A STUDY TO DEVELOP A METHODOLOGY
FOR DETERMINING HOSPICE NEED
IN A MILITARY HEALTH CARE
CATCHMENT AREA

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by

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This study was conducted to develop a methodology for determining hospice need in a specific military hospital catchment area. A medical record review was conducted to categorize patients as to their need for hospice services. The author concluded that hospice services be initiated when the catchment area has a low Hispanic population and a large volunteer force available. The author also recommended hospices be made available to all terminally ill patients, regardless of their providers illness.
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I. INTRODUCTION

General Information

"After a long illness... at a local hospital..." is what the newspapers say, someone anonymous, it seems, is always dying while society tries to look the other way. Yet, now that that same society has accepted the realities of birth as a natural process to be celebrated and respected, it is time for it to take a clearer look at the process of death.

In Medieval times, dying persons were seen as prophetic souls, voyagers and pilgrims valuable to the community in a number of ways, not the least in the opportunity they provided those around them for service and spiritual growth. It is a modern and ignorant prejudice to consider death a failure. It is a modern superstition to avoid knowledge of it, to treat it as if it were something unnatural, shameful, or wrong.¹

It is time for society to root out the fears and misconceptions that lie behind this distorted view. Society must begin to honor the labor of those pilgrims who journey on before it; and in being present for them during that part of their living which is called dying, it must learn a better way to honor life itself. In Medieval Europe, a hospice was a place of shelter and comfort for travelers on a difficult journey. Today, hospice is a name given to the health care movement that comforts travelers on life's most difficult journey: dying.² The emergence of the
modern hospice in our world today brings with it the hope and, potentially, the promise of a far better way of dying for all of us. Dying patients and their families have different needs. Some patients want to acquire inner peace and accept their situation; others want to see that their affairs are in order; some want to do or see something "one last time;" and still others expect only clarity of mind and freedom from pain or other symptoms of the disease.

For anyone who has watched a close relative struggle with the loneliness, anxiety, and physical pain of impending death, the need for such a place of comfort is unquestioned. In a hospital, treatment and diagnostic tests are pursued to the end. In a hospice, care—not cure—is the goal. Extraordinary measures to prolong life are not used; pain relief and emotional support are the basic elements of the care provided. Support for the family before and after death is an integral part of the care.

The emphasis on family is common to all hospices. Some hospices are facilities with playgrounds and day care centers, living rooms and chapels. Life goes on in a hospice atmosphere much like it does everywhere else. Not all hospices are separate buildings; however, most have community-based mobile teams which work with a hospital when necessary but care for the patient at home in a natural environment as much as possible.

Relief from pain is one of the major goals of the hospice program of care. Patients and family members are taught how and
when to give medication with the intention of freeing the patient from dependence on staff members. Dr. Richard M. Dupee, Medical Director of the Hospice of the Good Shepherd, Waban, Massachusetts, feels that the goal of the hospice is to maintain the highest quality of life possible during the terminal illness. He feels every effort should be made to keep the patient free of present pain, erase the memory of past pain, and eliminate anticipation of future pain. Pain relief is supplemented, when necessary, with antidepressant and antianxiety medications along with drugs that reduce nausea and vomiting.

However, drugs are only part of the hospice program. Religious persons, physicians, nurses, social workers, dietitians, and physical, occupational and speech therapists, are there to lend a listening ear, provide a hand to hold, and help the patient sort out feelings of regret, failure, or the meaninglessness of life and death. Hospice care also involves helping families deal with their unspoken and spoken fears. Answers to these fears resolve anxieties and allow the families to enjoy the remaining time with their loved one.

Historical Perspective

In 1974, the National Cancer Institute made the inauguration of the first Home Care Program of Hospice possible. The first hospice under this program became known as the Greater New Haven Hospice and is located in New Haven, Connecticut. This first American hospice is modeled after successful hospice programs in England, and has rapidly become the model for other American
hospices. By 1978, more than 190 hospices in over 39 states were operational. These are providing a deep and previously unmet need for the caring support of dying people.¹¹

The major advocates of hospice care stress the importance of a comprehensive, holistic approach. Three important aspects of this total approach have been identified as: (1) delivery of both medical and social services; (2) involvement of volunteers on the care-giving team; and (3) provision of care in both the home and inpatient setting.¹²

A study conducted in 1982 made a comparison of hospice services in the United States and found that most hospices had multiple criteria for admitting patients. Three criteria were used by more than two-thirds of the hospices: (1) limited prognosis, (2) physician participation, and (3) the presence of a care giver in the home. In addition, two eligibility criteria were identified that tended to be applied jointly. The criterion of eligibility involved prognosis and specific characteristics such as diagnosis, geographic location, finance. The criterion of cooperation included patient awareness, care giver in the home, and physician cooperation.¹³

