and it shall not indicate completion of an Unusual Occurrence *Report*.
4. The reporting system will be part of Coastal Hospice Inc.'s *Performance and Safety Improvement Plan*.

**DEFINITIONS:** An *unusual occurrence* is an unusual event involving Coastal Hospice, Inc. personnel, patient and/or family/caregiver. The event is considered unusual if the result was unintended, undesirable and/or unexpected. An incident is also any occurrence that is not consistent with the routine operation of Coastal Hospice or the routine care/service of a patient. It may be actual or potential. See "*Examples of Occurrences Reportable as Incidents*" *Addendum 5-012-B* for further definition.

A *sentinel event* is an unexpected occurrence involving death or serious physical or psychological injury, or the risk thereof. Serious injury specifically includes loss of limb or function. The phrase, "or the risk thereof" includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome.

**PROCEDURE**

1. When an incident occurs, the person discovering it will:
  - a. Notify his/her supervisor immediately describing the incident.
  - b. For clinical incidents, follow-up with the patient and family/caregiver and/or patient's physician if instructed by supervisor and/or designee.
  - c. Keep the information confidential. The report is for internal use only.
  - d. Complete an *Incident Report* form and forward to one's supervisor within twenty-four (24) hours of the incident. NOTE: *Volunteers or Hospice Aides must communicate any incident immediately to their direct supervisor or designee. The supervisor or designee should implement the form.*
2. The Supervisor will review and sign the *Incident Report* form, request any necessary additional information from appropriate personnel, analyze for causative factors, and conduct follow-up as indicated. Recommendations for prevention of further incidents (e.g., referral for Physical Therapy) will be forwarded to the appropriate personnel for action and resolution within 4 days of the occurrence.
3. Once the investigative process is completed, and resolution achieved, the *Incident Report* will be forwarded to the Director of Clinical Services for review and then the Performance and Safety Improvement Coordinator for completion of Incident Log entry within one work week of the occurrence.
4. The Director of Clinical Services forwards the reviewed *Incident Report* to the Performance and Safety Improvement Coordinator for entry into the Incident Report log within 10 days of the occurrence.

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16
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5. Completed *Incident Reports* will be secured for confidentiality in the PSI files.
  6. A summary of Incident Reports will go to the PSI Committee and to the President
  7. The President will forward summaries to the Board of Directors, with any recommendations, at least quarterly.
  8. For incidents requiring reporting to state and/or federal regulatory agencies:
    - a. Regulations and reporting forms are available from the nursing supervisors.
    - b. The Director of Clinical Services or President reviews incidents to determine if the event meets reporting criteria.
    - c. The President or designee reports within the required time frame to the appropriate agency, along with any required subsequent or summary reports.
    - d. Reportable event files are maintained securely in PSI files according to applicable regulations.
  9. Should an incident be a sentinel event, a root cause analysis is done according to the process outlined in *Addendum 8-019.B*. The President or designee is responsible for reporting a sentinel event to an accrediting agency.
  10. Senior Management develops a plan for corrective action based on a sentinel event root cause analysis.

*Amended 4/7/03, 7/31/04, 3/27/06; 12/3/08; 5/09*

Reviewed 1/23/07; 12/3/08; 05/09, 2/10, 2/16
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