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PHYSICAL AND ENVIRONMENTAL FEATURES
THAT CONTRIBUTE TO
SATISFACTION WITH HOSPICE FACILITIES

by

AREZU MOVAHED

A dissertation submitted in partial fulfillment
of the requirements for the degree of

Doctor of Philosophy
in
Urban Studies

PORTLAND STATE UNIVERSITY
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DISSERTATION APPROVAL

The abstract and dissertation of Arezu Movahed for the Doctor of Philosophy in Urban Studies was presented on June 8, 1995 and accepted by the dissertation committee and the doctoral program.

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ABSTRACT

An abstract of the dissertation of Arezu Movahed for the Doctor of Philosophy in Urban Studies presented June 8, 1995.

Title: Physical and Environmental Features that Contribute to Satisfaction with Hospice Facilities

Improving the quality of remaining life for individuals who are terminally ill and their families is an issue that has become increasingly important in recent years. This issue has evolved from perceived deficiencies of conventional health care institutions in meeting the needs of people who are in the final stages of their life, when curative measures are no longer deemed appropriate. In response to deficiencies in care of the terminally ill and their families, there has been a movement toward humanizing conventional health care and making it more holistic. Hospice care, which is consistent with this movement, has evolved as an alternative to hospitals and nursing homes.

The purpose of this study was to investigate the physical environment (building and grounds) of a free-standing hospice facility to identify the features that would contribute to the design and renovation of other hospices and health care facilities that plan to adopt a hospice program of care. In this study, an attempt was made to examine how architectural factors combine in a hospice

setting to meet the needs of the dying and their families and those who work in hospices.

Specifically, this study used a qualitative, case study approach to describe and develop an understanding of the feelings and experiences of the users of a particular hospice facility concerning the physical environment of that facility. Post Occupancy Evaluation Methodology, which is a process to assess the performance of the built environment after it has been occupied for some time, was employed.

Qualitative analysis of the data revealed three distinct environments within the facility to be of major importance to the users when discussing the physical surroundings. The three separate areas of importance were the grounds, the administrative offices, and the patient care unit.

The findings of the study will be of use to designers, architects, and planners, as well as hospice advocates, as they will assist them in conceptualizing essential components of hospice design and in creating better hospice facilities in the future.

DEDICATION

To all hospice residents, their families and friends, and the people who
compassionately care for them...

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The work on this dissertation was completed through some very eventful years of my life. I would like to thank the many people who have touched my heart, each in their own special way, throughout this endeavor.

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My stay at Portland State University was enriched by the knowledge shared with me by my dissertation committee members. Dr. Margaret Neal made herself available whenever I needed her advice and support. She not only introduced me to this project, but set an example with her dedication to her work. I especially thank her for her friendship and the invaluable comments she provided about my dissertation. Dr. David Morgan inspired me with his knowledge of qualitative

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
LIST OF TABLES	viii
LIST OF FIGURES	ix
CHAPTER	
I INTRODUCTION	1
Purpose of the Study	4
Conceptual Framework	6
Research Questions	13
II REVIEW OF THE LITERATURE	16
PRINCIPLES OF HOSPICE CARE	16
History of Hospice	16
Elements and Philosophy of Hospice Care	18
Free-Standing Inpatient Facilities	22
HOSPICE FACILITY DESIGN	23
PRINCIPLES OF POST OCCUPANCY EVALUATION	33
History of Post Occupancy Evaluation	33
Overview of POE	34
Organizing a POE Project	35

III	METHODOLOGY	38
	Data Collection and Sampling Procedures	39
	Data Coding and Analysis	52
IV	ABOUT THE FACILITY	54
V	FINDINGS: THE GROUNDS	64
VI	FINDINGS: THE ADMINISTRATIVE OFFICES	88
VII	FINDINGS: THE PATIENT CARE UNIT	105
VIII	CONCLUSIONS AND RECOMMENDATIONS	140
	Discussion/Summary	140
	Strengths and Limitations of the Study	149
	Recommendations for Hospice Facility Design	151
	Recommendations for Future Research	154
	REFERENCES	157
	APPENDICES	161
	A: Statement of Informed Consent	161
	B: Oral History/Architectural Intent Interview Guide	163
	C: Staff and Volunteer Focus Group Guide	165

D:	Family and Friend Focus Group Guide	169
E:	Letter of Family Recruitment and Abstract of Study . .	172
F:	Staff and Volunteer Individual Interview Guide	175
G:	Family and Friend Individual Interview Guide	179
H:	Family and Friend Interviews: Supplemental Information	183

LIST OF TABLES

TABLE		Page
I	Physical and Architectural Features (PAF) Checklist	8
II	Elements of Building Performance in Post Occupancy Evaluations	11
III	Interview Contents by User Group	49
IV	Daily Activities That the Facility Did Not Accommodate As Well As Possible	148

LIST OF FIGURES

FIGURE	Page
1. The Setting	55
2. The Floor Plan of Hospice House	59
3. The Grounds, Henningsen House, Front Loading Area	66
4. The Fountain in the Courtyard	72
5. The Gazebo	77
6. Birdfeeders Outside Patient Rooms	83
7. Henningsen House	89
8. Hallway Connecting the Two Buildings	107
9. The Common Area	111
10. Children's Play Section in the Common Area	112
11. The Nursing Station	117
12. A Patient Room	121
13. View From the Patient Rooms	122
14. The Quiet Room	131

CHAPTER I

INTRODUCTION

Improving the quality of remaining life for individuals who are terminally ill and their families is an issue that has been gaining momentum in recent years. This issue has evolved from perceived deficiencies of conventional health care institutions in meeting the needs of people who are in the final stages of their life, when curative measures are no longer deemed appropriate. Evaluations of the existing care of the elderly and chronically ill have prompted criticism of hospitals and nursing homes as places to die. Although most Americans would prefer to die at home, an estimated eighty percent of the American population currently dies in these institutions (Carey, 1986).

In response to perceived deficiencies in care of the terminally ill and their families, there has been a movement toward humanizing conventional health care and making it more holistic (Neal, 1985). Hospice care, which is consistent with this movement, has evolved as an alternative to hospitals and nursing homes. Focusing specifically on meeting the special needs of the dying, the hospice philosophy addresses the desire of terminally ill people to die in a caring environment with loved ones nearby. Hospice care, which is palliative and supportive care rather than biomedical treatment aimed at cure or life prolongation,

has been employed to help the dying and their families cope with terminal illness, and eventually, with death. The aim of hospice care is to care for the terminally ill so that they live as fully and meaningfully as possible for the time remaining to them (Chase, 1986). There is no standard definition of "hospice," and the term has been variously defined. Historically, as noted by Kohut and Kohut (1984:6), hospice was a "medieval name for a way station for crusaders on their journey to the Holy Land; it is now a sojourn for people preparing for life's last station." In 1978 the National Hospice Organization (NHO) adopted the following definition:

Hospice is a medically directed, nurse coordinated program providing a continuum of home and inpatient care for the terminally ill patient and family. It employs an interdisciplinary team acting under the direction of an autonomous hospice administration. The program provides palliative and supportive care to meet the special needs arising out of the physical, emotional, spiritual, social and economic stresses which are experienced during the final stages of illness and during dying and bereavement (Zimmerman, 1986:17).

About 80-90% of hospice care in the U.S. is provided in patients' homes by a hospice home health care team (Siebold, 1992). Many people prefer to stay at home when there are family members or friends who can provide care; and when there is adequate support for these caregivers, home care may be ideal. But, some individuals do not have family or friends to care for them, or their family or friends are too ill or fatigued themselves to continue providing care, and are in need of respite; other individuals' pain and symptoms may be out of control. For all of these individuals, home care may not be possible. Still others would rather not be at home, preferring instead the security and comfort of being in a

specialized inpatient facility, with nurses and others present around the clock.

These are the individuals and families for whom hospice inpatient programs were designed. Inpatient hospice facilities include departments of general hospitals, facilities attached physically or organizationally to a general hospital, and separate free-standing facilities. The inpatient hospice unit has been developed with a special program and philosophy to promote a humane, caring environment to deliver terminal care to the people who cannot be at home in the weeks before they die.

The inpatient free-standing hospice seeks to remedy impersonal and non-homelike conditions that often exist within hospitals and nursing homes and that are inappropriate for caring for the dying. Death in a hospice facility can be peaceful because emphasis is on the comfort and quality of life of the patient and family, and special care is given to their emotional, psychological, and spiritual needs. Hospice treats the symptoms rather than the disease by providing an environment in which to die with dignity rather than actively either prolonging or accelerating death (Kohut and Kohut, 1984).

Although the number of inpatient hospice facilities is growing, information about the ways in which their physical environments enhance or impede user satisfaction and quality of care is still scarce. Specifically, the literature reveals little attempt to systematically examine how architectural factors combine in a hospice setting to respond to the needs of the dying and their families and those who work in those settings (Carey, 1986). Designers, architects, and hospital

planners, as well as hospice caregivers and proponents, should be made aware of the conditions necessary in a hospice program of care to better understand the need for this new building type as a place to ameliorate the problems existing in conventional health care facilities (Carey, 1986). Such information is needed in order to inform the design and renovation of future hospice facilities so that they meet the needs of patients, families, and staff.

PURPOSE OF THE STUDY

Although inpatient hospice accommodation is being offered through many hospice programs, the architecturally distinct hospice unit is still very scarce, according to the Joint Commission on Accreditation of Hospitals, which now develops standards for hospices as well as hospitals and nursing homes (Carey, 1986). The purpose of the research reported here was to study the physical environment (buildings and grounds) of a particular free-standing hospice facility as a case example to identify positive features that could be applied to the design and renovation of other hospices and health care facilities that want to adopt a hospice program of care.

The specific facility studied was Hospice House, now called Hopewell House, which is a facility to take care of people with a terminal illness who have been diagnosed with less than 6 months to live. The original name of the facility will be used here, as that was the name and the program actually studied. Hospice House was an 11-bed free-standing inpatient hospice facility located on four wooded acres in Portland, Oregon, at 6171 S.W. Capitol Highway. One of only

about 15 such facilities in the U.S., Hospice House was an excellent facility for study because its inpatient wing was designed and built expressly as a hospice, unlike other programs, which generally have attempted to adapt, remodel, or convert existing buildings into hospices. Because Hospice House was a free-standing facility, not attached to other health care institutions, it was a hospice in its "pure form." Studying a case in its pure form simplified the research process so that strengths could be easily translated to other hospices and healthcare facilities.

Research in the area of hospice facility design is scarce. In fact, a review of literature revealed only two studies focusing on hospice facility design. The findings of this study contribute to knowledge about the design of hospice facilities in general, and health care institutions that want to provide hospice care in particular. This knowledge will form a sound basis for creating better facilities for care of the dying in the future.

The research reported here used Post-Occupancy Evaluation methodology (POE). POE is a stage of the design process which assesses and evaluates the effectiveness of designed environments after they have been built and occupied for some time. It is a process in which users of the occupied environment give feedback on the performance of the design features that they regularly use, thereby providing insights into the consequences of past design decisions and the resulting building performance (Carpman, 1986; Preiser, 1988). Furthermore, this type of evaluation enables progressive refinement of design so that subsequent design can

emerge from both the successes and failures of earlier versions (Koff, 1980). The study reported here generated data on how users of the particular facility being studied perceive the environment and how they feel about the performance of the facility. It determined how the Hospice House building and grounds were working to meet the needs of those who use them.

CONCEPTUAL FRAMEWORK

In this section the two bodies of work that influenced the conceptual direction of this study are presented: physical resources of sheltered care settings, and the literature on Post Occupancy Evaluation.

Physical Resources of Sheltered Care Settings

The conceptual direction of this study was first influenced by Moos and Lemke's (1980) work on the physical resources of sheltered care settings. Assessing the physical and architectural features of sheltered care settings, Moos and Lemke developed the Physical and Architectural Features Checklist (PAF), which measures physical resources in terms of nine conceptually unified and empirically derived dimensions.

A growing body of literature indicates that physical design and architectural resources contribute to attractiveness of a facility as perceived both by residents and outside observers. It has also been noted that such features can affect the behavior, functioning, well-being, and general life style of elderly people in health

care facilities (Bednar, 1977; Carp, 1976a, 1977; Moos and Lemke, 1980). Carp (1976b) also relates perceived physical attractiveness to tenant satisfaction.

A synthesis of factors discussed in studies conducted to explore the effects of the physical environment in care settings on user morale and satisfaction is included in Moos and Lemke (1980). Listed are the quality of the physical environment; the availability of facilities for social and recreational activities; the provision of prosthetic, orientational, and safety features to enhance resident independence; the amount of public and private space available to residents; and the centrality of location of the facility as judged by users (Carp, 1975; Moos and Lemke, 1980).

Moos and Lemke's Physical and Architectural Features (PAF) checklist is a comprehensive tool developed for assessing such features. The checklist is composed of more than 175 individual items organized into the nine dimensions listed in Table I. Included are questions about the facility's location, its external and internal physical features, and space allowances.

TABLE I
PHYSICAL AND ARCHITECTURAL FEATURES (PAF) CHECKLIST

Dimensions	Subscale Description
1. Physical Amenities	measures the presence of physical features which add convenience, attractiveness, and special comfort.
2. Social-Recreational Aids	assesses the presence of features which foster social behavior and recreational activities.
3. Prosthetic Aids	assesses the extent to which the facility provides a barrier free environment as well as aids to physical independence and mobility.
4. Orientational Aids	measures the extent to which the setting provides visual cues to orient the resident.
5. Safety Features	assesses the extent to which the facility provides features for monitoring communal areas and for preventing accidents.
6. Architectural Choice	reflects the flexibility of the physical environment and the extent to which it allows residents options in performing necessary functions.
7. Space Availability	measures the number and size of communal areas in relation to the number of residents, as well as size allowances for personal space.
8. Staff Facilities	assesses the presence of facilities which aid the staff and make it pleasant to maintain and manage the setting.
9. Community Accessibility	measures the extent to which the community and its services are convenient and accessible to the facility.

Source: Moos and Lemke, 1980, p. 573.

Moos and Lemke (1984, 1980) and Moos, Lemke, and David (1987) describe the nine dimensions in terms of subscales as follows. First, the "Physical Amenities" subscale measures features which contribute to attractiveness, comfort, and convenience of the building and grounds (for example, a homelike design). Second, the "Social-recreational aids" subscale measures features which encourage social interaction and recreational activities (for example, indoor and outdoor seating areas, and a comfortably furnished lounge).

The next three subscales measure features of the environment that aid users in their daily activities. "Prosthetic Aids" measures provision of aids to mobility within the facility (for example, wheelchair accessible areas and handrails in hallways and bathrooms). "Orientational Aids" are features that help to orient users within the facility (e.g., bulletin boards and signs). "Safety Features" are those that enhance user safety (e.g., good lighting, non-skid surfaces, smoke detection devices, and call buttons).

The sixth and seventh subscales assess the extent to which the physical environment of the facility provides residents with flexibility in their activities. The "Architectural Choice" subscale taps the existence of features which give the user choice or options in performing daily functions (for example, individual heating controls). The "Space Availability" subscale assesses the size of special activity areas and the amount of communal and personal space available to each resident.

The eighth dimension, the "Staff Facilities" subscale, reflects the availability and attractiveness of staff-specific areas (for example, staff offices, a staff lounge). The ninth subscale, "Community Accessibility" measures the physical proximity of the facility to the surrounding community resources (for example, the presence of a grocery store and a bus stop within easy walking distance to the facility).

The PAF is a tool for quantitatively describing a facility's physical features. The nine subscales have moderate to high internal consistencies and measure relatively distinct aspects of a facility's architectural characteristics (Moos and Lemke, 1980). According to Moos and Lemke (1980:581), the PAF may be useful "in efforts to produce environmental change, both for indicating potential areas for change and for monitoring the results of these efforts."

In general, the availability of more dimensions and better physical features in a facility is positively related to user satisfaction with the facility.

Post Occupancy Evaluation Elements

The conceptual direction of the research was also influenced by advances in the field of Post Occupancy Evaluation (POE), as discussed by Preiser, Rabinowitz, and White (1988). One of the major aspects of POE is "building performance," which is comprised of factors that can be measured, evaluated, and used to improve buildings (Preiser et al., 1988). As depicted in Table II, Preiser et al. (1988) sort the elements of building performance into three categories--

technical, functional, and behavioral--which they argue are very important in creating an overall experience of the environment.

TABLE II
ELEMENTS OF BUILDING PERFORMANCE IN POST OCCUPANCY
EVALUATIONS

Elements	Description and Examples
1. Technical Elements	elements that deal with health, safety, and welfare of occupants, fire safety, structure, sanitation, ventilation, electrical, exterior walls, roofs, interior finishes, acoustics, illumination, environmental control systems.
2. Functional Elements	elements that deal with activities that buildings contain, human factors, storage, communication, flexibility and change.
3. Behavioral Elements	elements that deal with psychological and sociological well-being of occupants as affected by building design, territoriality, privacy and social interaction, environmental perception, image and meaning, environmental cognition and orientation.

Source: Derived from Preiser et al., 1988.

Technical elements are issues that form the background for the occupants' activities; they usually appear in building codes. Included are things such as the

building, safety, sanitation, and ventilation of the structure, as well as the performance of roofs, walls, illumination, acoustics, and electrical and environmental control systems (Preiser et al., 1988).

Functional elements of building performance have to do with activities and functions that take place within buildings. These elements include access, security, parking, utilities, spatial capacity, adaptability, communication, and circulation (Preiser et al., 1988). These functional elements support activities within buildings, and they must be responsive to the physiological needs of those who use the building (Preiser et al., 1988). Most of these functional criteria are site-specific and will vary according to the type of facility being evaluated. In a health care facility, for example, the building should be flexible and specialized, able to accommodate large patient beds, wheelchairs, kitchen carts, etc.

Behavioral elements, the third component of building performance, are concerned with the impact of the built environment upon the psychosocial well-being of occupants (Preiser et al., 1988). Here, the physical environment and the building design are believed to affect the occupants' activities and satisfaction with the built environment. Preiser et al. (1988) discuss a number of issues that are addressed by behavioral elements in POE's. These issues include territoriality, where the size, shape, definition, location, and relationship of spaces and individuals is examined; privacy and ability to control social interaction within the premises; environmental perception, which assesses whether users perceive the building as dull or stimulating; image and meaning, which reflect aesthetic qualities

of the building; and environmental cognition and orientation, which consist of the elements that help create a mental map in the minds of users so they will be able to orient themselves once they are in the facility.

RESEARCH QUESTIONS

The primary research question addressing the purpose of this study was, "What are the physical and environmental features/resources that contribute to user satisfaction with hospice facilities?" This question was addressed by obtaining the perceptions of four different groups of users: patients, family members, volunteers, and staff. Questions 1-4 addressed these different user groups.

1. "What are the patients' feelings and experiences about the quality of the physical environment of the facility?"