On May 12, 1978, Senators Abraham A. Ribicoff, Edward M. Kennedy and Robert J. Dole requested the Comptroller General of the United States to review hospices in the United States. They expressed particular interest in the potential for Medicare and Medicard payments to hospices. Therefore, one of the required
reviewing tasks was to identify hospices' operating costs and sources of funds.\textsuperscript{14}

The study found that the hospice concept has four basic principles that distinguish it from the traditional health care system:

1. The patient and the family are considered the unit of care.

2. An interdisciplinary team provides coordinated care by assessing the physical, psychological, and spiritual needs of the patient and family.

3. The treatment is primarily for control of pain and the collateral symptoms associated with the terminal illness. No heroic efforts are made to cure the patient.

4. The family is provided bereavement followup to assist them in overcoming their emotional suffering.

It was also identified that the programs operating under the hospice concept are caring almost exclusively for cancer patients whose attending physicians have determined that the disease has progressed to the point where curative and restorative treatment is no longer reasonable. Therefore, prolonging life should no longer be the objective of medical care.\textsuperscript{15}

As a result of this study, in September 1983, Congress enacted a Medicare hospice benefit for an initial three year period (until September 30, 1986). In creating hospice reimbursement, Congress was persuaded (a) that hospice offered dignity and independence to the terminally ill who wished to remain at home;
and (b) the hospice would save money for Medicare. The initial projections were that the hospice benefit would save Medicare about $55 million over the three years, largely by reducing hospital costs. Since then the Health Care Financing Administration (HCFA) and the Office of Management and Budget (OMB) re-examined the data and projected that the hospice benefit may actually increase Medicare expenditures by $350 million over the three year time frame. In late December, 1983, the Department of Health and Human Services issued final rules providing direct Medicare payments to hospices for the first time.

Conditions Which Prompted the Study

One of the premises in the civilian sector is that a hospice team cannot work with all those who might apply for help. The New Haven Hospice defines eligibility with these criteria: (1) the patient must have cancer, (2) the patient must have only weeks or months to live—rather than years, (3) the patient/family must reside within the geographical area that the hospice serves, (4) the consent and cooperation of the patient's own physician must be obtained, and (5) it is preferred that a primary care person be in the home, usually a relative.

Data collected from the period of September 1975 to June 1977 at the New Haven Hospice provided a significant insight into the characteristics of the 170 patients cared for during that time:
1. The mean age of hospice patients at admission was 64 years. Almost three-fourths of all patients were in the age group of 55 to 79.

2. Fifty-six percent of the 170 patients were female, 44% were male.

3. About two-thirds of the patients were married, about one-fourth were widowed.

4. Thirty-five percent of the patients were of Italian descent; 16% were of Irish heritage; 93.5% of the patients were white; 6.5% were non-white.

5. Two-thirds of patients were Catholic, about one-fourth were Protestant, almost seven percent were Jewish, three percent reported other denominations or had no religion. 19

The Hospice of El Paso, Texas, has designed its program and its eligibility criteria similar to the New Haven Hospice. The hospice's main focus is on home care in order to enable patients who are in advanced stages of cancer to remain at home as long as possible, alert, and relatively free of pain. They provide hospice care to patients and families 24 hours a day, seven days a week. Bereavement followup care is continued for the family for up to one year after death. The influence of Medicare legislation on the design of the this program has resulted in an almost exclusive patient workload selected for admission as having:

1. Less than six months to live.

2. A diagnosis of advanced cancer.
3. At least one person living in the home to care for the patient. 20

These established characteristics effectively eliminate all other terminally ill patients from hospice care. (Appendix A).

While the civilian community is actively accepting and pursuing the hospice concept and allowing a certain portion of society to die with dignity, the military community has not formally acknowledged that such a need exists within its community. The primary philosophy for military medicine is to maintain soldier, strength, life. Those people identified as terminally ill are released or retired from service. Dependents and retirees facing death have little recourse open to them through military medicine beyond continued treatment and an effort to prolong life regardless of quality. For the most part, military personnel and families who have been maintained by military medicine throughout their careers and retirement, have established faith in the treatment and support groups within the military system, but are forced to seek hospice care in the civilian sector at a time when these dependencies are crucial. Military hospice care could provide an undetermined amount of comfort and strength if they could be maintained in this familiar environment.

For those people who have spent a lifetime within the military ambience, sudden forced reliance on an unknown, unfamiliar civilian environment can only provide even greater feelings of isolation and loneliness. How then can the military bridge this deficit and provide the needed care and support
during the final phase of life? Can it be as supportive during this time as it was during the productive phases of life? Small, informal groups within the military medical environment are beginning to recognize the essential need within every person to be offered the dignity of support and quality of life and to live until they say goodbye to this life.

Relevant Facts

William Beaumont Army Medical Center (WBAMC) is a 476 bed hospital that serves an active duty, retired and dependent population of approximately 140,000. Located close to Fort Bliss, Texas, WBAMC has one of the largest patient care workloads of any Army medical treatment facility. During the calendar year of 1983, the Tumor Registry at WBAMC identified 322 new patients with a diagnosis of cancer in various stages. A total of 162 cancer related deaths were reported to the registry during calendar year 1983.21

Of the 162 deaths, only 16 patients were part of the Hospice of El Paso Program. The remaining 151 patients and families either received no hospice type care or were provided hospice type counseling and pain control through the WBAMC Hematology-Oncology Clinic where the majority of cancer patients are treated.

The total number of deaths at WBAMC during calendar year 1983 was in excess of 300. The 162 cancer related deaths account for approximately 50% of this total. Accidental deaths account for approximately 20% of the total. The remaining 30% of deaths
were due to chronic, terminal illnesses. A substantial number of deaths from this group occurred from a small number of recurring terminal diagnoses:

1. End Stage Chronic Obstructive Pulmonary Disease (COPD)
2. End Stage Renal Disease
3. End Stage Cirrhosis
4. End Stage Atherosclerotic Cardiovascular Disease (ASCVD)
5. Amyotrophic Lateral Sclerosis (ALS)—Diagnoses resulting in death.

Approximately 60-70% of all deaths occurring at WBAMC in calendar year 1983, could have benefited from hospice type services.

The non-cancer group of terminally ill patients and families have been effectively excluded from the majority of civilian hospices and receive no real emotional support, counseling support, additional home care support that offer dignity and comfort, or recognition of the dying process by health care providers.

WBAMC Hematology-Oncology Clinic has developed an informal hospice type support program that parallels some aspects of the civilian hospice concept. This is a limited effort to meet the need within the military community for these services. This program has been developed primarily by the clinical nurse specialist in the Hematology-Oncology Clinic where the majority of cancer patients are seen during their chemotherapy treatments. This informal program is designed to meet individual needs;
therefore, it follows no structured pattern. Some aspects of the program offered are:

1. Counseling
   a. Problem solving for patient and family. Helping them identify their options and services available--hospice, church programs, assistance from the Department of Human Resources, volunteers for home care, etc.
   b. Preparing--what is going to happen during the disease process. How to deal with the situation when it happens. What type resources will be needed.
   c. Providing patient and family help in understanding that it is O.K. to die.
   d. Helping family to work through the grieving process.

2. Management of side effects and physical problems associated with the disease process.
   a. Pain control/management
   b. Altered body image
   d. Diet

3. Support System
   a. Helps manage situation in the home.
   b. Home visits if needed
   c. Helps the family let the patient die at home.
   d. Attends funerals

4. Bereavement Care
   a. Long term involvement--followup
b. Assists family members work through any unresolved issues after death.\textsuperscript{23}

Society and the government have identified and embraced the concept of hospice. The study at New haven Hospice identified characteristics of patients in their catchment area who were utilizing their services. The comparative study of hospice services in the United States conducted in 1982 identified characteristics of patients using hospice services.\textsuperscript{24} Based on these characteristics, the Hospice of El Paso has been developed in order to meet the need of terminally ill persons residing within El Paso, Texas. Research has frequently emphasized that the military follows society's lead. The need for hospice type services designed to meet the need within the military community is slowly being recognized by military health care providers. Therefore, the purpose of this research is to develop a methodology for determining hospice need in a military health care catchment area. A search of the literature indicates that there have been no studies published on determining a need for hospice services within a community. Since this is a preliminary research study to identify the community needs (pros and cons) for hospice care, additional research will have to be done.

**Research Question**

Assuming that there is a need for hospice service in the military, is there a methodology for determining hospice need in a military health care catchment area?
Definitions

1. Catchment Area. That area of patient population/military medical facilities that feed into a military medical treatment center as described in HSC Reg 40-21 for each specific area, e.g., WBAMC catchment area is defined as West Texas, New Mexico and Arizona.