The dimensions explored to address this question included patients' feelings and experiences concerning:

- 1a. the layout of the facility.
- 1b. specific physical areas within the facility.
- 1c. personalization and choice within the patient room.
- 1d. activity on the premises.
- 1e. the physical comfort of the environment.
- 1f. regulation of social contact/privacy in the environment.
- 1g. the symbolic meaning conveyed by the environment.
- 1h. the shortcomings of the facility.
- 1i. wayfinding and orientation on the premises.

2. "What are the feelings and experiences of the significant others about the quality of the physical environment of the facility?"

The dimensions explored to address this question include the significant others' feelings and experiences concerning:

- 2a. the layout of the facility.
- 2b. specific physical areas within the facility.
- 2c. activity on the premises.
- 2d. the symbolic meaning conveyed by the environment.
- 2e. the shortcomings of the facility.
- 2f. typical visiting activities.
- 2g. wayfinding and orientation in the facility.
- 2h. regulation of social contact/privacy on the premises.
- 2i. the accessibility of the facility.

3. "What are the volunteers' feelings and experiences about the quality of the physical environment of the facility?"

The dimensions to address this question included the volunteers' feelings and experiences concerning:

- 3a. the layout of the facility.
- 3b. specific physical areas within the facility.
- 3c. activity on the premises.
- 3d. the symbolic meaning conveyed by the environment.
- 3e. the shortcomings of the facility.
- 3f. accessibility of the facility.
- 3g. volunteer-specific facilities.

4. "What are the staff's feelings and experiences about the quality of the physical environment of the facility?"

The dimensions explored to address this question included the staff's feelings and experiences concerning:

- 4a. the layout of the facility.
- 4b. specific physical areas within the facility.
- 4c. activity on premises.
- 4d. the symbolic meaning conveyed by the environment.
- 4e. the shortcomings of the facility.
- 4f. accessibility of the facility.
- 4g. staff-specific facilities.

CHAPTER II

REVIEW OF THE LITERATURE

Literature related to the study reported here falls into four areas: (1) principles of hospice care; (2) hospice facility design; (3) physical and architectural features; and (4) principles of post-occupancy evaluation.

Principles of Hospice Care

History of Hospice

The hospice philosophy of care has existed throughout the world for centuries. The word "hospice" is believed to have derived from the Latin word "hospes" meaning both host and guest (Stoddard, 1978). The term later developed into words such as hostel, hospitium, hospital, and hotel (Stoddard, 1978:3), and was interchangeably used with these words. In the middle ages hospices were way stations to provide rest and sojourn for pilgrims on a difficult journey (Kohut and Kohut, 1984; Stoddard, 1978). To find the origins of hospice care, we must go back to the hospice of Turmanin in Syria, about 475 A.D. and even before that to Rome, where Fabiola, a Roman matron, gave food and rest to travelers, the sick, and the dying pilgrims who were returning from Africa (Carr and Carr, 1983; Koff, 1980; Stoddard, 1978). Throughout Europe, religious groups, such as the

Knights Hospitalers of the 11th century, devoted themselves to providing physical and spiritual comfort for travelers, pilgrims, the sick and the dying (Carr and Carr, 1983; Koff, 1980; Stoddard, 1978). Centuries later, examples of hospice places were found in 17th century France, 18th century Germany, and Ireland (Carr and Carr, 1983). In the early 1900's a group of Irish women founded St. Joseph's Hospice, which houses thirty beds to take care of the dying (Carr and Carr, 1983; Koff, 1980; Stoddard, 1978).

In the United States, the need to take care of the dying was also of concern. Another group of Irish laywomen established a place to care for dying people in New York City in the early 19th century. Other examples of U.S. hospice establishments were seen in the 1900's in Pennsylvania, Massachusetts, Georgia, Minnesota, and Ohio, most of which are still operating (Koff, 1980). In the late 1940's, Dr. Cicely Saunders, the founder of the modern hospice, sowed the seeds of the hospice philosophy with a friend of hers who was dying in a London hospital. Together, they envisaged a place that would take care of the total needs of dying patients, with pain control, care for the entire family, bereavement counseling, and multidisciplinary teams as major elements of this care (Koff, 1983) and in which dying people could die with peace and dignity (Buckingham, 1983). Dr. Saunders' dreams of establishing a religious and medical foundation to take care of the needs of dying people came true in 1967, when St. Christopher's Hospice opened in London (Carr and Carr, 1983; Siebold, 1992). St. Christopher's was planned to combine the old concept of hospitality and care with

the modern skills of a hospital (Buckingham, 1983). In the 1960's Dr. Saunders came to the United States to speak to a group of people interested in the hospice idea in New Haven, Connecticut. Her speech was the beginning of the formation of the first modern hospice to be established in the United States in the early 1970's (Buckingham, 1983; Carr and Carr, 1983; Koff, 1980). Hospice, Inc., or the New Haven Hospice as it is now called, was developed with an emphasis on home care and was referred to as a "non-complete hospice" because of its lack of an inpatient facility (Koff, 1980:12). The first complete, free-standing hospice in North America opened in 1977 in Tucson, Arizona, and was known as Hillhaven Hospice (Koff, 1980). The following year, the New Haven Hospice opened an inpatient facility to supplement its home care (Burnell, 1993).

Carr and Carr (1983) articulate that the movement toward hospice care is clearly growing in the United States, and that manifestations of this growth can be seen in the development of national hospice organizations, hospice groups, and international seminars on hospice topics. Siebold (1992) also reports that by 1990 1450 hospice programs had been established in 39 states.

Elements and Philosophy of Hospice Care

As described earlier, the word "hospice" connotes a calm vision of death, where people with a terminal prognosis spend their final days in comfort with family and friends nearby (Paradis, 1985). The hospice movement's leaders advocated a combination of medical treatments and naturalistic practices, making

the hospice concept unlike other health care methods (Siebold, 1992). "In its pristine, ideal form, hospice care welcomes 'guests' into a 'high-person, low-technology' setting, unsegregated from sights, sounds, persons, and activities of the world of wellness" (Paradis, 1985:3). Since it is a comprehensive program to care for people who are terminally ill, for whom therapeutic treatment is no longer pursued, its emphasis is on "care instead of cure, and comfort instead of rehabilitation" (Koff, 1980:12).

The modern hospice program was intended to address the emotional, physical, and spiritual needs of dying patients and their families (Siebold, 1992). "Modern hospices are not just comfortable places to spend one's last days, but comprehensive treatment centers for terminally ill patients and their families" (Siebold, 1992:93). In hospice care, the patient and the family are the unit of care (Buckingham, 1983; Paradis, 1985), and the emphasis is to control the pain of the dying person, and to console the family. If the family is going to be involved with the care, the members must be supported with services, education, counseling, and whatever else they need (Burnell, 1993). Burnell (1993) further explains that the better informed family members are, the less anxiety exists because the hospice staff helps families and patients with the psychological problems that develop during the patient's illness and during the period of bereavement. Paradis (1985:3) states that "the chief objective of hospice care is to provide supportive care for the dying person, where the principal products are nursing, palliative care, and counseling services." Paradis (1985:4) continues by adding that "care for the

patient must center on pain and symptom control provided by an interdisciplinary team of health care professionals including physicians, nurses, social workers, clergy, and specially trained volunteers."

Neal (1985) notes that the goal of hospice care is to help patients continue life as usual and be able to do whatever is significant to them and not be treated differently because they are dying. "Hospice care attempts to reach this goal through the palliation of symptoms, the provision of a secure and caring environment, the provision of expert care, and the provision of assurance that the patient will not be abandoned" (Neal, 1985:49). Buckingham (1983:16) lists the principles that constitute hospice care as follows:

- . The patient needs to be as symptom-free as possible so that his or her energy can be used to live the remaining portion of life as fully as possible.
- . Doctors and nurses must be easily accessible to the patient and the family members.
- . Continuity of care should be sustained by the same health team.
- . The patient's and the family's life style must be maintained and their life philosophies respected by the professional caregivers.
- . Loneliness, isolation, and the fears of abandonment must be addressed by the professional caregivers when these symptoms surface.
- . Twenty-four hour care must be available to the patient and the family members.
- . A multidisciplinary team must be available for support, counseling, and advice. This team may include doctor, nurse, social worker, clergyman, and lawyer.
- . The patient should be treated as a person, not as a disease, by all caregivers.

- . A family facing the death of a loved one needs support and advice from health care professionals.
- . The terminal patient must be allowed to give as well as receive.
- . We must perpetuate among the dying their continuing self respect and identity as persons with freedom from being a burden to others.
- . The family must feel a sense of participation in caregiving and decision making.
- . The primary care person tending to a patient needs support and occasional relief from duties to the dying person.

A comprehensive synthesis of several descriptions of hospice care, including the standards of the National Hospice Organization, is given in Neal (1985:47-48) as follows:

- a. both the patient and the family are considered the unit of care;
- b. care is individualized, or personalized, to the needs of each patient and family;
- c. psychological, social, and spiritual needs are addressed as well as physical needs;
- d. care is provided by a multidisciplinary team of providers including volunteers;
- e. control of pain and symptoms is of paramount importance; palliation, not cure, is the goal;
- f. the patient and the family are involved in care-related decisions;
- g. care is provided in surroundings as "normal" as possible, preferably in the patient's own home;
- h. bereavement care and counseling are provided to the patient's family members during and after patient's death;
- i. care is available 24 hours per day;

- j. patients are accepted based on need, not ability to pay; and
- k. staff's needs are recognized and attended to, such as through the provision of counseling.

Free-Standing Inpatient Facilities

As stated earlier, most hospices in the United States provide a home-care program, where a hospice team or a hospice person goes into patients' homes to offer assistance to the patient and family. Although the provision of inpatient services is one of the goals of the hospice concept, not all hospice programs do offer inpatient care. Inpatient hospice facilities have the advantage of offering the terminally ill person and his or her family a flexible and non-restrictive, environment unlike most acute care hospitals (Buckingham, 1983; Zimmerman, 1986) which have visiting restrictions and offer aggressive therapy and impersonal care, in addition to an institutional environment (Buckingham, 1983). As discussed earlier, inpatient hospice facilities have mostly developed in the United States as being affiliated in some way to acute care hospitals. Burnell (1993) reports that these are either hospital-based units within a general hospital, or are free-standing, hospital-affiliated units associated with a specific hospital. Buckingham (1983:41) reports from a sample study of American hospices that, "Only two out of ten hospices are independent from hospitals." Although both free-standing and affiliated hospices try to offer a homelike environment to patients and their families, independent, free-standing facilities have more freedom to design buildings that enhance the hospice concept (Buckingham, 1983).

Free-standing hospice facilities are independent economic enterprises which function autonomously, not under the auspices of any other institution or agency (Kohut and Kohut, 1984; McDonnell, 1986), and are governed by their own administration, staff, and board of trustees (Kohut and Kohut, 1984). As Burnell (1993) explains, the free-standing facilities provide the care and the atmosphere needed for comfort and pain control, but no facilities for acute medical care. Although no aggressive treatment is given in a hospice, an open relationship with the hospital is maintained in case its services are needed (Burnell, 1993). The most visible aspects of free-standing facilities to the surrounding community are the building and grounds. The facility usually includes homelike features, such as small lounges for private conversation, bedrooms for visiting family members to spend the night, kitchens for family use, chapels for services as well as for private use of patient and family, viewing rooms for family to spend some time with the deceased, playgrounds for children, and gardens and private patios for patient and staff enjoyment (Buckingham, 1983). Buckingham (1983) continues to describe the free-standing hospice environment as having a non-institutional atmosphere with homelike decorations and furnishings, such as plants, wall decorations, and colorful furniture.

Hospice Facility Design

As discussed earlier, research on the design of environments suitable for hospice facilities is very scarce. In fact, most of what has been reported about

hospice design is not based on empirical research. A review of the literature uncovered only two studies about the design of hospice facilities which are based on empirical research. One study was conducted by Carey, and the other one by Koff and Ittleson.

Deborah Carey (1986) studied a total of forty-eight hospice units in the United States by means of mail questionnaires and some site visits. She reports that in addition to patient rooms, "the four architectural elements that are present in most hospices include family rooms, kitchenettes, indoor gardening, and art work; and are followed in frequency by nurses' station, separate wings, outdoor gardening, dining rooms, and multipurpose rooms" (Carey, 1986:184). Results from her sample reveal that some hospices lack transition spaces, viewing rooms, and staff retreat rooms (Carey, 1986).

Although Carey's (1986) research on hospice environments is one of the first of its kind in the literature, she did not collect data from hospice patients and family members. However, the data she collected from staff revealed several important characteristics for hospice facilities, as described below.

Homelike design was one of the major requirements of hospice architecture (Carey, 1986). This can be achieved by providing privacy and community gradients (Carey, 1986:215), which is what Chan (1976) had in mind when he was talking about transition spaces--alcoves or areas where people can stop, retreat, and collect their thoughts. Flexibility, adaptability, duplication, and multi-functionality of hospice areas are other features that allow a homelike atmosphere in the facility

(Carey, 1986). Areas within the facility, including the patient rooms, should be flexible and adaptable to different needs and to multi-purpose uses (Carey, 1986).

Another component of homelike hospice design revealed by Carey's (1986) sample is the contribution of furnishings and finishes to the indoor and outdoor spaces of a facility. She also found that chairs close to the patient's bed "for visiting, hand-holding with the patient, and reading to the patient" are very important (Carey, 1986:223). Another important element for a homelike design in a hospice facility are attempts to promote "personalization, individualization, participation, and choice" by the user (Carey, 1986:223). "Hospices very definitely designate these characteristics as being essential to hospice care" (Carey, 1986:224).

The incorporation of nature and natural elements into the design of the facility will also make it more homelike, and will affirm the cycles of life and death (Carey, 1986). Connections to nature and spirituality can be achieved by providing a chapel, meditation room, and viewing room; interior and exterior gardens; and proper lighting in each room (Carey, 1986). "The architectural use of natural materials -- wood, stone, brick, adobe-- and the presence of growing life , like children, pets, and plants exhibit the diversity and charm of nature within the hospice" (Carey, 1986:230). The last element in Carey's (1986) sample of hospice facilities was the presence of institutional elements such as laundry, pharmacy, and laboratory facilities; fire safety, cleanliness, and durability; and climate control (Carey, 1986).

The second and final empirically-based study of a hospice facility was a post-occupancy evaluation of a hospice facility (Koff and Ittleson, 1980). That study was conducted in 1978 by the University of Arizona, Department of Public Policy, Planning, and Administration. The facility studied was the Hillhaven Hospice, located in Tucson, Arizona. The findings of this study help to illustrate viewpoints of different users of the facility; it was the only study about a hospice building that involved patients and family members in its survey.

The findings of this study (Koff and Ittleson, 1980) reveal that the answers to questions regarding user satisfaction with the hospice building frequently dealt with the social environment (i.e., attitudes of personnel), instead of with the physical environment of the facility. On the other hand, the major reason for dissatisfaction with the building was its institutional layout (because the facility had retrofitted an existing health care facility). A second area of dissatisfaction was found to be the location of the hospice and its entrance; wayfinding inside the facility was not a problem for most of the respondents, however.

Although almost all of the respondents thought a chapel was necessary in a hospice, the staff and volunteers hardly used it, and less than one half of the family members used it. The viewing room, which is a room where patients are moved to after death for viewing by family and friends, was also mentioned by the respondents as a necessary part of hospice, but it was hardly used by any of the respondents.

Overnight accommodation for family members was also approved of by all the respondents. The kitchen facility, however, was reported to have a low level of use by users. The findings also indicate that a staff lounge was a necessary part of hospice, but in the case of Hillhaven Hospice, it was an ill-equipped, unsuitable room. The problems mentioned were its small size and lack of ventilation and windows.

The post-occupancy evaluation (POE) of Hillhaven Hospice also included an approximately 30 hours of behavior mapping. The most frequent patient activities were lying in bed; visitor and volunteer activities were sitting and talking in patient rooms; and staff activities were conducting professional duties without the patient, where most of staff time was being spent at the nursing station or in their offices.

The Koff and Ittleson (1980) POE was different in several ways from the study conducted here. First, the Hillhaven Hospice, unlike Hospice House, was a remodeled building which retrofitted an existing skilled nursing facility into a hospice, instead of being a specially designed free-standing hospice facility. Second, although the Koff and Ittleson (1980) study looks at satisfaction with the layout of the facility, there is a strong reliance on satisfaction with the hospice program. The research conducted here was specifically attuned to the layout and structure of the facility. Third, the Koff and Ittleson (1980) study used structured, fixed-alternative (closed) questions and surveys. Thus, the range of response alternatives used for each question was not as comprehensive as would be revealed in a qualitative study with open-ended questions.

The review of the hospice literature uncovered a number of other articles concerning the design of hospice facilities which were not based on empirical research. These articles simply reported the beliefs of the writers concerning the necessary features of a hospice facility. For example, Paradis (1985) stated that it is important to pay careful attention to the environment created in the inpatient hospice unit, but did not systematically examine it. It has been reported that use of color is important in setting a soothing and cheerful tone (Chan, 1976; Paradis, 1985), and in driving fear away (Chan, 1976), and "should be used to make patients feel and look better" (Paradis, 1985:140). Light is also discussed with respect to its role in setting a mood. Paradis (1985) believes that proper light and sunshine assist in counteracting problems of pain, anxiety, restlessness, and confusion and should, therefore, be used in hospice facilities. Floor and table lamps provide a warmer and a more personal feeling, and outside light and sunshine should be used to the fullest to alleviate sensory deprivation (Paradis, 1985). Provision of privacy is also important in a hospice facility. Koff (1980:125) argues that "privacy could be achieved if there is the ability to control the environment to suit changing personal needs, accommodate visitors, or provide periods when the individual can be alone". He also argues that privacy should not be confused with isolation. This confusion could be minimized by enhancing the patient's ability to control the environment, such as through having flexibility in arranging the room (Koff, 1980). Ability to control the environment also "helps to

establish a sense of self esteem and emphasizes the individual nature of hospice care" (Kriebel, no date:226).

As the empirical studies suggested, one of the most occupied and important areas, and a large component of a hospice facility, is patients' bedrooms. It is reported that the size of the rooms, the number of beds, and the furnishings in a patient's room are of major concern (Koff, 1980; Kriebel, no date). Hospices have developed using different room arrangements, and it is still debated whether four-bed rooms, two-bed rooms, or one-bed rooms are appropriate to the particular needs of American patients (Koff, 1980; Kriebel, no date). Kriebel (no date) also states that lighting in the patient room should be variable and should permit different preferences. Although sophisticated medical machinery may not be appropriate in a hospice patient's room, Koff (1980) states that it is important to provide space for this equipment in case it is necessary. "A lounge chair in the room and space for the patient to transfer from bed to wheelchair is another important feature to be available to encourage movement" (Kriebel, no date:225). Adequate space may also be necessary for several visitors at a time. Kriebel (no date) reports the physical means of providing patient control and independence to include call buttons, direct and remote control of lighting, heating, ventilation, television, and telephone. It is also noted that the psychological control of areas is also essential for identifying and maintaining a sense of personal value. "This sense of control of the area is brought about by the use of personal objects to demarcate the territory" (Kriebel, no date:226). Koff (1980) also argues that every

opportunity should be provided to allow patients to personalize their rooms with their own possessions, such as plants, pictures, blankets, and even pets. Another very important feature of the patient room, as discussed by Kriebel (no date), is the view from the bed, because it is the bed where patients spend the majority of their time (Kriebel, no date). The view could be within the room; from the room to other interior spaces of the facility, so that the patient is indirectly able to participate in the activities of the facility; and also from the room to the outdoor space and nature, so that the patient could attempt to reveal the passage of time (Chan, 1976), and reduce fear and stress (Kriebel, no date). Views of the street activity and arriving visitors would also help the patient maintain continuity with the outside world (Kriebel, no date).

Kitchen facilities have also been discussed as essential elements in planning for hospice facilities (Koff, 1980; Paradis, 1985). In many cultures, social activity, relaxation, and family sharing is often accompanied by food. The hospice kitchen (provided for use by family and patients) should permit family meals and private dining. Preparation, cooking, and reheating of food prepared at home should also be allowed in hospice kitchens (Koff, 1980; Paradis, 1985). The kitchen area, like other parts of the hospice facility, should be accessible to persons in beds or wheelchairs (Koff, 1980), as well as to other users of the facility.

Another item discussed throughout the literature as a necessary part of any hospice facility is the provision of space for patients' families. A family room allows a common meeting place for patients to interact as well as space for family

members and staff (Koff, 1980; Paradis, 1985). It is best to make provisions for overnight stays of a family member in the hospice facility either in the patient's room, or in a self-contained guest room, lounge, or a living room (Koff, 1980; Paradis, 1985).

Ideal space for staff use includes comfortable working areas, proximity to patients, equipment, and supplies, as well as "staff only" areas where the staff can retreat and restore their capacities (Koff, 1980:133; Paradis, 1985). "Staff only" areas include a Quiet Room for reflection and privacy, and a staff lounge to get together with other staff away from patients and families (Koff, 1980).

Another important element of the hospice structure as discussed by Carey (1986) and Kohn (1976) is a viewing room, which has been reported in the literature as having a therapeutic effect on the survivors. The viewing room is for the purpose of providing a private setting for families to grieve over the body after death (Koff and Ittleson, 1980).

Accommodating the presence of children has also been discussed as a major part of hospice facilities (Koff, 1980). Children's play areas with games and toys and outdoor recreational areas could be provided in a hospice facility so that children are encouraged to come to the facility, and at the same time are able to "feel at home" in the facility (Koff, 1980).

Lo-Yi Chan, one of the first architects in the U.S. to design a free-standing hospice facility, attempts to relieve anxiety in the hospice facility through a system of transitional spaces (Chan, 1976; Kohn, 1976). The series of transitions begins

at the street, with the driveway to the building; once you get inside the building, transition places such as the hallways and alcoves continue to provide retreat before or after visiting a loved one (Kohn, 1976). The transition spaces give the users an opportunity for withdrawal and retreat to allow them to understand their feelings.

The hospice should be small in scale and size to be as homelike as possible, and, although "safety and convenience features must be provided, they can be offset with a decor featuring warmth of colors, fabrics, and furnishings" (Koff, 1980:134). The atmosphere of the facility should communicate to patients their importance as individuals (Kriebel, no date), and family members should be made aware of their importance in the program (Koff, 1980). Special attention should be given to individual and cultural preferences in terms of number of persons per room, room sizes, and privacy. Specific modifications should also be allowed for people with different ethnic backgrounds, family sizes, and regional characteristics (Kriebel, no date).

The design propositions of the empirical research and the features purported as important in the literature about hospice facility design are tested in the study repeated here, and serve as a basis for the research questions.

PRINCIPLES OF POST OCCUPANCY EVALUATION

History of Post Occupancy Evaluation

Post-Occupancy Evaluation (POE) is recognized and valued as a process that can assess and improve the performance of the built environment after it has been occupied for some time (Rabinowitz, 1989). It is a stage of the design process in which user participation is valuable, where users can contribute to the building and grounds evaluations by helping to identify satisfactory and unsatisfactory features of the design. Users of the environment can give feedback on the performance of the design features they regularly use, and they can help identify problem areas and make recommendations about changes in design and related policies (Carpman, 1986; Preiser, 1988).

During the past twenty-five years, Post Occupancy Evaluation (POE) has emerged as a distinct area of research, scholarly activity, and application (Rabinowitz, 1989). The beginning of the field is marked by the systematic approaches to environmental analyses and building performance in the 1960's and early 1970's (Preiser et al., 1988; Rabinowitz, 1989).

The 1960's saw the growth of research on human behavior and building design, which led to the creation of the field of environmental design research. Early POE efforts during this period were focused on institutional settings, such as college dormitories, medical centers, and schools (Preiser et al., 1988). During the 1970's the scope of POEs increased significantly. Influential POEs

were conducted mostly in the area of public sector housing and institutional facilities. For example, Oscar Newman's (1972) research on crime in high-rise public housing was a critical influence in the field of housing evaluation. Other POE projects conducted in the 1970's and 1980's included multi-family housing evaluations, housing satisfaction criteria studies, and school and office planning studies and nursing home studies, some of which were funded by the federal government (Preiser et al., 1988). Because of the significant increase in use of POEs in evaluating buildings in the 1970's, a body of techniques was developed which became the foundation of this discipline (Rabinowitz, 1989). Due to advances that occurred in the field, POEs have now become a widely accepted and used tool in assessing how buildings-in-use actually perform. In the 1980's, POE developed into a discipline of its own, where a number of advances in theory, method, and application were developed (Preiser et al., 1988). Today, POEs are commercially accepted and routinely used in evaluating private sector facilities (Farbstein, 1989).

Overview of POE

Although many definitions of post occupancy evaluation have been developed, a particularly useful working definition is proposed by Zimring and Reizenstein (1980:429): "POE is the examination of the effectiveness for human users of occupied and designed environments." By effectiveness is meant the

"many ways that physical and organizational factors enhance achievement of personal and institutional goals" (Zimring and Reizenstein, 1980:429).

A POE study or research program generally focuses on a single type of setting and tries to describe that setting. An implication of this descriptive approach is that POE is almost invariably conducted in field settings (Zimring and Reizenstein, 1980). Another aspect that distinguishes POE from other types of research is that it is aimed at application and is intended to be used to improve the environment/setting under study. It is meant "to influence the complex system of users, designers, planners, builders, and managers of designed environments" (Zimring and Reizenstein, 1980:430) by conceptualizing essential components of design, so that sound design decisions can be made based on the strengths of earlier designs. This focus on refining and improving the designed environment is what differentiates POE from more general environment and behavior research or applied social science research which usually focus on social processes within designed environments (Zimring and Reizenstein, 1980:431).

Organizing a POE Project

Post Occupancy Evaluations consider both the successes and failures of building performance and are used "to seek facts and not faults" (Preiser et al., 1988:x). There are several factors to consider in organizing a POE project prior to any data collection.

As Preiser et al. (1988) suggest, first and foremost, a liaison with the client organization should be established so that the nature of the POE and the activities involved are explained, and background information regarding the organization is identified and obtained by the researcher. The initial stage also includes the development of a protocol, where appropriate research methods and analytical techniques are determined.

After the above initial planning tasks are developed, the next phase of the POE project is conducting the POE. The main tasks at this stage are data collection and analysis. Preiser et al. (1988) describe some typical data collection methods that can be used singularly or in combination when conducting a POE. These include evaluation of archival records, discussions with the management regarding the performance of the building, walk-through evaluations, and interviews.

Historical data pertinent to the building are obtained as part of archival evaluation. This method may include evaluation of floor plans, repair records, and space utilization schedules. As stated in Preiser et al. (1988), this does not have to occur on the building site.

The second data collection method discussed by Preiser et al. (1988) is conducting open-ended interviews with the facility managers and other key informants on space planning and building performance issues. This type of data collection will represent the management's perspective about the successes and failures of the given facility.

Following the discussions with management, the research team may conduct a walk-through evaluation addressing the issues raised earlier (Preiser et al., 1988). In addition, direct observations and photography may be used to augment the findings (Preiser et al., 1988).

The final data collection technique is the use of interviews with selected personnel who are responsible and familiar with the facility (Preiser et al., 1988). In this stage, the issues raised in the previous phases of data collection will be addressed.

Preiser et al. (1988) state that consideration of appropriate methodology to use in a POE is very critical, and when feasible, a multi-method approach should be employed in order to enhance the credibility of the findings.

A major task during and after data collection is the analysis of data. Particular attention needs to be given to the interpretation of results, so that all the findings are integrated into useful patterns, and relationships among the factors examined are indicated (Preiser et al., 1988).

The last phases of the POE process are to draw conclusions, to report the findings, and to make recommendations. As a result of this phase, the building problems and successes will be indicated, and thus, short-term solutions may be applied. Also, long-term planning to resolve major environmental and space problems may take place. Finally, findings of the POE may be fed into design criteria databases to help improve the quality of future buildings (Preiser et al., 1988).

CHAPTER III

METHODOLOGY

Because this study explored a relatively new area of research, and there is not a lot of literature about free-standing hospice design and user satisfaction, the goals of this study were exploratory. Thus, a qualitative case study approach was used. Qualitative research methods have become increasingly important modes of inquiry for the social sciences (Marshall and Rossman, 1995). Using such a method enabled the description and development of an understanding of how the physical structure of Hospice House functioned within its real life context. The study evaluated the physical environment of an inpatient free-standing hospice facility using information from family and friends of patients as well as staff and volunteers of the hospice. The focus of attention was the perceptions and experiences of the users of the facility.

A qualitative researcher combines several data collection methods and uses many rich sources of data that are available to increase the body of knowledge about something (Marshall and Rossman, 1995). In the case of this study, the experiences of users were used to explore areas of satisfaction and concern about the physical structure of a specific hospice, and also to increase knowledge about hospice design and planning.

Post Occupancy Evaluation (POE) methodology was employed in the study to assess the performance of the built environment and to identify satisfactory and unsatisfactory features of the design. Central to any POE study is the selection of the processes and the evaluation tools/techniques to be employed in measuring the chosen aspects of building performance (Preiser et al., 1988). There are a wide variety of processes/tools available which may be used singularly or, preferably, in combination in a POE. These include interviews, questionnaires, archival and historical records, user diaries, walk-throughs, observations, behavior mappings, photography, videos, and audits (Preiser et al., 1988; White, 1989).

The research described here used a combination of historical data (oral history interviews with people involved in the original design of Hospice House), pilot interviews, focus group interviews, and individual interviews. Informal observations through several walk-throughs and while collecting the data and photography were also used whenever it was feasible.

DATA COLLECTION AND SAMPLING PROCEDURES

At the time of data collection, the staff at Hospice House was composed of three occupational categories: hospice services (nursing, counseling, social services, pharmacy, and therapy); general services (dietary and kitchen, housekeeping, operations and maintenance); and administrative services (administrative, community education, and development). The volunteers of Hospice House were composed of three different categories: direct patient

services; general services (administrative and clerical); and governance (board of directors).

Following Portland State University Human Subjects Research Review Committee approval, selected study participants were informed about the study in a letter from the Director of Hospice House and then contacted by telephone by the Director of Hospice House or by the Director of Volunteers. Once participants had agreed to participate, they were contacted by the researcher. After the research study was explained, the individuals were discretely and sensitively asked to participate. Consistent background information regarding the purpose of the study was provided to each participant. As the literature on qualitative research recommends, uniformity, consistency, generality and neutrality regarding the purpose of the interviews was maintained in all advance communication (Marshall and Rossman, 1995; Morgan, 1988). The statement of informed consent distributed to the participants is contained in Appendix A. The next section describes the data collection and sampling procedures that were used.

Oral History of Design

Three people who played a key role in the design of the facility were interviewed to identify what the original goals were in designing the space as it is. Individual interviews were conducted with the architect and with the interior designer of Hospice House to discuss the configuration of spaces and the rationale for the materials, colors, textures, and design elements that were used. An interview was also conducted with one of the co-founders of Hospice House; the

other co-founder had died by the time of data collection. The one co-founder who was interviewed had the vision of creating the facility, and her original ideas and intent helped the architect and the interior designer in designing the facility.

Appendix B contains the oral history/architectural intent interview guide.

Pilot Interviews

Face-to-face pilot interviews were conducted with key informants to serve as an exploratory step in helping to identify major issues about the physical space of the facility. These face-to-face interviews with staff were unstructured and informal, and served to identify topics for discussion by the focus groups that followed. The pilot interviews explored with the informants the building and grounds and what they thought would be patients' and families' areas of concern with regard to the building and grounds.

Focus Groups

Focus groups are a qualitative data collection technique borrowed from marketing research (Bechtel, 1989; Krueger, 1988; Morgan, 1988; Morgan and Spanish, 1984). These groups bring people together in a group discussion which concentrates on their personal feelings and perceptions. Focus groups are thus valuable for their ability to collect data from group interaction when topics are to be explored. Frey and Fontana (unpublished) assess the use of the focus groups for the initial or exploratory phase of a research project in order to arrive at a better understanding of the general context under study. As Frey and Fontana (unpublished) believe, the focus group discussion will serve to "solidify the

researcher's image of the reality of a setting," so that in the future questions will be asked that best reflect the purpose of the study. The researcher selects the topic of interest and leads the group discussion. Morgan and Spanish (1984) have recommended a moderator style which allows for minimal involvement in the actual discussions.

In this study, focus groups were used in an exploratory manner to get a general understanding of the physical aspects of the facility, to provide for a discussion of users' experiences with the building and grounds of the facility, and to identify the specific issues to be covered in detail in face-to-face interviews.

The areas of questioning for the focus groups were identified by examining the elements of hospice design discussed in the literature, the Physical and Architectural Features checklist, and the Post Occupancy Evaluation checklist, as well as the issues that were revealed in the pilot interviews with staff and volunteers. Appendices C and D contain the focus group interview guides.

Each focus group consisted of 5-7 participants and took place at a formally arranged meeting at the facility. The focus groups followed a structured program of questions asking the participants to recount their experiences with the facility and to give as many examples as they could. The focus groups incorporated the use of stimulus material to open up the discussions. Photos, pictures, and floor plans of different areas of the facility were used to trigger the respondents to remember and recount their experiences with the physical environment. Once the respondents started talking, they prompted each other to expand on what was being

discussed. The interviewer (the author) maintained a passive, nondirective role. The series of events that users had undergone while at the facility, as well as a range of experiences and examples about what users felt, as revealed in the focus groups, determined the dimensions to be evaluated and explored in detail in face-to-face (personal) interviews.

Staff and Volunteer Focus Group. The first focus group included seven users of the facility who were either full-time staff or part-time volunteers. Participants of the staff and volunteer focus group comprised a convenience sample of staff and volunteers who were present for a final Hospice House staff meeting. Participants were notified by the Director of Hospice House, in advance, that there would be a focus group interview following the staff meeting and that participation would be voluntary. It was also explained to the staff and volunteers that self-selection for participation in the focus groups should be based on familiarity with the facility, and the ability to articulate concerns.

Participants represented the three occupational categories of hospice services, general services, and administrative services. These data allowed a preliminary analysis of staff and volunteer perceptions and experiences and were analyzed to identify the issues of concern to be explored in detail in the upcoming individual interviews with staff and volunteers.

Family Members and Friends Focus Group and Individual Interviews. Following data collection with staff and volunteers, family members and friends of previous Hospice House patients were asked to participate in a focus

group or face-to-face interview. Again, this group identified issues of concern or areas of satisfaction about the physical structure of the facility to be explored in greater detail in follow-up individual interviews with ten family members or friends.

A first attempt to select family members and friends for participation in the study was made by the Director of Hospice House. She had provided a list of family members and friends to the Director of Nursing and the Head of Patient Admissions and had asked them to identify people from an alphabetized list of patients whose primary contacts as listed on the Hospice House database could be contacted. Twenty families were identified based on the following criteria: willingness to discuss things about Hospice House, those who are articulate, those who had either predominantly positive or negative feelings about the facility, and those whose relative had died at least six months earlier.

This sampling procedure allowed a twenty percent response rate (four families responded). The Director of Hospice House was contacted by the researcher, and the low response rate was discussed. A major reason was the recent closure of Hospice House, which was announced to all primary contacts of Hospice House patients just a few weeks prior to the contact for the study. A need for random selection of family members was also discussed. The researcher asked for a way to assist in a second round of contacting family members and friends without compromising confidentiality, and yet enabling recruitment of a randomly

selected sample of family and friends for a better representation of the whole group.

At this time, the database of all families ever served by Hospice House was utilized. There were 335 records (account numbers), meaning a total number of 335 patients had been served by Hospice House since its inception (9/14/87) and before it suspended operations (12/28/90). The criteria for selecting this random sample were as follows: length of patient's stay at Hospice House of at least 5 days (length based on the difference between admission date and discharge date), and discharge type listed as "death." This filtering provided a list of 242 records. Addresses of the primary contacts of these patients were merged with the list, and another filtering was done. This time the criteria included: valid mailable addresses of the contacts, and addresses within the Portland metropolitan area (Portland, Milwaukie, Hillsboro, Newberg, Gresham, and Vancouver areas) with the 970xx or the 972xx zipcodes. Based on the above criteria, a total of 64 primary contacts were identified. Four of these contacts had already agreed in the first round of recruitment to participate.

The remaining sixty primary contact people (spouses, parents, daughters, sons, sisters, brothers, aunts/uncles, pastors, partners, and friends) were approached by the Director of Hospice House via a letter describing the study and asking for participation in a focus group or individual interview. Along with this letter an abstract of the study and information regarding how to contact the

researcher was provided. Samples of the letter of recruitment and the study abstract are provided in Appendix E.

A total of 13 primary contacts (including the first four) agreed to participate. Some also expressed that other members of their family were interested in participating as well. Thus, there were a total of 17 family members who agreed to participate in the study. Five respondents either chose or were selected by the researcher to participate in the focus group. Four individuals actually came to the focus group. Ten preferred to participate in the individual interviews.

Face-to-Face Interviews

Face-to-face interviews with each user group (staff, volunteers, family members and friends) were conducted to augment the focus groups and to provide the bulk of the data to be analyzed. All issues raised in the pilot interviews and the focus groups were covered in detail in the face-to-face interviews. The face-to-face interviews consisted of staff (n=10), volunteers (n=10), and family members (n=10). In addition to staff, volunteers, and family members (or significant others), the original protocol called for personal interviews with patients (approximately 5).

Patient Interviews. The patients to be interviewed were to be selected by the nursing staff of Hospice House based on their capability and alertness. Only patients who had been at Hospice House for at least five days were to be interviewed (the average length of stay for Hospice House patients was 14 days).

Five days were required to give a patient enough time after being admitted to become familiar with the environment.