3. Hospice Care. An interdisciplinary health care service for the terminally ill. Hospice care is essentially home care that is provided by family members, hospice professionals and dedicated volunteers. Both home care and inpatient care are incorporated into the concept with the primary goal being to offer supportive, palliative and respite care for the dying patient and the family. Bereavement care and family education are important aspects of the program.

4. Interdisciplinary Health Care. All health care disciplines working as a team in order to provide a comprehensive, integrated approach to the patient. Same as multi-disciplinary, i.e., physician, nurse, chaplain, volunteer, social worker, occupational speech and physical therapist.

5. Terminally Ill Person. A person whose disease process has progressed to the point where curative and restorative treatment is no longer reasonable and prolonging life should no longer be the object of medical care.
Objectives

1. To conduct a thorough literature review.

2. To retrospectively compare terminally ill persons utilizing and not utilizing a hospice service in the WBAMC catchment area from 1 January 1983 to 31 December 1983.

3. To describe those persons who would be likely to use a hospice service in the future.

4. To determine the characteristics of those persons who would be likely to use a hospice service in the future.

Criteria

The criteria that must be met in order to accomplish the objectives that have been given are:

1. The research study will provide data describing the characteristics (Appendix B) of three separate groups of persons:
   
a. Hospice of El Paso users
   
b. WBAMC informal hospice users
   
c. Non-hospice users

Both "a" and "b" will be termed "hospice users."

2. The research study will compare the characteristics of the hospice user versus the non-hospice user and will identify differences between the two groups.

Assumptions

1. That a significant, untapped, eligible population exists within the WBAMC catchment area.

2. That there is a need for hospice services in the military.
Limitations

1. No prior research has been conducted in the military environment to determine hospice need.

2. Only the WBAMC catchment area will be researched for the hospice patient.

3. Only a retrospective audit on charts of discharged terminally ill patients and patient death charts will be researched.

4. Time constraints prevent researching more extensively in other medical treatment facility catchment areas.

Research Methodology

In order to retrospectively compare terminally ill persons utilizing and not utilizing a hospice service in the WBAMC catchment area from 1 January 1983 to 31 December 1983, a record review of all hospital patient deaths as well as a record review of all tumor registry deaths and preterminal admissions would be conducted. Characteristics identified in Appendix B would be collected from significant records.

Descriptive statistics would be developed from these characteristics in order to provide a profile of users and non-users of hospice. From this profile determination of potential users of a hospice service should be determined.

An analysis of variance and chi square statistics will then be conducted on the descriptive statistics in an effort to determine significant characteristics of persons who would or would not be potential hospice users. Proposed application for Army-wide usage is to be made after the results have been analyzed and discussed.
FOOTNOTES


2 Lewert, p. 20.


5 Ibid, p. 21.

6 Ibid, p. 22.

7 Dupee, Richard M. "Hospice--Compassionate, Comprehensive Approach to Terminal care." Postgraduate Medicine. Vol 72, No 3 (September 1982); p. 239.

8 Lewert, p. 22.

9 Ibid, p. 22.

10 Lack, p.


17 Ibid, p. 4.


21 Records from WBAMC Tumor Registry.

22 Records from WBAMC Patient Administration Division, Medical Records Library.

23 Interview, Elizabeth Lemieux, May, ANC, Oncology Nurse Specialist, WBAMC Hematology-Oncology Clinic, 7 May 1984, El Paso, Texas.

24 Buckingham, p. 455.
II. Discussion

Impact of Death on Society

The hospice movement has become primarily associated with cancer related terminally ill diagnoses. How much of this association is due to society's acceptance of cancer resulting in the inevitability of death can only be speculated. United States society "allows" persons in the final, terminal stages of cancer to die with dignity and honor. This same acceptance, however, has not been extended to all persons dying with incurable diseases. Death is seen by much of society as the ultimate failure. Society dictates that a person live as long as possible and also, fight for life at any emotional, psychological or financial cost. To do less than this is to defy societal norms. Part of this reasoning, especially for a young person, stems from the removal of a productive person from the working role. The attendant economic loss is very high. More importantly, society as a whole, is bent on ignoring or avoiding death and, by doing so, makes death less real. However, rapidly escalating medical costs, increased ability to prolong life through modern technological and medical advances, and an ever increasing geriatric population have forced society to recognize that death is a natural outcome for everyone.

This paper is a review of all patients treated at William Beaumont Army Medical Center during calendar year 1983, with a terminal illness. The purpose of this study is to develop a
methodology for identifying potential military catchment areas for developing future hospice programs.