At the very early stages of data collection, it was announced that due to financial problems, Hospice House was suspending its operations for an unknown period of time. All of the respondents could be contacted and interviews could be carried out as planned, even after closing, except those with patients. The decision was made to continue with the research as planned, minus the patient interviews, and to schedule focus groups and face-to-face interviews with the staff, volunteers, and significant others. To replace the information that would have otherwise been collected through patients, one question was added to each of the interview schedules for staff, volunteers, and significant others. This question asked the respondents to recount their family member's or friend's experience and perception of the facility and their concerns and satisfaction regarding the building and the grounds.

Participants in the face-to-face section of the study consisted of a sample of individuals in each user group supplemented by key informants. The key informants were respondents who had participated in the focus groups and who were identified as particularly useful candidates (those who were knowledgeable about the facility) for participation in the face-to-face interviews.

Staff and Volunteer Individual Interviews. The sample drawn for the face-to-face interviews with staff and volunteers was a stratified sample across different occupational categories for staff and volunteers so that all of the occupational

categories were represented. Face-to-face interviews were conducted with ten full-time staff. Similarly, ten interviews were conducted with volunteers.

At the staff and volunteer focus group, participants were asked if they would like to provide more detail about what they had discussed in the focus group in a face-to-face interview. Three focus group participants agreed to also participate in the individual interviews with staff. Also, a snowball sampling procedure helped attain the desired number of staff respondents as was originally planned. Ten full-time staff representing the different occupational categories were identified to participate in the individual staff interviews.

Selection of volunteers for the individual interviews was done with the assistance of the Volunteer Coordinator. Participants consisted of a random sample as identified by the Volunteer Coordinator, supplemented by a key informant. The key informant in this case was a respondent in the staff and volunteer focus group who was identified to be particularly useful for participating in a more in-depth individual interview. This participant was very knowledgeable about the building and the grounds, and had quite a bit of information to share. Ten volunteers participated in individual interviews.

Content of Interviews. The face-to-face interviews with staff, volunteers and family members and friends covered ratings of the layout of the structure, including the buildings and the grounds, open-ended evaluations of the different areas of the facility, recounts of family and patient behavior and where things took place, discussion of wishes to improve the facility, and recommendations for the

design of future facilities. In addition to the above areas of questioning, the respondents were also asked to recount the patient's feelings and experiences about the facility. Table III depicts the content areas covered in the face-to-face interviews.

TABLE III
INTERVIEW CONTENTS BY USER GROUP

	Staff	Volunteers	Family/ Friends
layout	x	x	x
behavior mapping	x	x	x
patient proxy	x	x	x
wishes	x	x	x
area by area	x	x	x
recommendation	x	x	x

Use of the face-to-face interviews enabled the investigator to examine in detail all the issues that were explored in the earlier interviews. In the case of this study, face-to-face interviews were most plausible and effective given the constraints of observing users in such a sensitive environment.

All thirty of the individual interviews provide an in-depth exploration of user experiences with the facility, and explored in detail the features that were deemed to be satisfactory and unsatisfactory by all the users.

All individual interviews were semi-structured and were conducted using an interview guide. Since broad, unstructured and non-directive data were available from the focus group interviews, the individual interview guides were semi-structured. The principle in designing the interview guide was to elicit responses about the physical structure of Hospice House that made a difference in the staff, volunteer, and family member/friend perspectives. Thus, an initial interview guide was developed for each user group.

All of the interview guides followed a funnel structure; that is, there was a general open-ended question that allowed users to tell some of their personal views. The open-ended first question allowed the respondents to explain the things in the building and the grounds that were important to them in an unbiased point of view. This was followed with questions about specific features and specific areas within the building or the grounds that the respondent either liked or disliked. A floor plan of the building was used during the interviews to help the respondent remember the spaces they were talking about. For a copy of the instruments see Appendices F, G, and H. The next question asked the respondent to recount ways in which patients used the building as the staff, volunteers, and family members remembered. The interview ended with a general question to shift to a broad advice-giving format and to bring the interview to a closure. The respondents

were asked to make recommendations for the design of a future hospice.

Throughout the interviews, flexibility in the interview guide was allowed in order to elicit emergent properties of data as the need arises (Morgan, 1988). Because of the vulnerability of the patient families and the grief they were experiencing, special consideration and sensitivity was used in all aspects of the interview process. The time and place of each interview was arranged individually with each participant, and the length of the interview was announced. Permission was requested to tape each interview. Prior to beginning each interview, informed consent was obtained. For all interviews, enough time was allowed to ease slowly and sociably into the interview process.

Interview Procedures. The interviews took place at Hospice House, the respondent's house, or the researcher's house or place of work, depending on the respondent's preference. Each interview lasted from one to two hours. First the researcher briefly explained the study and answered questions, then the respondent signed the informed consent forms before discussing his or her perspectives about the physical structure of the design of Hospice House. All interviews were conducted by the researcher and were tape-recorded with permission. The sample selection and data collection for this study were conducted from December 1990 to June 1991.

DATA CODING AND ANALYSIS

The qualitative data analyzed for this study came from the individual interviews with staff, volunteers, and family members or friends of patients. The tape recording of each interview was transcribed as a separate wordprocessor file and then entered into The Ethnograph software program. Due to restrictions on the number of lines that could be contained in each file, the staff transcripts were separated into three different files. The volunteer transcripts were separated into two files. Likewise, the family and friend transcripts were divided into two files.

The analysis of the data proceeded with three phases of coding for each file. In the first phase, key aspects of the data were sorted and categorized into two main categories: positive comment or negative comment. That is, a code of "good" was assigned to sections of the data where the respondent had talked favorably about a space within or a feature of the building or the grounds, and a code of "bad" was assigned to the section of the data where the respondent had mentioned disliking a specific feature or a specific area within the building and the grounds. This coding scheme required a minimum of interpretation.

The goal of the second coding phase was to identify and classify major themes in the transcripts. This helped with formulating theoretical interpretations of the data, as indicated in the nine Physical and Architectural Feature elements described in Table I. Each segment of the transcript was given an appropriate code from the list of PAF elements.

The final phase of coding involved sorting and categorizing three key elements of the data: grounds, patient care unit, and the administrative portion of the building. Again this process required little interpretation. The segments (respondents' comments, as coded) varied in length and overlapped with the earlier Phase One and Phase Two codes. For example, an overlap of a section coded as "good" with a section coded as "grounds" meant that the respondent had mentioned something positive about the grounds. Likewise an overlap of a segment coded as "bad" with a segment coded as "ptwing" meant that the respondent was talking about a negative feature of the patient care wing.

The three codes in Phase Three of the coding scheme provide the approach for presenting the analysis and what emerged as the major findings. Quotes from the transcripts are used to enhance the discussion.

CHAPTER IV

ABOUT THE FACILITY

The present chapter will be an objective description of the facility and will provide general information about the setting and the building. The findings from the oral history interviews with the founder, the architect and the interior designer of the facility will also be reported here. In the next three chapters, the findings about the buildings (Patient Care Unit and the Administrative Building) and the grounds will be presented, and photographs will be used to enhance the discussion.

The facility studied was Hospice House (currently called Hopewell House), a free-standing hospice facility located in Hillsdale, one of Portland, Oregon's west-side neighborhoods, very close to the city center. On the outskirts of Hillsdale, coming up S.W. Capitol Highway from downtown Portland, a small sign on the right-hand side of the road marked the entrance to the facility. Turning right into the grounds of the facility, a driveway through a wooded area took visitors past the Henningsen house to the front entrance of the facility (see Figure 1). To the right of the driveway there was a large wooded area with fir trees and some trails. To the left of the driveway, there was also a smaller wooded area that separated the facility from Capitol Highway. The co-founder of Hospice House reported in an oral history interview that the proximity to downtown Portland was

Figure 1. The Setting

a positive feature of the facility. She also felt that direct access to a main road that was screened from the facility by trees was a positive asset for Hospice House.

Before arriving at the front entrance, one passed by Henningsen house, a vintage 1926 residence which remained on the property after the patient care facility was built and was used for the administrative offices. The architect explained that his goal was to make the Henningsen house visible first as one entered the grounds, in order to create a sense of home.

There were four parking spaces available on the south side of the building. The driveway curved at the south side of Henningsen house, and near the west property line there was an option to turn either left or right. Turning left on the driveway one entered the main parking area, which had about twenty parking spaces available. The parking area was out of sight from the entrance to the building because it was located on the property's highest elevation, about ten feet higher than where the structure was located. The driveway curved and took one back to Capitol Highway from the parking area. Turning right off the driveway, one passed by some of the garden areas, and curved away onto a residential street on the west side of the property called S.W. Cheltenham. The architect explained in the oral history that the site was steep and difficult to build, and that the entrance to the facility and the driveway was constrained by the site. On the other hand, he clearly enjoyed working on the design; several times during the interview he mentioned: "How can you go wrong with a site like that, with the variety in elevation, and the serenity of the woods?"

A birds-eye view of the grounds could be obtained from the main entrance area of the structure looking west, where all the outdoor spaces were visible. Changes in elevation across the property allowed for several segregated garden areas. All of the garden areas were well-maintained, with seasonal flowers, vegetables, and perennials always in bloom. Expansive areas of lawn, with brick walkways and paths to the upper areas of the grounds, completed the scene. As mentioned earlier, there was about a ten-foot difference in elevation from the front entrance of the structure to the highest area of the grounds. Trees were planted in the lawn areas, as well as a variety of bushes and other vegetation. Such garden accents as trellises with climbing flowers, birdfeeders, and brick paths with a simple black metal fence along the edge were used throughout. Just above the patient care unit, on the north side of the property, there was a rose garden and a large gazebo with a swing. On the north and north-east sides of the patient care unit, was a wooded area onto which all of the patient rooms faced. A birdhouse stood outside the window of each room.

Adjacent to the front entrance of the structure, or the front loading area, was a flat area called the Courtyard, which normally held patio furniture and umbrellas. There was a cement-and-brick water fountain close to this sitting area. Plants grew up on the pillars of the front loading area, many flower pots were set about the Courtyard, and a topiary rabbit sitting on a chair at the front entrance greeted people as they approached. The co-founder of Hospice House explained

that accessibility to the outdoors for patients, as well as their families, was the main purpose of the outdoor space.

Walking into the building (see Figure 2) one entered the foyer, or reception area. A hallway to the left led to the patient care unit, which will be described later. The foyer itself was a part of Henningsen house, where the administrative and non-medical services were provided. Henningsen house was an elegant home with hardwood floors, French doors, and antique fixtures. Both the architect and the co-founder explained that when the property was acquired, they found that it would be too costly to bring the old house up to code for use as a care unit. They therefore designed a new building for the patient care unit, that would be attached to the old structure.

The entrance of old Henningsen house was used as a reception area. The size of this room was 18 by 12 feet. Two steps led up to the reception desk. The reception room had no windows to the outside and was dark, so lighted candles and flowers were always kept on the reception desk. The area was open to the other rooms surrounding it. To the left of the reception desk, there was a large living room about 33 by 22 feet in size. This room had windows looking outside on two sides. There was a fireplace, elegant furniture, bookshelves, and a piano. The founder explained that the intention for this room was for it to be a community room for patients, families and staff, and for holding family reunions and group meetings, as well.

Figure 2. Hospice House Floor Plan

Across the living room, on the right side of the reception desk, there was a 16 by 17 foot dining room. It had leaded glass cabinets and a large conference table for meetings. Off the dining room was a room used for the Director's office. This room had French doors and windows on three sides looking out to the property. Several steps behind the reception desk was a small bathroom used as a public restroom. Also to the right of the reception desk a mahogany staircase led to the upstairs of Henningsen house, which housed offices, meeting rooms, bathrooms, and a counseling room. Located immediately to the right of the foyer as one entered the building were the main facility kitchen, a pantry for storing snacks and utensils, a small area called the staff room, and another office.

As noted earlier, to the left of the foyer was an eight-foot wide hallway that connected the administrative offices to the patient care unit. There were windows looking outside on both sides of this hallway. The floor was red tile covered with a strip of an earth-tone colored carpet down the middle. There was also a large board listing the donor names. Also, on the wall of the hallway was a natural-stained wooden handrail. The interior designer discussed her intention of keeping the design as close as possible to earth and nature. This was achieved by using natural elements and earth-tone colors throughout the structure. Color was added later by art work, quilts, and furniture.

At the end of the hallway one arrived at the new area specifically constructed to be the patient care wing. The old charm and the elegance of Henningsen house was contrasted by a modern patient care unit. The heart of the

patient care area was the Common Area, a spacious area, 35 by 26 feet in size, with light coming in from skylights. The furnishings were simple and earth-tones were used for the carpet and wall paint. The co-founder explained that "one of the main goals in designing this space was to create a place that had light and warmth, and a close relationship between the indoors and the outdoors." The architect's original intent in the design of the Common Area was to create a pleasant space conducive to social interaction for patients, families, and friends.

The small scale of the patient care unit was discussed by both the founder and the architect. From the co-founder's perspective, the small size of the facility helped to maintain a homelike atmosphere. The architect described the small size as a direct result of an effort to keep construction costs down. As the co-founder had discussed earlier, the architect also noted that the smaller scale facilitated a residential atmosphere, which was a major goal of the design.

Adjacent to the Common Area was a circular, low nursing station. A small room behind the nursing station was used as the medicine room. The "Quiet Room" was located in the Common Area at the end of the hallway. This was a room about 16 by 18 feet with homelike furniture, including a hide-a-bed sofa for overnight guests, several bookcases, wooden chests, and many afghans and quilts. In the oral history interviews, the co-founder stated that the Quiet Room was intended to be a multi-purpose room for religious and memorial services, family members staying overnight, meetings, and listening to music, and other quiet activities. Across from the Quiet Room was a mini kitchen with a small

refrigerator and stove, microwave, and hot water dispenser. The architect mentioned that the kitchen was placed close to the patient rooms so that families could bring their own food, and also so that patients could be served easily.

A nine foot-wide corridor was connected to the Common Area at a 130 degree angle. As shown in Figure 2, there were eight patient rooms on one side of this corridor. The size of the patient rooms varied from 12 by 16 feet for single rooms (Room Numbers One, Two, Four, Seven and Eight), to 21 by 16 feet for the double-bed room (Room Number 3), to the four-bed room, which was 23 by 18 feet in size. All patient rooms had large pane windows looking outside to the wooded area, thus connecting the indoors to the outdoors, as the co-founder had envisioned. The architect also discussed that the visual connection to the outdoors as one of the main goals in the design of the patient rooms. Another goal in the design of the patient rooms was to allow patients a choice in controlling the privacy in their room. This was achieved by the blinds and curtains on the windows facing the patient care area.

Across from the patient rooms were a nurse's office and two utility areas. The co-founder revealed that the nurse's office had actually been intended as another multi-purpose room, but that after moving into the facility they discovered that an office space in the patient care unit would be necessary. Also behind the nursing station were a tub room and shower area, which were used for bathing patients. The tub room was about 9 by 15 feet and was covered with white tile.

A very large jacuzzi-type mechanical tub was situated in the middle. The shower area was also tiled, and it covered an 8 by 10 foot area.

The three oral history interviews with the co-founder, the architect, and the interior designer all revealed the main intentions in the design of the facility to be creating a connection to the outdoors, enhancing the quality of life by creating simple yet pleasant spaces to care for patients and their families, using homelike features as much as possible, and creating defined spaces to break up the large impersonal spaces often seen in institutional settings.

The next three chapters report the findings of the interviews with staff, volunteers, and family and friends with respect to positive and negative features of the buildings and grounds. To aid the reader in understanding the area which is being described a two-part figure is included. Part one of the figure is the photograph of the area, part two is the enlarged setting or the floor plan. The arrow on the setting or the floor plan indicates the position of the camera.

CHAPTER V

FINDINGS: THE GROUNDS

By all accounts, an essential element in the success of Hospice House was its location and the design and beauty of the grounds. All of the respondents talked first about the grounds when asked what they thought about the layout or the structure of Hospice House. This chapter reports the feelings and experiences of users with each area within the grounds of Hospice House.

Situation/Location

Staff. The staff reported that the situation of Hospice House on four wooded acres lent a feeling of being in the country. They also explained that its closeness to nature, with its accessibility to all parts of the Portland metropolitan area, made Hospice House attractive to many of the families who chose Hospice House for their terminally ill family members. For example, most of the staff reported that it was within walking distance to Tri Met bus stops, and its location just off a main thoroughfare but tucked in behind big trees gave it a personal and private feeling of space.

Volunteers. Volunteers reaffirmed the positive comments of the staff members about the location and surroundings of Hospice House. One volunteer commented that Hospice House's location close to a main thoroughfare provided

accessibility to the nearby Hillsdale community with its shops and fast food places, which, she explained, was very important to some patients and their families. This volunteer noted that she often made trips to the fast food places close to Hospice House to get patients ice cream, pizza, burgers, or other special foods Hospice House kitchen was unable to provide.

Family Members and Friends. Most family members and friends of Hospice House patients also referred to location, accessibility, and seclusion as positive features of the facility. All family members visited their patients every day before and after work without having to drive a long distance. This, they explained, helped to reduce some of their stress. One family member stated: "I liked the fact that it was so close to the metropolitan area, to the city, to where we live; and yet, it was hidden in the trees, so it felt private."

Grounds

Staff. Staff reported over and over again that having a park-like setting around the Hospice House facility created a sense of "home." They unanimously reported that the grounds are the most beautiful part of the facility (see Figure 3; arrows on the floor plan represent the position of the camera). One staff person explained that the grounds are aesthetically pleasing: "When I first went to Hospice House for a job interview, I thought it was a country club... I thought I had the wrong address." Another staff member said: "I think the grounds were truly beautiful, and I also had lots and lots and lots of comment from everyone about how beautiful the grounds were."

Figure 3. The Grounds, Henningsen House, Front Loading Area

The grounds, because of changes in the elevation and layout, create several discrete environments that lend interest to the outdoor area of Hospice House. The staff remarked that there was a lot of color in the garden, with flowers from early spring through fall. Staff also emphasized that the gardens were well-planned, well-cultivated, and well-maintained. One staff member explained that the grounds were truly useful to the family members or visitors because they gave them a chance to get out, to separate, and to renew. This staff member reported that some family members got no further than the front door, but even this gave them a chance to get outdoors, stay for a while, and come back in. Others reported that they thought the grounds were very essential for the facility, and that the overall landscaping was truly terrific. The staff also commented that there were destinations within the grounds that were easy to get to, giving people options of where to go.

Volunteers. Like the staff, volunteers first talked about the beauty of the grounds when they were asked what they thought about the layout of the facility. They felt that having outdoor space was essential to a hospice program. Volunteers also commented on the variety of garden spaces that were available. One could walk in the woods, or eat lunch in the courtyard, or sit in the terrace garden or the gazebo. They stated that there was always something colorful and pretty year-round, and that everything in the grounds was well-maintained. "Everybody loved the grounds... Families and patients liked it and always talked about how great the grounds were," one of the volunteers mentioned. Another

volunteer stated: "One of the things that impressed me was the old estate feeling of Hospice House, the beautiful grounds, and all the work that went into making it lovely." Another volunteer talked about the first time she went to Hospice House for an interview and how she thought the grounds were peaceful, all the flowers were well cared for, and everything was aesthetically pleasing. The volunteers frequently reported that patients used the outdoors when the weather was nice and that staying in a place where the gardens were beautiful gave them a special feeling.

Family Members and Friends. Some of the family members and friends explained that they felt reluctant to visit Hospice House the first time, but the beauty of the grounds and the well-maintained gardens was the first thing that positively affected their feelings toward the idea of "hospice." Family members and friends were extremely satisfied with the beauty and the maintenance of the grounds. One family member stated: "The setting was very soothing and healing with the trees and the woods around it; and then the gardens on top of that made it more beautiful." Another family member, referring to her husband, who was a patient, reported: "I think he was very impressed with the outdoors. It was in the fall, and the grounds were just beautiful." All of the family members and friends stated that the gardens were beautifully landscaped and that they really enjoyed the different areas within the grounds and all the flowers. When asked what they would recommend for the design of future hospices, they unanimously reported

that the landscaping at Hospice House was truly remarkable and that the outdoors of any hospice should look like that of Hospice House.

The Front Loading Area

Staff. The staff frequently talked about the design of the front loading/unloading area as a positive feature. It was not a drive-through, a feature liked by most of the staff, and it had automatic lighting which would come on and off by itself. However, one of the recurring problems with the front loading area was the front door. As the staff explained, the way the front door was set was not functional for a hospice facility. First, it was not an automatic opening door. Second, there was an obstacle, or a lip, at the threshold, which made it difficult for wheelchairs to travel over without help. Whenever a patient wished to go out the front door, a staff member, a volunteer, or someone else had to be present to help the patient out the door. Other good features of the front loading area were that it was wide and also covered. When a car or an ambulance came in, the patient would be kept out of the rain or other outdoor elements. The only disadvantage of this covered area was the flat roof, as rain had a tendency to gather on the top, creating mildew problems on one side. Several staff members also mentioned a topiary rabbit sitting on a chair at the front loading area, which was very whimsical. According to staff, the rabbit topiary caught almost everyone's attention, and many families and friends and patients commented on it. Overall, the staff noted that the front loading area was aesthetically pleasing.

Volunteers. The volunteers also reported that the loading area was spacious and had plenty of room to unload a patient from a car or ambulance. One of the volunteers explained that the fact that the front loading area was not a drive through was a blessing, because cars could not park there and block the entrance. This volunteer stated: "In most health care facilities where there is a drive-through, people end up parking their cars for even short periods of time and block the front entrance; so at Hospice House they have saved themselves a lot of problems by designing the front loading area the way it is." Several volunteers said that they liked the area because it looked inviting with plants growing up the columns. One volunteer mentioned: "I always enjoyed coming into the building because it was covered, and yet felt very open." The volunteers, too, reported problems with the non-automatic front door and the obstacle at the threshold, and the fact that in most cases a patient in a wheelchair needed assistance to get outside.

Family Members and Friends. Family members and friends did not have a great deal to say about the front loading area. One family member reported that she liked it very much because it looked pretty as she drove into it. Another recounted the first day she came to Hospice House, explaining that it was very easy to unload the patient and his belongings in that loading area. Some of the family members and friends commented on the topiary rabbit as a nice welcoming feature and that their kids really enjoyed it. One family member explained: "The rabbit was very cute, and all the kids really liked him. My husband [the patient] couldn't see that rabbit, but he knew it was out there."

The Courtyard and the Fountain

Staff. The courtyard was one of the areas most frequently mentioned when staff talked about the grounds. It was located next to the front loading area, along the west side of the building. Staff reported that the courtyard was one of the most heavily used outdoor areas. Families and patients who wanted to be outside would either spend their time in the courtyard area or the back patio (which will be described later). One of the extremely valuable features of the courtyard is a fountain (see Figure 4; arrow on the setting represents the position of the camera). Staff reported that the fountain was very inviting and that the sound and feel of water were pleasant features to have in the courtyard. One staff member stated: "The fountain is aesthetically very attractive and welcoming, and people's first impressions are quite positive with the fountain and the courtyard area." However, two staff members reported that they felt uncomfortable when children would go outside to the courtyard area to play in the fountain, because they worried about their safety. The courtyard area had patio furniture and umbrellas so people could sit and enjoy the grounds. The one disadvantage of that area, according to two staff members, was that in late summer the afternoon sun would reflect against the white concrete and made that area a very hot place to be. Without the shade of the umbrellas, it was impossible for anybody to stay out for any length of time.

Figure 4. The Fountain in the Courtyard

Volunteers. Most volunteers reported that the courtyard area was one of their favorite places outdoors. They pointed out that the courtyard area, when weather permitted, was one of the outdoor areas most frequently used by patients and their family members and friends, including children who took off their shoes and socks and played in the fountain. One volunteer noted that staff and volunteers, as well as patients and their families, used the courtyard area to take a break, eat lunch, or just relax. Another volunteer stated that she would always sit at one of the tables in the courtyard area by the fountain and just listen to the water. The volunteers pointed out that the patients who were able to go outside would use the courtyard area very frequently. "I remember one fellow who just loved to go out there and sit by the fountain; he would sit there for hours. In fact, evenings he would sit there till it was time to go to bed," one volunteer noted.

Family Members and Friends. Family members and friends reported that they enjoyed the courtyard area and the fountain very much. They remarked that they could push a wheelchair to the courtyard and sit together with a patient; or, that they could go there by themselves to be alone and take a break.

The Patio at the End of Patient Care Area

Staff. Staff reported that in addition to the courtyard area, the sunken patio at the end of the patient care area (also referred to as the back patio) was another outdoor space heavily used by patients and their families. Staff reported that the back patio was a terrific area, good for patients and their families who did not want to use the main entrance of the Henningsen house to exit to the courtyard

garden. Some staff members also noted that the back patio was an excellent private space for a small family to sit when the windows to the patient care wing or the nurse's office were closed. Otherwise there would be no privacy for the family.

Volunteers. Volunteers reported that patients enjoyed moving about the facility, especially to the back patio, which was one of their favorite areas to sit. Patients and their families might have their meals out there, or just sit and talk. There was a round table with an umbrella and chairs where people could go to sit. One of the volunteers stated: "What was good about the back patio was that it was a very private area, down below the hill, snugly warm." The same volunteer also explained: "The back patio was a good area, a people area."

The Woods and the Trails

Staff. Another aspect of Hospice House that was positively viewed by staff was the wooded area surrounding its north and east sides. One staff member explained: "The woods are a symbolic milestone foundation for a great deal of mythic thought. Having access to the big douglas firs and a wooded walk with animals and a creek, the quiet in the midst of all the fury, was the best feature of the facility." Staff reported, however, that the woods were mostly used by staff and volunteers, and rarely used by families or friends of patients. The staff mentioned that access to the woods was a problem, as the woods did not connect across the ravine to the facility: "Had you been able to walk the back side of the building, across the ravine over a bridge to the woods, people would have been

more interested to go there, and we could have made use of the meditative and the healing aspect of the woods that way," one staff member explained. All of the staff expressed their appreciation of the wooded area and emphasized the importance of such a feature for a hospice facility. "The trails were also available through the woods, and there were also benches, and it was a good place for someone who is going through the death process to get out and away from the facility for a while," one of the staff commented. Another staff member mentioned: "I think it was very comforting for the families to be able to get away from the facility but be close enough so that they can see the building and be able to walk around it, into the woods, and be a part of nature." Staff expressed that access to the natural area should be provided in the design of other hospices.

Volunteers. Volunteers also mentioned the woods as one of the important parts of the grounds. They explained that even though the trails were not wheelchair accessible, they provided a place to go for people who were able to walk and who needed to get away. They were according to one volunteer,: "a place to recharge their spiritual batteries in nature." Often in institutional settings, there is not the space to provide a wooded area with trees, like what was available at Hospice House. Volunteers frequently mentioned that having the wooded area was a great benefit of the facility. One of the volunteers noted: "Another great thing is when they walked up through the woods, people could still see the building, and they knew someone could get them right away. From any one of the

patient room windows a family member or staff could call you back. That gave families a lot of comfort when they went to the trails."

Family Members and Friends. One family member reported that she had walked all around the building often and that she liked walking in the woods every day. Some family members or friends explained that they did not go to the woods because of the weather. "Had it been some other time of year we probably would have gone outside for walks and would have also taken the patient," one explained.

Walkways in the Grounds to the Perennial Garden the Gazebo and Rose Garden

Staff. According to staff, one of the most beautiful areas within the grounds was on the west side of the building: a large annual bulb and perennial garden. The area also had trees and blooming flowers and was a pleasurable entrance for those who drove into the facility from the west entrance. However, because the facility is situated on a slope, it was difficult for patients in wheelchairs to maneuver out to this area of the garden. The walkways continue further up to the gazebo and the rose garden (see Figure 5; arrow on the setting represents the position of the camera). "All of the walkways are very steep and they also turn," one staff person explained. Thus, it was difficult to push someone around in a wheelchair to the perennial garden, the gazebo and rose garden. The staff explained that they would sometimes take patients in wheelchairs out to the walkways, but this was somehow difficult for family members to do, and a little scary for the patients because the paths could be treacherous. One staff

Figure 5. The Gazebo

member stated: "I like the gazebo and the swing in there. The rose garden also turned out to be an interesting place; people came up with the idea that if they wanted to memorialize a loved one, they would just donate a rose bush." The only flat areas outdoors were the courtyard area connected to the front loading area, and the back patio. The staff explained that even though the walkways were steep and patients could not really go up to the gazebo, it was still a nice feature. One staff member pointed out that it would have been nice, and even possible, to have a levelled walk all around the two buildings that patients in wheelchairs could have used.

Volunteers. The volunteers also pointed out that the way the grounds were situated on a slope, patients were limited as to where they could go in a wheelchair. Some of the volunteers reported that they frequently took patients up the walkways to the gazebo and rose garden area, but that in some spots they really had to push hard; others said they could not take patients in wheelchairs up there at all. One of the volunteers provided more detail about the perennial garden and the rest of the garden: "We had a beautiful wildflower garden, and herbs, and pumpkins; all the seasonal things. Each season was celebrated at Hospice House. May Day we had a maypole with streamers hanging. Christmas was just wonderful. You wouldn't believe, it was just lovely, it was wonderful." A few volunteers expressed the need for more covered walkways and covered areas. Because of Portland's climate, more covered walkways were needed to take patients outdoors during the rainy season. Just as the staff had expressed a need

for level walkways around the two buildings, so did some of the volunteers.

"There were a few times when patients wanted to go for a walk around the building, and there really wasn't a way to walk the patient completely around and stay on a paved path. The back side does not have a sidewalk or boardwalk, so we would do a half loop and back," one volunteer noted.

Family Members and Friends. Family members and friends were especially fond of the rose garden and the gazebo. Some explained that they went out there on many occasions. The one family member who talked about the walkways explained: "The one time that we went outside, I know my husband enjoyed it. He liked the fact that it looked so nice." She went on to provide more detail about that day: "Towards the last three or four days he could no longer speak, and he was agitated because he had gone off the medication, so I thought it might be pleasant for him before he lapsed into a coma that maybe I could take him outside. So, we put him in a wheelchair and bundled him up with blankets, and I took him outside, and pushed him all around the yard. He was so touched. I started singing to him every song I could think of, we stopped and looked at each of the flower bushes. He was not able to speak, but I wheeled him around for one hour, and when we came back down to come into the building, I had to go in front of him to take him down the pathway, because the pathway was kind of steep, and I looked at him, and he had tears just rolling down his face. I think he was so profoundly touched by the beauty, the incredible beauty."

The Terrace Garden

Staff. One of the quaint areas within the grounds was a little garden area on the east side of the building tucked in between the Henningsen house and the patient care wing. "I think it was just delightful. It is such a miniature garden, very comforting because of its size and because it is protected on three sides," one of the staff commented. Another staff member noted that "the terrace garden was pretty and everyone commented on it. I can't see anything negative about it. It was very attractive and nice to look at."

Family Members and Friends. The terrace garden was a favorite area for family members, and they used it frequently. They liked it because of its close proximity to the patient care area. Some explained that they took patients out to the terrace garden and that they seemed to have enjoyed that.

Parking

Staff. The parking lot is situated on top of a slope close to the street on the south side of the facility. "The advantage of having the parking lot up there was that it was not right in line of sight and was not a visual distraction. But there was the potential problem of security, especially for elderly people at night, because it was secluded and away from the building and from the road, and you can't really see it from a distance to assess potential danger until you are in the parking lot," one staff member noted. He further mentioned that the parking lot was well-lit and that escort service would be provided if someone felt uncomfortable walking up to the parking lot. The slope was also a problem. The staff discussed that,

especially during icy weather, it was difficult to walk down from the parking lot to the facility. Furthermore, staff stated that the amount of parking was inadequate when they had a high patient census, or when a special function was taking place at the facility.

Volunteers. Speaking about the issue of safety in the parking lot, one of the volunteers who always worked the evening shift said that she thought the grounds and the parking lot were well-lit and that she never felt the parking lot to be unsafe. Another volunteer, however, reported that she felt isolated going to the parking lot because it was out of sight of the main building, and also because it was surrounded with big trees. She reported that she liked having the escort service, and also just having another staff or volunteer look out the door when she was leaving. Other volunteers discussed the issue of parking spaces, that it was becoming apparent that more parking space was necessary, especially when they had a high patient population or when there was a special meeting. "Parking was one of the reasons we couldn't hold a lot of open houses for the community to come and visit; or to hold classes for the general public," one of the volunteers stated.

Family Members and Friends. The family members and friends had very little to say about parking. Most of them stated that there was nothing that they disliked about the parking arrangements. Two family members did have concerns about parking space and explained that even though they never had to park on the

street, there were times when they had to walk a long distance from the parking lot to the building.

The Birdfeeders

Staff. There was at least one birdfeeder outside the window of each of the patient rooms (see Figure 6; arrow on the setting represents the position of the camera). The birdfeeders received overwhelmingly positive reaction from all of the staff.

Volunteers. The volunteers too, were unanimous in their positive comments about the birdfeeders outside each window. As one volunteer mentioned: "Patients and their families really appreciated having that kind of life outside their rooms. Squirrels and chipmunks and birds would eat at the feeders, and most people have a sensitivity to those things at that point in their life."

Family Members and Friends. The view from the patient rooms was a features that family members and friends commented on positively. All of the family members and friends also talked about the birdfeeders, and mentioned that they enjoyed looking out the window and watching the squirrels and the birds at the birdfeeder by each window. Without exception, family members and friends explained that patients were very pleased that they had a window that looked out into the trees, and that there was a birdfeeder outside their window. One family member, in referring to her spouse, said: "When he first got to Hospice House, he was very pleased that he had a window that looked out into the trees. He thought that was really, really beautiful; and that there was a birdfeeder outside, he

Figure 6. Birdfeeders Outside Patient Rooms

was thrilled by that." Another family member stated: "We were able to enjoy looking out the window and watching the squirrels and the birds, which was very important to my wife. The birdfeeders were extremely important to her." Family members and friends explained that the wildlife was a very positive feature both to them and to the patients, and that the birdfeeders were a nice diversion to take their minds off of their grief.

Summary

As noted above, the grounds of Hospice House was one of the elements that was frequently talked about by all groups of users. All respondents agreed that the situation of Hospice House in a natural setting, hidden in a wooded area and yet very close to the city, was a positive aspect of the facility. They also unanimously reported that they were impressed with the layout and the beauty of the grounds, the landscaping, and availability of seasonal flowers. All user groups talked about the woods and the trails, although each in a different way. Most families and friends reported that they did not walk to the woods because the weather did not permit that kind of activity during the time they were at Hospice House. In contrast, staff and volunteers reported that the trails and woods were an integral part of the grounds. They also reported that the wooded area was an important place for families and friends to go to get away but still be within close proximity of the facility. The staff explained further that the woods were more heavily used by staff and volunteers and not so much by the family members and friends. Staff

were specific in citing access to the woods as a major reason family and friends did not use the area as much.

There was a commonality between staff and volunteers in what they reported about the front loading area. Even though family members and friends did not have much to report about the front loading area, they did explain, just like staff and volunteers, that it was a spacious area, easy to unload patients, and that it looked inviting with garden accents, such as the plants growing up its columns and the topiary. The other user groups, staff and volunteers explained further that they liked the front loading area because it was not a drive-through, it was airy and spacious, and it was covered. The staff and volunteers reported the non-automatic front door and the obstacle, or the lip, at its threshold to be a major flaw in the design of the front entrance because this made it difficult to move patients on beds and wheelchairs outdoors. The family and friends did not talk about this as a problem.

Regarding the courtyard and the fountain area, all user groups converged to mention that the courtyard was a heavily used area, especially when weather permitted. In addition, the staff and volunteers reported that it was a pleasant area and that the fountain was an aesthetic feature to have. Two negative things that only staff reported about the courtyard area was that some days it would really get hot because of the cement floor and the white of the building, and also that they felt the fountain was not safe for children to play in.

No family member referred to the back patio. On the other hand, staff and volunteers reported that it was frequently and exclusively used by patients and their families, and that it was a private area except when the window to the director of nursing's office was open. The perennial garden, the gazebo, and the rose garden were mentioned by all of the user groups as beautiful features that they enjoyed. It was also reported that the elevation of the walkways to the gazebo and rose garden was very steep for maneuvering patients in wheelchairs. There was a similarity in what staff and the family members and friends said about the terrace garden. Both of these user groups expressed that the miniature terrace garden was a favorite spot for people to use. Even though the terrace garden was reported by the staff as well as family and friends to be a delightful area, none of the volunteers referred to it.

Regarding the parking lot and parking spaces at Hospice House, all user groups reported that there was a need for more parking. Staff and volunteers referred to the problem of the security of the parking lot because it was out of sight and isolated. Family members did not refer to security as a problem, but they mentioned that sometimes the distance they had to walk from the parking lot to the building was too great.

One last feature in the grounds that all user groups raved about was the availability of a birdfeeder outside the window of each patient room. There were overwhelming positive reactions to the birdfeeders among all user groups.

The next chapter will explore the feelings and experiences of the users about the layout and structure of the administrative side of the building, The Henningsen house.

CHAPTER VI

FINDINGS: THE ADMINISTRATIVE OFFICES

In addition to the grounds, another distinct feature of Hospice House described by the users of the facility was the administrative portion of the facility. The administrative portion of Hospice House was Henningsen house, an existing vintage building on the property when it was purchased (see Figure 7; arrow on the floor plan represents the position of the camera). The Henningsen house, built in 1926, is what gives Hospice House the "old estate" or "French mansion" feeling that some users described. It is an elegant building that was once the residential home of the Henningsen family, with a mahogany staircase, oak floors, antique light fixtures, French doors, stained glass and several large fireplaces.

Administrative staff explained that even though Henningsen house is an older home retrofitted to house administrative offices, the original charm of the house has been maintained, and without major structural changes, its spaces are functional. This portion of the facility includes the entrance and reception areas, most of the offices, a conference room, living room, and the main kitchen. This chapter will present the findings from interviews with the three user groups regarding Henningsen house.