**Materials and Methods**

All patients dying from a chronic, terminal illness during calendar year 1983, and all patients diagnosed with terminal cancer during calendar year 1983, made up the study population. This group of patients was analyzed with respect to age, sex, marital status, religion, type of residence, ethnic background, sponsor's rank, diagnosis, prognosis and type of hospice program involved with. Sponsor's rank was broken down into nine separate categories: Active duty officer; active duty enlisted; dependent, active duty officer; dependent, active duty enlisted; retired officer; retired enlisted; dependent, retired officer; dependent, retired enlisted; and veteran (VAB). Diagnosis was described as: Non-cancer terminal illness, dead; cancer terminal illness, dead and; cancer terminal illness, alive. Five categories were developed for type of hospice program: No program offered; hospice program offered, but refused; WBAMC informal hospice program; Hospice of El Paso program; Hospice of El Paso program refused, remained in WBAMC informal hospice program. Five categories were developed for prognosis that indicated length of life expectancy: 1-3 months; 3-6 months; 6-9 months; 9-12 months; 12 or more months. Type of residence was described as: Home, apartment, nursing home, and other. Only those terminally ill persons admitted to WBAMC at least once during calendar year 1983, were analyzed.
**Results**

During calendar year 1983, a total of 203 patients were admitted to WBAMC with a terminal diagnosis that were analyzed for this research. Of this group, 54 patients were non-cancer, dead; 136 patients were cancer, dead and; 23 patients were cancer, alive. Categories non-cancer, dead and cancer, dead were patients that were alive as of January 1, 1983, were treated for their terminal illness and subsequently died during calendar year 1983. Those patients in the category cancer, alive diagnosis were patients treated for their terminal illness at WBAMC during calendar year 1983, and were identified as having less than one year to live.

The characteristics of the 203 terminally ill patients analyzed in the study are:

1. The mean age of all three diagnosis groups was 59 years. The mean age of the non-cancer, dead group was 66 years; of the cancer, dead group was 56 years and of the cancer, alive group was 54 years.

2. 83% were married; 11% were widowed; 39% were single, and 3.5% were divorced.

3. 83% were caucasian; 79% were Black; 7.5% were Hispanic and 2.5% were Oriental.

4. 32.5% were female and 67.5% were male.

5. 28% were Catholic; 67% were Protestant and 4% had no religion.
6. 26.5% were non-cancer dead; 62% were cancer, dead; and 11.5% were cancer, alive.

7. 58% of all terminally ill patients analyzed had a prognosis of less than three months to live; 25% had between 3-6 months to live; 8.5% had between 6-9 month; 6% had 9-12 months; and 2% had more than a 12 month life expectancy.

8. 37.5% of all terminally ill patients analyzed were not offered any type of hospice services; 12% were offered hospice services, but refused; 26.5% were being followed in the WBAMC hospice group without being offered the formal hospice program; 8% were being followed by Hospice of El Paso, and; 16% refused Hospice of El Paso when made aware of it and were being followed in the WBAMC hospice service.

Analysis of Results

An analysis of variance using "age" as the dependent variable was performed against all other analyzed characteristics. All results with less than a .05 probability were considered significant results. Significant characteristics were religion, marital status, sex, diagnosis, and program.

In analyzing this data, mean ages for the three diagnostic categories were: Non-cancer, dead - 66 years; cancer, dead - 56 years; and cancer, alive - 54 years. The mean ages for type of program: None - 64 years, refused - 57 years, WBAMC Hospice - 55 years, Hospice of El Paso - 57 years and, refused Hospice of El Paso - 55 years. The analysis of significance for these statistics is the relationship to the non-cancer, dead in the no
hospice services offered. This is significant only in the fact that all non-cancer, dead patients fell into this category, therefore, reflecting the mean age of non-cancer dead diagnosis. These statistics also indicate that the non-cancer terminally ill persons at WBAMC in calendar year 1983 were significantly older than the cancer related patients when entering the terminal phase of life.

In analyzing the statistical implications that marital status, religion and sex have on age, some results were surprising. The mean age for terminal illnesses for single patients was 45 years; for married, was 59 years; for divorced, was 63 years; and for widowed, was 64 years. The mean age for Catholics was 56 years and for Protestants was 60 years. The mean age for terminal illness for females was 54 years and for males was 61 years. This last statistical analysis is the reverse of the civilian community.

From studying the results of the analysis of variance, it appears that the military community of El Paso, Texas, does not reflect National norms. This indicates a need for the military community to seriously consider establishing hospice services that will meet its community's need.

Chi square analysis was used for all other characteristics, again significance was determined to be at the .05 probability level. Significant characteristics resulting from this analysis were: Sex impact on program, prognosis impact on program, religious impact on program, marital status impact on diagnosis,
sex impact on marital status, diagnosis impact on program, diagnosis impact on prognosis, ethnic impact on program and, ethnic impact on religion.