Figure 7. Henningsen House

The Physical Separation from the Patient Care Area

Staff. The first thing most of the staff discussed was the importance of physical separation of the administrative building from the patient care building. It was a great benefit to have two distinct buildings, as they created an outer and inner sanctum, as one of the staff members explained. He provided further detail by adding, "The administrative building, or the Henningsen house, is where the public access and business activities take place; it also represents the outer world noise and bustle. The other building, the patient care area, represents the inner sanctum and a place where all of the nursing and the psycho-emotional activity occurs."

Regarding the separation between Henningsen house and the patient care area, however, most of the staff discussed the negative side of that. They explained that staff in the Henningsen house often were uninformed of what was happening at the nursing end. For example, sometimes there would be a death in the patient care area and the administrative staff would be unaware of it.

Volunteers. One of the volunteers remarked that the physical separation of the two buildings was a positive feature. She explained that patients and their families had the best of both worlds at Hospice House: "Having all the stability that the Henningsen house provided with the French doors and the nice furniture helped visitors feel stable and secure; and yet the patient care area provided a diversion--a modern, up-to-date setting."

Family Members and Friends. The family members and friends had much less to say about the Henningsen house than either the staff or volunteers. Most of their attention was focused on the patient care area and the beauty of the surrounding landscape. They did remark that the way the old--Henningsen house-- and the new--the patient care area-- were combined was wonderful. "You could go down to the old house and walk on the hardwood floors and make that nice sound; it felt nice to have that homey feel," one family member explained. Another family member said that Henningsen house was kept in its original condition and not modernized was one of its most satisfactory features.

The Front Entrance and the Reception Area

Staff. According to the staff, the foyer, or front entrance, created a successful first impression as people walked in. It was seen as very attractive, with skylights and a beautiful stained glass window. It was bright, open and airy and decorated with plants. When someone enters the building, they may turn left up the hallway to the patient care area, or go straight ahead to the reception desk. One of the problems of Henningsen house described by most of the staff concerned the reception area. They explained that to get to the reception area, visitors had to climb a couple of stairs, and this caused confusion when someone entered the building. Over and over again, staff explained to the researcher the reception area was far less than the ideal. The reception desk was too far from the front entrance, was tucked in the back of the building and did not have the same feeling of openness as the rest of the structure. Again, people new to the facility might

not notice the reception desk in the back up the two steps and would get confused as to which way to go. The area also was dark and the two steps sometimes were a hazard.

Some users, specifically the administrative staff, explained that there was no other good vantage point down the hallway leading to the patient care area and the nurse's station. However, if the reception desk was moved forward, the person sitting at that desk could see a little more of what goes on in the patient care area. One of the staff also explained that the reception area was not directly wheelchair accessible and an unassisted person in a wheelchair had to go through a labyrinth before he or she could reach the reception desk.

Volunteers. All of the volunteers stated that they loved the entrance area as they described it, with plants, flowers, a little table with the book of sayings, and a bulletin board that always had wonderful messages. They also noted that the reception area was aesthetically pleasing, creating a warm and friendly feeling with flowers and a burning candle. It was very old-fashioned and gave a feeling of coming into someone's home, rather than a health care facility.

One of the volunteers reported that because there was a very receptive person at the front desk who acknowledged and greeted everyone who walked in, the problems with the reception area described by staff were not as serious. Otherwise, as staff had reported, volunteers explained that the reception area should have been closer to the front door. Volunteers felt this was more of a problem after hours when there was no receptionist, and this is when visitors who

entered for the first time would get confused as to which way to go. In addition, there were no signs to direct people. On the other hand, some volunteers pointed out that by the addition of signs would cause the homelike feeling to be taken away.

In contrast to criticisms of the reception area, one of the volunteers who sometimes worked at the reception desk reported that the location of the reception area allowed her to see the paid staff coming in or leaving. This, she explained, was good because she knew who was in or who was gone when she was answering the phones. Also, because the patient care area was closeby, it was easy to get to that area if a nurse was temporarily unable to answer phones at the nurse's station.

The problem of stepping up from the front entrance area to the reception area was also mentioned by volunteers. Another issues surrounded a closet that was used as a volunteer check-in room. There was a book in which they signed in and a place to hang their coats. This situation was probably not ideal for the volunteers because of the tight space in the closet, but as one stated: "That was definitely not a priority, and I'm just trying hard to think of anything negative. To me it was all so positive, and so beautiful."

Another unfortunate feature of the front entrance was the fact that it was very close to the kitchen, food smells often collected in that area. One of the volunteers explained that since people usually experience a new place with their senses, strong odors coming from the kitchen could leave a bad impression on a

person. However, when cookies or bread were baking in the kitchen, people experienced a more positive reaction.

Family Members and Friends. Most family members explained that the front area was very welcoming and comforting, with the plants and other things to look at, as well as the little table with the book on it with comments or thoughts for meditation. One very interesting comment that a number of family members made was about the location of the reception desk, away from the front door. Unlike the staff and the volunteers, these users explained that it was a very satisfactory feature not to have someone at the door as soon as you walked in. They suggested that perhaps the first time someone walks into the facility, it would be nice to have someone right at the door to direct him or her where to go; but as you start to live in the facility, as it becomes your home, it is nice to be able to walk in without having to acknowledge someone at the door. One family member explained: "I really liked it that she [receptionist] was not sitting right there at the door, I could go back there to where she was and talk to her if I wanted to, but I didn't have to." Another family member explained: "I liked the privacy at the front door. It gave me a little bit of time to get prepared for what I anticipated in the patient care area. I knew exactly when I would run into staff, and then I was prepared." It is interesting to note that these comments are in contrast to what staff and volunteers felt family members and friends would like about the reception area.

Public Bathrooms

Staff. The only available bathroom for visitors to use was located behind the reception area. Some of the staff explained that because a lot of patients were in a semi-isolated condition, their families or friends were not allowed to use the bathroom in the patient room. Thus, they had to come about 100 feet to use this bathroom, the only one available on the first floor of Henningsen house.

Volunteers. One of the volunteers noted the remoteness of the bathroom.

Family Members and Friends. None of the family members or friends who were interviewed made a comment about the bathroom being remote from the area of care where they spent most of their time.

The Living Room

Staff. Staff reported that the living room was a large beautiful room, with light coming in through big windows and easy access to the gardens. It was furnished with traditional Victorian furniture, a piano, and a stereo, and had a fireplace. The staff also noted that the furniture could be rearranged according to the type of meeting taking place. One satisfactory feature of the living room, as one staff member explained, was that the furniture was always rearranged after support groups. Group members would bring the chairs and the sofa in a tight group around the fireplace, which was a comforting feature, especially for bereavement groups.

The living room was also wheelchair-accessible through a door on the side of the room opening to the hallway which led to the patient care area. However,

staff explained over and over again that the living room was not very practical for some of the things it was used for. Meetings, support groups, workshops, tea parties, masses, small concerts, candlelight dinners for couples, and other functions took place in that room. The living room was noisy and there was no privacy. This was a problem because the room did not have a door to the reception area; instead, a curtain covered the opening between the reception area and the living room. One of the nursing staff explained that they really lacked a large meeting space that was "sound proof." All of the nursing staff meetings were held in the living room and there was no privacy. During nursing staff meetings they would frequently deal with serious emotional matters and constantly felt distracted, lacking quiet space and privacy. At the same time, staff stated that the charm and availability of that room, which gave the administrative end of the building a homelike touch was a successful feature.

Volunteers. Most of the volunteers were very satisfied with the living room of the Henningsen house, with its French doors leading to the gardens, the fireplace, piano, and antique furniture that could be moved around for different meetings. One of the comments a volunteer made about the living room was that "the furnishings were very exquisite, but one did not feel that they can't sit down. One could comfortably sit on them, drink coffee or tea, and not worry about it." Like staff, the volunteers also explained that the curtain covering the opening instead of a door made it difficult to maintain privacy, and also made it hard to hear things well because of sounds coming from the reception area. However,

they enjoyed the nice gatherings, Christmas parties, tea parties, and concerts that were held in the living room.

Family Members and Friends. One family member felt that the living room was dark and also rather cold when a fire was not lit in the fireplace. All others felt that it was a very attractive and soothing room; some reported that they had spent a lot of time in the room. One mentioned that she liked the living room because of all the normal, positive things happening there, such as, the time the living room was used by a singing group while she was staying at Hospice House.

The Dining Room or the Conference Room

Staff. Another space within the administrative side of the building with problems similar to the living room was the dining room. It, too, was used for multiple purposes. Again, staff explained that privacy was an issue here. The dining room was used for meetings of big groups, and did not have a door. They would have been more satisfied with the dining room if the noise were not an issue, and if it were a little larger so that the big round table would fit better.

The table was a good size for the different work groups at Hospice House to fit around for their meetings (i.e., staff, volunteers, administrators, nurses, or a combination). One of the other satisfactory features of the room, as explained by staff, was that the room was conducive to big meetings where staff could make joint decisions. The room was also used by staff as a place to eat lunch, but during board meetings or other functions, the staff would be displaced.

Another use of the dining room was for family reunions. Some of the staff complained that even though the large table was very practical for meetings, it was not very conducive to having family dinners, last family dinners, or family reunions. Overall, as in the case of the living room for meetings where privacy was required, there was a problem with noise coming from the reception area to the dining room.

The Kitchen

Staff. The kitchen was another positive feature of the administrative building from the perspective of the staff. This was a large kitchen, the original kitchen in the Henningsen house, which was remodeled into a commercial-type kitchen while still maintaining its original shape. A walk-in cooler had been added next to the kitchen, a feature that the kitchen staff enjoyed having. Prior to that, the dietary staff had to make trips down to the far basement of the house to get their supplies. Even though there was some regularity in the production of meals, the kitchen primarily functioned as a short-order kitchen. The kitchen had its own ground-level back entrance for deliveries, and thus, the main front door was not being used for this purpose.

Another satisfactory feature was a little pantry area next to the kitchen with its pink refrigerator. Nursing staff reported that the kitchen staff always kept single-serving snacks for patients and families and that families could bring things for their relatives and store them in the pink refrigerator. The pantry also had

cupboards for plates, straws and other utensils. It was always shown to patients and families when they were first admitted.

Some staff felt that one of the problems with the kitchen was that it was remote from the patient care area. Dishes, plates and trays had to be taken up the hallway to the patient care area. On the way back to the kitchen they were often mixed with family and staff personal utensils and had to be sorted out in the main kitchen. A kitchen staff person, who was interviewed, felt that the distance was not a big problem because all of the patients did not eat at the same time. He also mentioned that because Hospice House normally was not at capacity, and that the average number of patients was about four, distance was not a concern. On the other hand, if there were ever a full house, there would be problems with food getting cold.

Volunteers. One volunteer explained that she found the kitchen to be wonderful, and even though she was not kitchen staff, she found the kitchen convenient and functional. Regarding the staff room, this person thought that it needed some work done on the drawers so that they would open and close more easily. Besides that, most of the volunteers expressed that they were quite satisfied with the staff room and the pantry, in part because of its shelf space. For the most part, volunteers did not discuss the kitchen, staff room, and pantry areas, or the office spaces as much as the staff did. This was probably due to the nature of their jobs and the fact that they did not have as much experience with those areas as the full-time staff had.

Family Members and Friends. Some family members described the food that came out of the kitchen as wonderful, and commented that the kitchen staff were nice to the whole family and not just the patient. Family and friends could pay a minimal amount to have meals served to them, as well. They looked forward to the food because it was well-prepared and served nicely. The one family member who raised the issue of cooking odors in the reception area, mentioned that it was great to have the kitchen separated as far as possible from the patient care area, so that food smells would not affect nauseated patients. This was one positive aspect of the remote location of the kitchen.

The Staff Room

Staff. The room next to the pantry was called the staff room. It was a small area and could not house a table for eating lunch or taking breaks. It also did not contain a phone. However, staff did not complain much about the space. There was a microwave they used to cook food they brought from home, and they felt that the room was a comfortable place to sit.

Administrative Offices

Staff. One of the most satisfactory features for staff was the administrative office space available at Hospice House. The Director's office was a spacious office on the ground floor of Henningsen house. It was a gracious, charming room with French windows, a lot of light coming through, and a view of the grounds. Like other spaces within the facility, it had beautiful furnishings and homey touches which created a comfortable, casual atmosphere. "One of the positive

aspects of the office spaces like we had here, was that the environment felt less stressful, less rushed, and was an easy reminder of the function of Hospice House," one staff member explained. He further continued by saying, "Most of the administrative people really enjoyed having an office space in the old building with the large old bedrooms, very big and spacious."

Other staff members commented that a negative aspect was that they were separated from what went on in the patient care area, and that they had to make it a point to find out what was happening in the patient wing by either walking to that end or by keeping in daily contact with the nursing staff.

The Second Floor of Henningsen House

Staff. The second floor of the House was referred to only by the staff because it mainly consisted of staff offices, a multi-purpose room called the Rose Room, more bathrooms, and storage areas. The staff who had their offices upstairs explained that the spacious rooms, all the nooks and crannies and bonus rooms made the space upstairs flexible for use as office space. One staff person felt that he had the best office in Portland because he had a very spacious office with an east view of the mountains through the trees.

One of the office spaces upstairs had a fireplace in it, which became a very nice office space for the social worker. This room had a pleasant feeling-- very charming, warm and homelike. The problem was that it was on the second floor, and not all patients and families could get up there. In some cases, the social worker used the living room (downstairs) to meet with people. Another multi-

purpose room on the second floor was the Rose Room. It served alternately as a conference or meeting room, staff room, and counseling room.

Accessibility to the upstairs was an issue addressed by two of the staff members who participated in the study. Another thing lacking in the upstairs of the House was adequate storage area because staff reported that accessibility to the attic for storing things was difficult, particularly for heavy things. One staff member explained however, that "For retrofitting an older home, I think the areas are pretty functional considering that they weren't designed for the way they're being used. A good job has been done of being functional but yet honoring the house and not making major structural changes."

Summary

This chapter dealt with the administrative offices and the users' feelings and experiences about each of the rooms in the administrative portion of the facility. All users had positive remarks about the elegance of the Henningsen house, the existing building on the Hospice House property when it was purchased.

The physical separation of this building from the patient care unit is the first thing that all users mentioned. All three groups had favorable things to report about the separation of the administrative building from the patient care unit because it offered the best of both worlds, an elegance and stability of a 60 year old vintage house, alongside a modern patient care unit. At the same time, the administrative staff sometimes saw the separation from things happening on the patient care unit as negative.

The front entrance of the Henningsen house was an area that received overwhelmingly positive remarks from all user groups due to its aesthetic qualities. The staff and volunteers agreed that the reception desk should be closer to the front door, so there could be better reception service. A diverging view as held by the other user group, the families, who enjoyed having the receptionist not very close to the front door. As they explained, it was up to them to go forward and talk to the person at the reception desk if they wanted to, or they could just directly turn left to the patient care unit. The staff and the volunteers also referred to the public bathroom behind the receptionist's desk as a problem, because it was the only available public bathroom in the whole facility. On the other hand, none of the family members and friends referred to that as a problem.

All three user groups unanimously mentioned that they enjoyed the beauty and elegance of the living and dining rooms in the Henningsen house. The furnishings, the piano, the French doors, and the fireplace were features that all user groups mentioned as exquisite. On the downside, two of the user groups (staff and volunteers), repeatedly noted that both of rooms were noisy when there were meetings taking place in those rooms, because neither of the rooms had doors that would shut.

One staff member explained that the kitchen was remote from the patient care unit. A family member raised the issue of odors, and felt that it was best to have the kitchen away from the area of care. None of the other respondents talked about either of these issues. A very satisfactory feature with the kitchen, and one

that all three user groups liked, was the pantry area. It stored dishes and utensils, and also had a refrigerator that contained a variety of snacks for patients and their families.

The rest of the Henningsen house was administrative offices, and staff who worked in those offices were the only ones who referred to them. All had generally positive remarks regarding the beautiful offices, some of which had a view of the mountains.

The next chapter will present the findings about the patient care unit as described by the three user groups.

CHAPTER VII

FINDINGS: THE PATIENT CARE UNIT

The physical separation of the administrative building and the patient care wing and their connection by a corridor was discussed in Chapter VI. In the present chapter, the corridor or hallway that connected the two buildings will be discussed in more detail. Also, satisfaction or dissatisfaction with the patient care wing as a separate unit within the facility will be discussed, as viewed by the three user groups interviewed.

One of the respondents talked about the continuity of the old building and the new patient care area: "I think the architect has done a wonderful job of adding continuity of a 60 year-old building into a new structure; so as you approach the building from the outside there is definitely a continuity in the skyline. You have to think about whether this is all one building. The architect accented the old structure by adding the new structure and kept with some of the same contour lines and tried to make it flow into each other." Combining the old and the new while creating diversity between the two buildings was an interesting design feature of the facility. There was something for every taste. The elegance of the old building and the contemporary design of the new wing was one of the most frequently mentioned features.

The Hallway

Staff. The hallway connecting the two buildings was one of the creative additions of the architect according to the staff (see Figure 8; arrow on the floor plan represents the position of the camera). One staff member stated that the hallway was an architectural symbol that represented the nature of the dying process, the transition from life to death. The hallway was a tube where a person has no choice other than transit to the patient care wing. The hallway did not seem excessively long, and one did not get a sterile feeling of being in a hospital.

There were interesting architectural features that gave it a positive effect. Windows opened along the hallway and one could look outside into nature from both sides. On one side, the hallway had large-pane windows looking onto the grounds; there was light coming through and it was always bright. On the other side, one first saw a beautifully carved huge piece of wood that listed the names of donors and then a window looking to the terrace garden. Below the wood carving was a beautiful stand with a large notebook on it with the deceased patients' names written in calligraphy. For these two reasons the hallway was referred to by some of the staff as the "Hall of Names."

On the right, one also had a view into the terrace garden, which was a beautifully landscaped patio area situated between the Henningsen house and the new patient care wing. The terrace garden could be seen from the living room in the old house, from the hallway, and from the common lobby area in the patient care wing.

Figure 8. Hallway Connecting the Two Buildings

Looking down the hallway from Henningsen house, one could see a quilt hung on the wall at the very end. Also, as one stood in the front entrance area and gazed down the hall, there was a light on the wall across, which was called the vigil light. This was a remarkable symbol because it was lighted for 24 hours after the death of a patient. Some of the staff explained that every morning when they first walked into the building, they would look over to the vigil light and see if it was on or not. One staff member felt a symbolic meaning in this and called it the "the light at the end of the tunnel."

The hallway was wide enough for beds and stretchers to get through, and, for the most part, the windows were low enough so that people on beds and stretchers could see out. One staff member referred to it as the "Hallway to Heaven". There was also an earth-tone wooden handrail along the hallway for people who needed it. The floor of the hallway was initially covered with tile, but it was later discovered that moving beds, carts, stretchers and wheelchairs over the tile was very noisy, so carpet was laid over it.