In analyzing these results, only portions of each category has significance and will be addressed. Sex impact on program indicates an equal number of females and males in the WBAMC hospice program. More males are in the Hospice of El Paso with a 3 to 1 ratio. Four times more males than females were involved in no program and twice as many males refused any hospice type service.

In evaluating prognosis impact on program, findings indicated that as prognosis decreased, a greater percentage of patients elected to enter one of the hospice services. Religion also impacted on the number entering the hospice programs with a higher than expected number selecting one of the hospice programs. Sex impact on marital status showed two significant findings: (1) twice the number of divorced males developed a terminal illness than the expected frequencies indicated and, (2) widowed of both sexes developed a terminal illness equally, whereas married males developed a terminal illness twice as frequently as married females.

The most interesting finding of the research effort showed that the Hispanic terminally ill person twelve out of fifteen times was not offered any hospice service. The remaining three patients were cared for in the WBAMC hospice program. Fourteen of the Hispanic terminally ill persons were Catholic and one
person's religious preference was unknown. There were 32 cancer, dead Catholic patients as compared to 16 non-cancer, dead Catholic patients with a total of 34 Catholic patients falling into the prognosis group 1-3 months. Potentially this could be indicating that the Hispanic terminally ill person is being maintained at home in a family centered environment and is cared for by the family throughout the disease process. The Hispanic family is an extended family community with close ties. Hispanic cultural norms may well have established within its environment much of the hospice concept.

Observations During the Research

Little effort has been made to involve the non-cancer terminally ill person in some type of hospice program, or acknowledge the actuality of impending death for many of the End Stages of chronic illnesses. Retrospective research of non-cancer patients who died during calendar year 1983, showed a phenomenon that was repeated frequently in many of the records. Many of these patients were admitted and treated frequently throughout the course of their illness while gradual deterioration was apparent. The patient would become ill, come to the hospital and improve, be discharged and become ill soon after discharge only to be readmitted again for treatment. At some point during the illness a decision, whether conscious or unconscious, is unknown, would be made and the patient was allowed to continue to follow the natural course of the disease process without medical intervention. When the family brought the patient to the
hospital, death resulted within 12-48 hours. This is a form of hospice effort in allowing the patient to die. Unfortunately, dignity and peace were not necessarily a part of the program. Emotional support for patient and family was absent with no bereavement care available. Cost to the patient and family is high in terms of dignity, self-esteem, spiritual and psychosocial aspects.

While more males were admitted in the Hospice of El Paso program than females, females almost equaled the number of males being cared for in the WBAMC hospice program. In analyzing the percentage of males and the percentage of females in the WBAMC hospice program, 63% of all females were being cared for in the WBAMC hospice program as compared to 41% of all males. Extrapolating from this data, it appears that if given the appropriate opportunity for hospice type care, more females than males would elect a hospice program. When evaluating societal norms, this trend is essentially self-evident because females are encouraged to be more attached to home and family, whereas males are encouraged to be more independent and not "burden" the home with weighty problems. Males are the protectors and providers of the home. Females are the heart of the home and identify strongly with their families.

Additionally, 35% of the male cancer, dead group tended to wait for a period of three weeks to four or five months with obvious disease symptoms, e.g., rectal bleeding, 10 cm. mass on side of neck, or significant weight loss. Once involved in the
health care system, death resulted in less than a 3-4 week time frame. While more definitive research is indicated, it would appear that males are again restricted by society from displaying weakness and seeking medical intervention until it is plainly evident they are ill.

### Hospice Users Compared to Non-Hospice Users

**Table I - Marital Status**

<table>
<thead>
<tr>
<th>Hospice:</th>
<th>Single</th>
<th>Married</th>
<th>Divorced</th>
<th>Widowed</th>
</tr>
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<tbody>
<tr>
<td>WBAMC Program</td>
<td>3</td>
<td>71</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Hospice of El Paso</td>
<td>2</td>
<td>13</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>84</td>
<td>1</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Hospice:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Program</td>
<td>1</td>
<td>60</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Refused Program</td>
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<td>22</td>
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<td>2</td>
</tr>
<tr>
<td>Total</td>
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<td>82</td>
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<td>10</td>
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Table II - Age