Volunteers. One of the volunteers described an interesting contrast between the old house and the new patient facility, "like walking from one world to another." The old, elegant style of the Henningsen house was on one end of the hallway, and the modern, bright, contemporary, and clean feeling of the patient care wing at the other. Like the staff, volunteers explained that there were advantages as well as disadvantages to that. Psychologically, it was a barrier or a buffer between the outside world and the patient care area. It allowed people the

space to prepare themselves for either coming into the patient care area when anticipating great fears or to recover from the agony when leaving the patient care area before going outside.

Another satisfactory thing about the hallway as discussed by one of the volunteers was that all the windows along the hallway focused on soft areas. Walking up the hallway, there was a good degree of openness and light; a visitor would be able to look into the terrace garden on one side and to the fountain area and the courtyard on the other side. The volunteer explained that "these are excellent features that help people make the adjustment to the fearful area they are coming into--a place where people die." All of these features, the fountain, the garden area, the light coming in, played a very important role in softening the visitor's feelings about the patient care area. "They all have expectations of what the wing will look like, and when they first get there, they can't believe all the light and the openness," the volunteer added.

As was also discussed by some of the staff, one volunteer talked about the carved wood panel in the hallway that had the names of the donors as a satisfactory feature of the hallway. She also said that whenever she came in, she would take a few moments to read the inspirational message on the stand at the front of the hallway. She said the message helped her leave her day at the office behind and prepared her for coming into a caring atmosphere.

Family Members and Friends. Family members, too, enjoyed reading the comment or thought for meditation from the book on the little table in the hallway.

Some particularly liked the carved wooden mural with the list of donors, which was an artistic addition to the hallway. They explained that the fresh flowers always made it very cheerful, and the way the hallway was lighted with all the big windows made it very pleasant. Most of the family members also mentioned that they enjoyed the book of patient names written in calligraphy in the hallway. Whenever a family member or friend was interviewed by the researcher at Hospice House, she or her would always go to the book and turn the page to where the name of their loved one had been written in calligraphy.

The Common Area

Staff. Over and over again, the staff talked about the architectural features of the patient care wing that made it perfect for a health care facility. The vaulted ceilings, the skylights, the patient rooms looking into the forest, the low height of the nursing station, the earth-tone colors were all the characteristics that the staff discussed as having uniformly positive effects.

Walking up the hallway to the patient care unit, one entered a spacious open room called the "Common Area." It was an atrium with skylights and was a bright room. There were lots of plants and comfortable furniture and a TV. There were tables for playing games and working puzzles, and there was also a small area for children to play in (see Figures 9 and 10; arrows on the floor plan represent the position of the camera). The basic simplicity of this area and the amount of light that came through from the skylights were the features that helped

Figure 9. The Common Area

Figure 10. Children's Play Section in the Common Area

to create a lot of positive feelings about this area. The simplicity came from earth-tone colors throughout, basic living room furniture, lots of plants, and a natural color wood headerboard around the ceiling that gave subtle sense of dimension and was also used to hang things on (e.g., framed art work). Everything in this area looked homelike and there were no indications that one was in a facility according to several of the staff. "The Common Area functions as a true living room," one staff member noted.

People, including patients and their family members and friends, went to the Common Area for social interaction, playing games, watching TV. Another staff member reported that patients spent a lot of time in that Common Area, some on their recliners and some on their beds. They could eat at or near the table, watch TV, or just be around other people instead of being isolated in their own room. "Something about the building allowed people to know more about one another and to ask about one another. They would also talk about the architecture of the facility," one of the nurses explained.

The socialization between families was one of the most valuable aspects of Hospice House, and one which a home health hospice program can never achieve, one staff member stated. The way the Common Area was designed facilitated the socialization and prevented isolation. There was a lot of healing work done at the table in the Common Area during meal times, some of the staff explained.

Volunteers. The Common Area was a gathering place, for bringing together families and patients, as described by the volunteers. "Lots of living went

on in that place," explained one of the volunteers. The area enabled people to share with one another. Families would gather there and have lunch or just sit and read the paper, and they would be part of things, and close enough so that they could be around their loved ones. There were afternoon teas with families, and they all had a wonderful time in the midst of an otherwise sad time, noted one volunteer.

The lightness and the openness of the room was apparent throughout the wing. It is an open area, and very inviting and non-obtrusive. One volunteer explained that the light that came through the skylights made it a bright and cheery place that broke down barriers; thus, the Common Area lent itself to group therapy. The Common Area was an area where patients, if they felt well enough, would come, and sometimes, if there were too many patients on wheelchairs, it would get crowded. There was homelike furniture all around, and a big dining table that some families used for family gatherings and pizza parties instead of staying in the patient's room all the time.

One of the volunteers who did a lot of counseling and individual talking to family members explained that since there were times that there were no rooms available for him to take the family member to, the big table in the Common Area and the chairs around it were just wonderful for that purpose. He explained that the chairs provided some choice. He could define distance by moving the chairs around and facing the person he was talking to, or getting close to the person so they could hear one another. He also said that he sometimes used the bench area

at the end of the floor, but sitting on a bench was not comfortable and was not conducive to counseling, especially when there were patients in Rooms 7 and 8.

The Common Area was always kept very pleasant, and they always had flowers or other items appropriate for the season. The furniture was comfortable, and families would sit there just to pass the time. The amenities in the Common Area provided different options for all the users. One volunteer explained that "there was a feeling of residential character and a human scale because of all the textured surfaces, earth-tone colors, weavings and paintings available in the Common Area."

There was also a children's play area in the Common Area that several volunteers talked about. The issue of children playing received some contrasting ideas from the volunteers. Some of them explained that it would be nice to have a specialized area sectioned off for children to play, whereas others argued that in order to maintain the homelike feature of the facility, there should not be a special area for children.

Family Members and Friends. The central Common Area was an area in which several family members and friends and patients spent their time. Some called it the solarium because of all the light coming in. They explained that they enjoyed using that room because it was very homelike, and that the big dining table there was very functional for having family dinners. They also thought of the Common Area as a very satisfactory feature because it was a spacious and open

place, and it could be a quiet, relaxing place where they could sit and watch the light and the trees through the skylights.

Some explained that with children around, it was sometimes noisy in this area just adjoining the patient rooms, but that added to the homey, family atmosphere.

The Nursing Station

Staff. A downside of the Common Area being used as a true living room was that the nursing station was located immediately adjacent to the Common Area, and it was sometimes difficult for staff to carry on their activities at that desk. A very interesting feature of the nursing station, and one that a lot of staff talked about, was its design. It was round, or circular, and it was also low (see Figure 11; arrow on the floor plan represents the position of the camera). Instead of being chest-high, where people had to stand and talk to the nurse, they could actually sit at the nurse's station and talk to a nurse. The low design of the nursing station made it easy for the nurses to command the floor. The roundness of the nursing station was another reason that it was very inviting and was thus a place for some of the staff to hang out and take their breaks. This could have been due in part to the lack of a real break room or a spacious staff lounge.

The access to the nurse's desk was only from one side of the station, and it did sometimes get congested at that end. One of the nurses explained that, overall, she liked the nurse's station "because its design kept things separate without

Figure 11. The Nursing Station

creating walls." At the nurse's station was a bookcase that housed all the patient charts. The nurses would do the patient charting there, answer phones, check their mail, etc.

Volunteers. The nurse's station, as it was described by volunteers, was fairly centrally located. This was a feature that they viewed positively. Some of the volunteers explained that there was not a lot of privacy for the nurses if they wanted to do their charting, or if they had private things to say about the patients. Nurses or volunteers would sometimes go into the medicine room or the Quiet Room to talk if there was a critical issue that needed to be discussed.

On the other hand, the nurse's station was very inviting and open, and the low design of the station did not create a feeling of separation; thus, families would stop by and talk to the nurses. The nursing station was also a gathering place for all the administrative staff and the garden staff; they would all come and have coffee at the nurse's station, and would become aware of what was going on at the wing.

Family Members and Friends. The accessibility of the nurse's station, particularly its round and low design was a feature that created a positive inviting atmosphere, family members stated. They all noted that the carpets and the furnishings and the colors were very normal and natural, and did not give an institutional feeling.

The Medicine Room

Staff. Behind the nurse's station was a very small medicine room. Most of the staff who worked in that area explained that the medicine room was not a very functional space. Architecturally it had been built on the assumption that a mobile drug cart would be used, but the nurses had found the cart frustrating and had gotten rid of it. The medicine room was small, and ventilation was always a problem. Also, because locking the door was required for medicine rooms, it was not functional to constantly lock and unlock that door.

Storage

Staff. As far as storage areas on the floor, there was some criticism as to their location and size. One staff member stated that the "clean utility" and the "clean supplies" rooms were sometimes confusing, and that they just had to memorize what was in each. Another staff member said that the two should have been combined into one big storage area, instead of having one on either end of the patient wing. There was also a soiled utility room, and both it and the clean utility room were narrow and not as functional as possible.

One staff person also stated that the linen room was not big enough, and that there was not enough space to adequately stock up linen for the whole patient care area when they had the maximum number of patients. There was a general storage area in the basement of the patient care wing. Again, this was not a very functional space, because it was too large and open. It housed general supplies,

medical supplies, equipment, and shop tools. The staff pointed out that the space could have been reasonably divided so that all uses could have their own area.

Volunteers. Just like the staff, the volunteers also referred to the storage and utility areas on the patient care wing as being confusing. They explained that they were never sure where they would find something, and they would have to look in more than one closet. This confusion was even more of a problem for volunteers who did not work everyday and would forget where supplies were stored. Again, they felt that a main supply room may have worked better. Another volunteer stated that it would have been nice to have push-open doors and lights that would come on automatically in the storage areas for times when they had to get something quickly.

Patient Rooms

Staff. One of the most satisfactory features of the patient care area, according to the staff, was the fact that all the patient rooms were on one side of the wing, and the rooms where nursing and service functions took place were on the other side. The positioning of the patient rooms so they all looked out into a forested area was the one feature that everyone (including staff, volunteers, family members and friends) talked about and referred to as the most positive feature of the facility (see Figures 12 and 13; arrows on the floor plan represent the position of the camera).

One staff member explained that patients were very impressed with the physical layout of the building, and also its cleanliness, and how well it was taken

Figure 12. A Patient Room

Figure 13. View From the Patient Rooms

care of. There were eight patient rooms along the side of the patient care wing. The rooms varied in size and the number of beds they held. Each room had large-pane windows looking out to the forest, and also a window looking into the wing. The window on the wing side had blinds, which the patients or their families could close to provide privacy. All of the rooms had closets, some had private toilets, and some had toilets that were shared by two rooms.

There was no access to the outdoors directly from the patient rooms. One staff member explained that it would have been nice to have covered patios outside each room, which would be an extension of the patient room to the outdoors. "Visually and aesthetically combined, the view to the woods and birdfeeders outside each patient room is very conducive to the kind of work that we do here, and families comment over and over again about the peacefulness and the beauty of it," one staff member noted.

Staff explained that most people wanted private rooms, and so it would have made more sense to have more private rooms. The patient rooms were made to look as homelike as possible, and patients could bring as many of their personal belongings as they wanted. Patients put pictures on the wall, or brought their own lamps, chairs, bedding, and pets. Each room had a table with the TV on it, and some patients wanted the standard hospital TV mounted on the wall. The staff often faced difficulties with the TV using floor space.

Another difficulty faced by nursing staff was the heating system in the patient rooms. There was one thermostat for all of the patient rooms, which was

located in Room 6, and they always had difficulty keeping everyone happy.

Patients were either freezing or too hot. One patient would be too cold because the air conditioner was on, so the nurses would cover the vent, and that would change the temperature in another patient's room. One of the nurses explained that they always had to have space heaters or fans handy for people who needed them. The offices across the patient rooms had their own thermostat, and the Common Area and the hall had their own.

There was a window seat in each room and a recliner. A lot of times the recliner would be used for the person who was staying with the patient. Even though they could wheel another bed into the rooms, most people either slept in the Quiet Room, which will be discussed later, or on the recliner in the patient's room. One of the nurses pointed out that most of the rooms usually had just one bed in them; when two beds were put in the same room, things would start getting crowded. "Even though the rooms all meet the codes and the minimum standards, in terms of functionality they are really tight with two beds in them," one of the staff explained. The nursing staff commented that in the larger rooms it would be easier to maneuver patients on wheelchairs or recliners, especially when they bring a lot of their personal belongings. Overall, staff noted that all the patients liked the rooms with the big windows looking to the woods and the birdhouse. Feeling close to nature and seeing living things such as chipmunks, squirrels, and birds was the most frequently discussed feature of the facility. Patients also liked it

when they would squeeze in another bed in their room for their spouse to sleep next to them.

One of the problems on the patient care wing was the lack of public bathrooms. There were no bathrooms in the patient care wing for families to use. Some families used the bathroom in or adjacent to the patient room, but for the most part, that was not encouraged by the staff because of infection control. There was one staff bathroom on the wing, a tiny area marked "staff lounge" which was a bathroom and was also the only place the nursing staff could hang their coats. Most patient rooms had adjoining bathrooms, which was a serious problem if one of the patients had an infectious disease. Also, at the stage that some patients were in (where they would vomit or have diarrhea, for example), private bathrooms would have been helpful. Furthermore, nurses explained that the bathrooms, because of their size and shape, were not very accessible to some patients, especially those in wheelchairs.

One staff member felt that it would have been nice to have wheelchair showers in each of the bathrooms instead of having to wheel patients down to the main tub room. Also, the windows in the bathrooms did not open, and the lack of ventilation was troublesome. Another thing that one of the nurses mentioned about the bathrooms which made some patients uncomfortable was that there were two doors to each bathroom, one from each of the adjoining patient rooms. Sometimes patients would forget to unlock the bathroom door to the next room when they were finished, and at times they would be concerned about noise as well as smell.

According to one nurse, one of the things that worked well in the bathrooms and which had been added after the facility opened was a mechanism on each toilet that would clean bed pans.

Volunteers. Volunteers reported that they really liked the patient rooms because the rooms fulfilled their purpose. They explained that patients spent most of their time in the rooms and that toward the end their world would be limited to their beds. The big windows and the view to the outside, the window seats that could store things, and the comfortable furnishings in the patient rooms also were very positive from the volunteers' standpoint. All of them discussed the fact that patients and families enjoyed the view and looking out into the trees, seeing birds and wildlife at the birdfeeders by each window.

Some of them explained that it would be absolutely ideal if the rooms were a little larger so that the patient bed, a comfortable chair, medical supplies, TV, flowers, and other belongings would easily fit, especially when a patient had a lot of visitors. As was stated earlier by staff, Rooms 3 and 6 were functional because they were the two larger rooms. When there was only one patient staying in each of those rooms, the volunteers reported that they thought the arrangement worked out very well. One of the volunteers commented that the furnishings, the carpets in the rooms, and the drapes were very nice.

The fact that Rooms 7 and 8 were not carpeted was very practical for AIDS patients and patients who would be vomiting a lot, because cleaning these rooms was easy. As far as closet space, they mentioned that it was adequate for the

patients who did not bring a lot of personal belongings with them; otherwise, it was cluttered. The volunteers pointed out that one of the nice features in the patient rooms were the windows facing the Common Area and the patient wing corridor, and that if patients wanted some quiet or privacy they could shut the door and draw the curtain. Thus, patients could have as much or as little privacy as they wanted. The volunteers reported that the sink in each patient room was very useful for washing their hands or for getting towels wet for the patients.

The volunteers commented on the fact that most of the time there were not a lot of patients who needed the volunteers' assistance in going to the bathroom. Furthermore, they reported that if there were ever more than two people in the bathrooms, it would be congested. Otherwise, the volunteers explained that the handrails in the bathrooms were very practical for patients.

Volunteers also pointed out that patients would sometimes get disgruntled about having to share a bathroom between two adjoining rooms, sometimes the patients would get disgruntled about that. Also, one of the volunteers would worry about the door staying locked to the adjoining room. As noted earlier, the staff, too, mentioned the shared bathrooms as a problem. At the same time, some of the volunteers explained that most of the patients had catheters, and few of them could use bathrooms; even the ones who did would often be able to use the bathroom for only a few days before they became total bed-care patients.

Family Members and Friends. The families or friends whose patients had stayed in the larger rooms, Rooms 3 or 6, with no roommates had very positive

feelings about the rooms. They all made the comment that the room had become their own personal area and that it really worked well for large families, or those who had a lot of visitors. Furthermore, they explained that having the extra available space in the room, and in some cases the extra bed, meant a great deal to them. Families also stated that they could bring personal belongings to hang on the walls or bedding from home for the bed, which was an admirable feature that really made a difference.

Families reported that they really enjoyed having privacy in the individual rooms, which allowed them some great times with their loved ones. They raved over the big windows, with their views to the trees, the birdfeeders and the animals outside. Those whose patients were still able to talk before dying explained that the beautiful view and the closeness to nature had really thrilled the patient. They also explained that the windows facing the Common Area were satisfactory features, because you could shut the door for some quiet, but still be able to see what was happening on the floor, and that the nurses could keep an eye on the patient, as well.

Over and over again, the respondents explained that the rooms were bright, airy, cheerful, and had a positive effect on their morale. The ones whose patients had stayed in the smaller rooms stated that it did get cluttered if a lot of medical equipment was needed there. But they all mentioned the proximity to the nursing station as one of the very positive aspects of care.

No family member or friend discussed the lack of storage space in the patient rooms; the ones who did talk about the closets mentioned that they were adequate for their needs. The bathrooms, too, were adequate from the standpoint of family and friends. All liked the upholstered furniture (for example, the reclining chairs) in the rooms, but some explained that more furniture pieces in the room would be nicer, especially a comfortable, lightweight chair with wheels that could easily be rolled to the patient's bed, so they could sit down next to the patient instead of standing.

The Main Shower/Tub Room

Staff. The main shower/tub room on the floor which was for patient use was a big bathroom with an adjoining shower room. It was a cold room, and a heater had to be added. Patients were taken to that bathroom in their wheelchairs and were moved to a chair attached to the tub that would hydraulically lift people up and into the tub. It was difficult for the nurses to stay dry when they were helping a patient. This bathroom was all tiled, floor and walls, and was thus easy to keep clean. One of the nursing staff explained that because it did not look as homelike as the rest of the facility, they were going to add some plants to soften the harsh institutional feeling of the tub room. Also, just outside the door of the bathroom was a pillar which made it difficult for nurses to maneuver people in wheelchairs into the bathroom.

Volunteers. About the tub room, the volunteers explained that they would take a lot of the patients there, and that it was a wonderful feeling for patients to

be bathed. They also stated that the tub room was a nice and spacious facility, except that it was difficult to keep warm and also difficult to keep clean. One of the volunteers mentioned that she always enjoyed giving baths in the jacuzzi tub, because patients could relax and get away from their pain.

Family Members and Friends. All but one of the families or friends whose relative used the tub room were very satisfied with it. They explained that it was large enough, comfortable, and relaxing. One family member said that the patient did not like being bathed in the tub.