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MEAN</th>
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<tbody>
<tr>
<td>Hospice:</td>
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<td></td>
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<tr>
<td>WBAMC Program</td>
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<td>55</td>
</tr>
<tr>
<td>Hospice of El Paso</td>
<td>16</td>
<td>56.5</td>
</tr>
<tr>
<td>Total</td>
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<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Non-Hospice:</td>
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<td></td>
</tr>
<tr>
<td>No Program</td>
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<td>64</td>
</tr>
<tr>
<td>Refused Program</td>
<td>24</td>
<td>57</td>
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<td>Total</td>
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Table III - Sex

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<tr>
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<th>Male</th>
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<td></td>
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<tr>
<td>WBAMC Program</td>
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<td>47</td>
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<td>Hospice of El Paso</td>
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<td>12</td>
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<tr>
<td>Total</td>
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<td>59</td>
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<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
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<td>Non-Hospice:</td>
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<td></td>
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<tr>
<td>No Program</td>
<td>15</td>
<td>60</td>
</tr>
<tr>
<td>Refused Program</td>
<td>8</td>
<td>16</td>
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<td>Total</td>
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<td>76</td>
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Table IV - Residence

<table>
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<th>Home</th>
<th>Apartment</th>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Hospice:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
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<td>59</td>
<td>9</td>
</tr>
<tr>
<td>Refused Program</td>
<td>21</td>
<td>3</td>
</tr>
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</table>

Table V - Religion

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<tr>
<th>Hospice:</th>
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<th>Protestant</th>
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<tbody>
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<td>WBAMC Program</td>
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<td>56</td>
</tr>
<tr>
<td>Hospice of El Paso</td>
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<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27</strong></td>
<td><strong>69</strong></td>
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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Program</td>
<td>26</td>
<td>44</td>
</tr>
<tr>
<td>Refused Program</td>
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<td>21</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>65</strong></td>
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### Table VI - Ethnic

<table>
<thead>
<tr>
<th>Hospice:</th>
<th>Cau</th>
<th>Black</th>
<th>Hispanic</th>
<th>Oriental</th>
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<tbody>
<tr>
<td>WBAMC Program</td>
<td>76</td>
<td>5</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Hospice of El Paso</td>
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<tr>
<td><strong>Total</strong></td>
<td>89</td>
<td>7</td>
<td>3</td>
<td>2</td>
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</table>

<table>
<thead>
<tr>
<th>Non-Hospice:</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No Program</td>
<td>57</td>
<td>4</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Refused Program</td>
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<td>3</td>
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<tr>
<td><strong>Total</strong></td>
<td>78</td>
<td>7</td>
<td>12</td>
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### Table VII - DIAGNOSIS

<table>
<thead>
<tr>
<th></th>
<th>Non-Cancer</th>
<th>Cancer</th>
<th>Cancer</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Dead</td>
<td>Dead</td>
<td>Alive</td>
</tr>
<tr>
<td>Hospice:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>WBAMC Program</td>
<td>1</td>
<td>72</td>
<td>12</td>
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<tr>
<td>Hospice of El Paso</td>
<td>0</td>
<td>12</td>
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</tr>
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<td><strong>Total</strong></td>
<td>1</td>
<td>84</td>
<td>16</td>
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<table>
<thead>
<tr>
<th>Non-Hospice:</th>
<th>Non-Cancer</th>
<th>Cancer</th>
<th>Cancer</th>
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</thead>
<tbody>
<tr>
<td>No Program</td>
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<td>23</td>
<td>0</td>
</tr>
<tr>
<td>Refused Program</td>
<td>0</td>
<td>17</td>
<td>7</td>
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<tr>
<td><strong>Total</strong></td>
<td>52</td>
<td>40</td>
<td>7</td>
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Table VIII - Prognosis

<table>
<thead>
<tr>
<th></th>
<th>1-3 Mo.</th>
<th>3-6 Mo.</th>
<th>6-9 Mo.</th>
<th>9-12 Mo.</th>
<th>12+ Mo.</th>
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</thead>
<tbody>
<tr>
<td>Hospice:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WBAMC PROGRAM</td>
<td>47</td>
<td>19</td>
<td>8</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Hospice of El Paso</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>22</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Non-Hospice:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Program</td>
<td>50</td>
<td>22</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Refused Program</td>
<td>12</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>28</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>
Hospice users in this study were both single and married, with a mean age of 55-56 years, having a diagnosis of terminal cancer and a life expectancy of less than six months. Non-hospice users in the study group tended to be married, with a mean age of 60 years, predominantly male, having a non-cancer or cancer related death, and an average life expectancy of less than three months. Many terminally ill persons in the no hospice program were patients presenting for first time treatment in the pre-terminal stage of disease having less than one month life expectancy. This group was predominantly male patients that fell into the cancer, dead diagnosis (35%). Also included in the no hospice program were the non-cancer group of terminally ill persons. A 3 to 1 ratio of males to females were admitted to the formal Hospice of El Paso program. Whereas, the WBAMC program supported a 1.2 to 1 ratio of males to females.
FOOTNOTES


III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

With the assumption made that the military community has a need for hospice type services, a preliminary methodology for determining hospice need in a military health care catchment area has been identified. Emphasis needs to be made that this is an initial research effort involving only one military catchment area. Because of the psychosocial make-up of the Hispanic family, it appears that this population of terminally ill persons will not be likely to utilize a formal hospice program. The data also indicates that males are more likely to be put into a formal hospice program than females.

The military community, both active duty and retired population, have dissimilarities from the civilian community in that most families are transplanted to the military medical catchment area in which they reside. The extended family concept is not an available factor for consideration in setting up a hospice program within the military community. More emphasis would need to be placed on maintaining a dedicated volunteer staff to support the hospice concept. Loss of the extended family could well be indicated by the higher ratio of males to females in the Hospice of El Paso program. With a mean age of 53 years for terminally ill females, most husbands would still be in their wage earning years and not be readily available for home care without additional support.
Army wide application for this research study suggests that areas with high Hispanic population not be considered initially for a formal hospice program. An additional factor would be to select an area that had a large, responsive volunteer force. The military community as a whole facilitates the volunteer concept and most medical catchment areas have a readily available population for cultivation. The third factor for consideration would be emphasis on including all terminally ill diagnoses because this group needs the same type support as terminally ill cancer patients.

**Recommendations**

Based upon the data in this study, it is recommended that:

1. The Army establish an initial Hospice Service in a medical treatment facility that has a low Hispanic population and a large, active volunteer force.

2. The hospice program be available to all terminally ill persons and families desirous of involvement in the program.

3. The military community in the selected medical catchment area be educated and encouraged to support the hospice program so that sufficient participation in the program evolved, as well as sufficient volunteers could be identified.
APPENDIX A

HOSPICE OF EL PASO - PROGRAM FOR PROVISION OF SERVICES

Referral Phase

PHYSICIAN

PATIENT/FAMILY

HOSPITAL OR AGENCY

PATIENT/FAMILY

HOSPICE OF EL PASO

1. Telephone Screening
2. Physician's Formal Referral
3. Interview by Patient Care Coordinator (Hospice RN)
4. Committee Review

Referral if not Hospice

Intake Phase

HOSPICE OF EL PASO

1. Care Plan Preparation by Patient's Physician
2. Assignment of Team Members

Preparation Phase

HOSPICE OF EL PASO

1. Care Plan Preparation by Patient's Physician
   Hospice Medical Director
   Patient Care Coordinator
2. Assignment of Team Members

Service Phase

Patient's Physician
Nurses
Physical Therapy
Home Health Aide

Clergy
Mortician

MEDICAL

Volunteers
Legal - Financial
Occupational Therapy

PRACTICAL

SPECIAL.

SOCIAL - PSYCHOLOGICAL

FAMILY

BEREAVEMENT ASSISTANCE

1. Evaluation
2. Delivery of Services & Group Services

Referral if needed

Weekly Team Evaluation

Bereavement Phase
APPENDIX B

Characteristics of Patients

1. Patient Age:____

2. Patient Sex:  Female_____ Male_____ 

3. Marital Status:  Single_____ Married_____ Divorced_____ Widowed_____ 

4. Ethnic Background:  Cau____ Black____ Hispanic____ Other____ 

5. Sponsor's Rank:  Active Duty: Officer_____ Enlisted____ 

Dep/Active Duty: Officer_____ Enlisted____ 

Retired: Officer_____ Enlisted____ 

Dep/Retired: Officer_____ Enlisted____ 

Veteran Benefit:_____ 

6. Religion:  Cath_____ Prot_____ Non____Other____ 

7. Residence:  Home_____ Apartment_____ Nursing Home_____ Other____ 

8. Diagnosis:  Non-Cancer,Dead_____ Cancer-Dead____ 

Cancer-Alive____ 

9. Prognosis:  1-3 months_____ 3-6 months_____ 6-9 months_____ 9-12 months_____ 12+ months_____ 

10.* Program:  None_____ Black_____ Green_____ Red_____ Refused Red_____ 

36
*Key*

None: Patient not offered any type of hospice involvement.

Black: Patient offered hospice involvement, but refused all programs

Green: Patient followed in WBAMC hospice program

Red: Patient admitted to Hospice of El Paso program

Refused Red: Patient refused Hospice of El Paso, but remained in WBAMC hospice program
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