The Quiet Room

Staff. One of the rooms in the patient care area that was frequently discussed was the Quiet Room. This was a multi-purpose room which housed a small professional library (see Figure 14; arrow on the floor plan represents the position of the camera). Patient conferences were held there, it was used to counsel families or friends of patients, it was sometimes used as a chapel or a retreat room or a meditation room, and family members could also sleep in it overnight. Staff would have liked to have seen the room used less as a multi-purpose room, and more as a meditation room or retreat. It was too small to hold a team for patient conferences. For other functions it worked fine, except that it would sometimes get too hot and was often noisy for meditation.

Volunteers. The volunteers explained that the Quiet Room was a place to go for those who wanted to rest, to stare out the window, to pray, or to cry; it

Figure 14. The Quiet Room

always felt like it earned its name, one of the volunteers explained. The volunteers also explained that since the Quiet Room was labeled as such, people would immediately understand that it is different than the Common Area, and would lower their tone. Just like staff, the volunteers also explained that the Quiet Room by itself as a multi-purpose room was not adequate, and that they would have liked to see another room on the floor for either worship or meditation purposes. Such a space would be used for counseling families or talking to families when the Common Area or the other spaces were occupied.

Family Members and Friends. Some family members or friends used the Quiet Room on occasion. Some visitors slept there overnight, or they would go there to get away from the pressure for a while. They explained that there was a hide-a-bed sofa which was very comfortable if someone wanted a little separation from the patient room. There were books, and candles, and a window that looked to the yard; they explained that it was a pleasant room to get away and relax and still be within close proximity to the patient.

The Kitchen on the Patient Care Wing

Staff. Centrally located on the patient care wing, there was a small kitchen, which staff explained families really enjoyed having. They could keep snacks, heat their food in the microwave, make coffee, or have popcorn. There was a small refrigerator, a small stove, and a microwave; the room was open on both ends to the Common Area. Some of the staff explained that they would have

liked to see a larger refrigerator and an oven where they could heat a pizza, and more outlets for toasters and other electric utensils.

Volunteers. The volunteers also stated that one of the areas that received a lot of use was the little kitchen on the floor. Other than making coffee, tea, or popcorn, the kitchen was used to keep the patient meals if they had visitors or were not quite ready to eat. The microwave was also available to heat the food when they were ready to eat. There was a hot water dispenser and an ice machine, which the volunteers explained were among the most useful features of that kitchen. Just like the staff, one of the volunteers also explained that a larger refrigerator would have worked better for that area, and that personal dishes and utensils would get mixed with those that belonged to the main kitchen. Thus, someone had to go through and check all the dishes and utensils to separate the ones that belonged to the main kitchen.

Family Members and Friends. The kitchen on the floor was another feature that the family and friends liked. Some brought their own coffee or tea which they would share with others, and some brought snacks; there was always food available. One of the respondents explained that the little kitchen area on the wing was a social area for people to gather and share food.

The Director of Nursing's Office

Staff. Another room in the wing was the nurse's office, which was located across from Room 7 at the end of the floor. One of the staff members explained that the spaces may have been more functional if the location of the Quiet Room

and the nurse's office were switched. The nurse would be closer to the administrative building and closer to the center of activity, and at the same time the Quiet Room could be used more as a quiet, meditative room being located at the far end of the wing.

Other Features

There was a window seat at the very end of the wing which turned out to be a very useful feature. It was also a place for multi-purpose functions such as individual counseling of a family member, nurse interviews if the Nurse's office was occupied, etc. Looking back at the uses that the window seat received, as well as the uses that the Quiet Room received, a staff member explained that another room should have been available on the wing.

The elevator to the basement was slow, and as one of the staff members explained, it was originally put there with the idea that there might be a need for a second story. It was not functional however, because a gurney would not fit in it, thus it truly could not have worked for moving patients.

One of the staff explained that acoustically the wing was poor. For example, conversations at the nurse's station could be heard in Room 8, or that one family who was having a special occasion would be laughing, when someone in another room would be dying.

One of the volunteers explained that odor control was wonderful at Hospice House: "the fact that there was no odor was a radically different feel than a nursing home."

Summary

Visually and aesthetically, the view into the woods, the feeling of being in a forest but so close to the city center, the earth-tone colors, all the light that came through the windows and skylights, and the connection with the earth and to nature was all conducive to the kind of work being done at Hospice House. Users all commented about the peacefulness and the beauty of it. One of the staff members explained that she cannot remember any criticism of the physical facility by any patient, or any complaint that the design of the physical structure undermined their care.

The hallway separating the administrative building and the patient care unit was discussed by all groups of users. Staff, volunteers, and families and friends talked about its light and open feeling as a positive feature. All user groups also referred to design elements such as the carved wooden mural with the names of donors, the stand at the front end of the hallway that always had flowers and a book of meditative messages on it, and the notebook that had former patients' names written in calligraphy as positive features of the hallway. Staff and volunteers described the hallway as a good place for transition from the outside world to the patient care unit, and also as a symbol of transition from life to death.

All user groups had uniformly positive feelings about the Common Area of the patient care unit. Members of all three user groups talked about the vaulted ceilings with the skylights, the spaciousness, the light and open feeling, the homelike features, and the earth-tone colors used in the Common Area as positive

design features. They also all noted that the Common Area had an inviting atmosphere for socialization. All of the users referred to the low design of the nursing station as one of the interesting and inviting features about the nursing station. Two user groups (staff and volunteers), explained that even though it was a wonderful feature to have the nursing station open and inviting, and that there was socialization going on at that station; there were times when there was too much socialization, and the nurses and volunteers had to go to another room to do their work.

Only staff referred to a medicine room just behind the nursing station. They reported that it was a small space and had poor ventilation. Regarding storage areas on the patient care unit, both staff and volunteers had similar criticisms of the location and the size of these areas. They felt that having two storage rooms was confusing, and that a main supply room may have worked better. The families and friends did not refer to the storage rooms on the patient care unit.

Another major similarity among the three user groups was the fact that they overwhelmingly appreciated the patient rooms. The view from the big windows looking to the wooded area, the proximity to nature, and the birdfeeders outside each window were some of the features they all talked about. They also all felt that the fact that the patients and their families or friends could bring their personal belongings to decorate the room added to the homelike nature of the rooms.

All three user groups also talked about the availability of the blinds on the windows to the nursing station and Common Area, and that the blinds were positive features to control privacy. All three user groups also preferred the larger patient rooms. Only staff and volunteers talked about the adjoining bathrooms in some of the patient rooms. Staff reported the shared bathrooms as a negative feature; volunteers reported that the shared bathrooms were a problem only before a patient became completely bed ridden. Family and friends did not refer to the shared bathrooms at all; neither did they discuss the heating or cooling system in the unit. Only one of the user groups (staff) reported the heating/cooling system as a negative feature, because all of the rooms have one central thermostat located in Room 6.

There was a tub room on the patient care unit that was used for patients. All but one family member explained that they liked it because it was a spacious room, comfortable, and relaxing. The volunteers did not talk about the tub room. The staff, on the other hand, mentioned that the tub room was a cold room, and needed a better heating system. One design flaw that the nurses referred to was a pillar just outside the door of the tub room which made it difficult to maneuver wheelchairs into the tub room.

The Quiet Room was a multi-purpose room that was frequently discussed by all three user groups. All of them similarly explained that it was a retreat for meditation, and another place to get away and separate from the patient care unit for a while. Staff and volunteers reported that the Quiet Room as the only multi-

purpose room on the patient care unit was not adequate. All three user groups explained that it was a good space for family members who were staying overnight. Family and friends noted that it was a pleasant room to use to get away and still be within close proximity of the patient.

The kitchen on the patient care unit, even though not very large in size, was one of the positive features. All three user groups explained that they enjoyed having that space available to store snacks and drinks. Family and friends also mentioned that it was a good social area for people to gather and share treats. The staff and volunteers thought the refrigerator in that kitchen was too small.

As was discussed in this section, the staff and the volunteers were the two user groups who reported problems with the patient care unit (i.e., the thermostat, the shared baths, and the pillar across from tub room). Unlike the staff and the volunteers, the family members and friends were completely satisfied with the patient care wing. The quality of the physical surroundings and the quality of the care they received as a family unit was so different from what they had received prior to coming to Hospice House that they did not find many problems with the physical structure of the patient care area. One of the respondents whose husband was being cared for at Hospice House had been an architect. She stated that, "He was very interested in the aesthetic quality of the facility. He would go outside to the upper level of the grounds and appreciate how the new wing was added to the old structure; he would also talk about the quality of the physical structure to his friends who were practicing architects." This respondent explained that her

husband liked the way the facility looked, he was comfortable there, and he did not make any particular comments about how to improve the structure.

The pleasant homelike atmosphere, the airy and open feeling, the safety and comfort of being in a hospice, and the peaceful ambiance that was created in the patient care area, on top of the compassionate care that patients and their families and friends received, were all features that families described positively.

CHAPTER VIII

CONCLUSIONS AND RECOMMENDATIONS

The study presented above is a qualitative study that explored the physical structure of a free-standing hospice facility and identified physical and environmental features that contribute to user satisfaction and dissatisfaction with such a facility. In trying to identify these physical and environmental features, the study had three goals: 1) to generate data concerning the assessment of the existing structure of the facility; 2) to discover the users' feelings about and experiences with the quality of the physical environment; and 3) to contribute to the field of hospice facility planning by informing the design of future facilities wishing to adopt a hospice program of care. This chapter presents a summary of the findings, discusses the strengths and the limitations of the study and makes recommendations for future research.

Discussion and Summary

The transcripts from the study provided very rich data regarding the feelings and experiences of staff, volunteers, family and friends of patients about the physical structure of Hospice House. Prior to the collection and analysis of the data, considerable divergence was expected among the responses of the different

user groups. The analysis of the data, however, showed a general convergence among the user groups. All of the users expressed an overall sense of satisfaction with the facility; none of the respondents had only negative feelings to report about the structure and environs. The content of the interviews was most detailed among the staff, and least among the family or friends of patients. This is likely a function of the degree of user experience with the facility. The family members and friends interviewed were less experienced with Hospice House than the staff because they did not spend as much time at the facility. The same holds true for volunteers, who had more to discuss than family and friends, but not as much as staff.

The participation of users contributed to this post occupancy evaluation study by helping to identify areas of satisfaction and dissatisfaction within the facility. Short-term and long-term problem solving at Hospice House (now Hopewell House) can be attempted by looking at the results of the study and identifying deficiencies that the users of the facility mentioned. The findings of the post occupancy evaluation can also be used in the development of design criteria that will improve the quality of the existing facility as well as contribute to the design of future facilities.

Analysis of the data revealed three distinct environments within the facility to be of major importance to the users when discussing the physical surroundings of Hospice House. The three separate areas of importance were the grounds, the administrative end of the facility, and the patient care unit.

The outdoor areas, or the grounds of Hospice House, turned out to be a key factor in user satisfaction. They created a first impression that was very pleasing. The grounds are what one notices first upon coming to Hospice House for the first time. All users expressed great satisfaction with the grounds, the landscaping, and the views from the patient rooms onto the grounds. While the existing hospice design literature refers to exterior gardens as important features in the design of a hospice (Carey, 1986), the findings of this study call attention to the outdoor environment and the grounds as playing the predominant role in the design of Hospice House. Many studies have documented a relaxing and restorative value of nature. Ulrich (1979 and 1984) notes that viewing nature tends to foster recovery from stress. His findings suggest that natural scenes foster greater recovery, as indicated by a reduction in fear. Ulrich (1984) and Ulrich and his colleagues (1991) also report that positive emotional states elicited by viewing nature may be a mechanism underlying the finding that hospital patients recovering from surgery had more favorable recovery courses, including shorter hospital stays, lower intake of narcotic pain drugs, and favorable evaluations by nurses, if their windows overlooked trees. Nasar (1994) also concludes that increases in natural elements such as trees, shrubs, and water will contribute to preference and relaxation.

The outdoor environment, especially the variety of outdoor spaces at Hospice House (the woods, the gardens, the expansive lawn areas, the courtyards, the gazebo, the landscaping elevations, and the seasonal effects) is obviously something that is not available in many facilities, and is one that had a direct

impact on people's satisfaction with Hospice House. It was unanimously discussed by respondents as an essential element. One major problem with the grounds as expressed by all groups of users was that the walkways were either steep for people in wheelchairs. Also, lack of parking on certain days was mentioned as another problem.

Another area that received considerable comment was the part of the facility where administrative functions took place, the stately Henningsen house. The Henningsen house contributed to the overall sense of satisfaction with the physical structure of the facility. The architectural features of this old Victorian home gave users a sense of stability and of being in an estate instead of a health care institution or a place to die. As Nasar (1994) points out, style is an important variable in an individual's experience of a building. Research on housing styles has confirmed style as a variable that conveys meaning (Nasar, 1994). Nasar's (1994) research on housing styles across four U.S. cities converges on the desirability of vernacular styles. In the case of Hospice House, the style of the vintage Henningsen house was a major factor in contributing to its pleasantness as reported by all user groups.

There was an overall sense of satisfaction with the building because of its non-institutional appearance, and family and friends appreciated the fact that as they first walked into the facility, they were faced with the administrative functions before being faced with the patient care area. Families and friends liked the reception area being away from the entrance, whereas staff and volunteers thought

it should have been closer to the entrance. The architectural features of the Henningsen house, such as the hardwood floors, the French doors, the stained glass, the fireplace, as well as the antique furnishings played a great role in user satisfaction. All user groups liked these features. These findings support Ornstein's (1992) report that aspects of the physical environment such as design elements, style, and furnishings are used by individuals in forming impressions about an organization.

The remarks conveying dissatisfaction with the Henningsen house stemmed from the fact that the house was retrofitted into office spaces. Also, noise on the first floor was a commonly mentioned problem. Most of the areas downstairs were open, or did not have doors, and thus noise could easily travel from one room to another. Staff and volunteers reported that the first floor was noisy, especially during meetings or private counseling sessions. Families did not mention noise as a problem.

The patient care area, where all of the nursing activity took place, was the third distinct area within the facility that received considerable comment. There was an overwhelming sense of satisfaction with the spaciousness, openness, homelike atmosphere, the light and airy feeling, the earth-tone colors, and the closeness to nature. In a study of residential settings for people with mental retardation, Thompson (1990) reports that furniture position, lighting type, and lighting flexibility contributed to homelike features. Virtually all users commented on the fact that they felt "lifted up" when they walked into the Common Area of

the patient care wing because of the light coming through the skylights. "It was not an oppressive structure," one of the respondents explained. Gutkowski et al. (1992) also found therapeutic effects were also reported as a result of minimal modifications such as painting, changing lighting, and defining separate areas within a day hospital unit.

The separation of the administrative building and the patient care area was accomplished by the hallway and was discussed by the majority of those interviewed as a most important element for transitioning from the outside world to the world of patient care. All user groups liked the hallway because it allowed people time to reflect and to prepare for what was ahead.

Once in the patient care wing, there was an overall contentment with the space. The single most frequently mentioned positive feature was the big windows in each patient room with the views to the woods and the birdfeeders. Next was the closeness to nature, which was brought about by the light coming through the windows and skylights, as well as the earth-tone colors used in the interior design. All user groups enjoyed these features.

The findings of the study called attention to an issue that was not expected to be critical at the beginning of the study: the number of patients in each room. Although available literature on patient rooms (Koff, 1980; Kriebel, no year) reports that there is a debate on whether multiple or single rooms are appropriate, the respondents unanimously stated that a single room is the preferred choice. According to one of the spiritual counselors at Hospice House: "At the stage that

most of the hospice patients are in, they and their families are not prepared or willing to meet new people or to begin new friendships." Thus, a single room is preferred. Also, the size of the smaller rooms was viewed negatively by the families who had stayed in the larger rooms, although the size of the room was not mentioned as a problem by the families who had stayed in the smaller rooms.

Results of this research are consistent with the findings of a study on architectural guidelines for state psychiatric hospitals. Gulak (1991) lists guidelines that hospital administrators can use when discussing patient needs with architects. These guidelines include providing an indication of a room's intended use, providing distinct visual differentiation between parts of the facility, providing a variety of spaces to support social interaction, and using distinctive colors to enhance activities and space.

In another study, Lyman (1993) identified four stressful aspects of facility design in an Alzheimer's day care center. Two of these aspects were found to be missing at Hospice House. Staff space and privacy was one aspect that was discussed by the nursing staff. There was no spacious "staff only" lounge or space available that provided some degree of privacy for staff to retreat. Another aspect that was reported as a negative feature in both of the above studies was the lack of bathrooms. At Hospice House, the only public restroom available was inconveniently located away from the patient care unit in the Henningsen house.

The staff, and to some extent the volunteers, were the two user groups who noted problems with the patient care area. Families and friends did not find major

faults with this wing. Probably this is mostly a function of the degree of experience with the facility. As mentioned earlier, the staff and the volunteers had spent more time and were more experienced with the facility than the families or friends. Staff and volunteers also had an opportunity to observe and to listen to a variety of families who had stayed in the facility. One reason some staff and volunteers found minor faults with the patient care area was that the "aesthetic" and the "homelike" features were sometimes emphasized more than practicality. Some staff and volunteers felt that medical or nursing people were not adequately consulted during the design of the patient care area. Even though aesthetics and homelike features are essential elements in designing a facility such as the one studied, these should be combined with other features such as practicality and function.

Designers of future hospices and health care facilities need to make sure that they have consulted the nursing staff and other users of the facility so that functional and practical elements are considered in the design and implementation of a hospice facility, as well as homelike features and aesthetics. Nonetheless, it should be restated that the overall feelings of all users were positive, and the fact that Hospice House did not look or feel like an institution was an extremely favorable factor.

In order to assist planners in designing better hospice facilities in the future, Table IV presents a list of activities and behavior settings that Hospice House did not accommodate as adequately as desired.

TABLE IV
DAILY ACTIVITIES THAT THE FACILITY DID NOT ACCOMMODATE
AS WELL AS POSSIBLE

Recommendation	# People to Accommodate	Comments
Staff and volunteers need a lounge to take breaks and to relax	10-20	need for oral and visual privacy
Families need a quiet room in which to relax during the day and stay overnight	10-15	need for privacy, yet proximity to the patient
Visitors need a public restroom	10-15	needs to be located on the patient care unit
Patient rooms need individual climate control	10-15	a thermostat is needed in every room
Users need a convenient front door	20-30	automatic doors with a flat threshold are needed
Users need privacy in the rooms in Henningsen house	10-20	need to replace curtains on the openings between rooms with doors

STRENGTHS AND LIMITATIONS OF THE STUDY

One of the strengths of a qualitative study such as that undertaken here is the degree of involvement of the researcher with the case under study. In the case of a post occupancy evaluation, the researcher is both listening to what the informants have to say, as well as informally observing the surroundings. Listening to the tapes of the interviews and focus groups for further transcription of the data makes the researcher even more intimate with the data. By the analysis stage, the researcher has already been immersed in the data and has exceptional familiarity with all that was discussed. Another strength of the study was the myriad of data collected from the key informant interviews, the two focus groups, and the thirty personal interviews. Although multitudinous at times, these data from multiple sources provided a wealth of information. This level of familiarity with the data, as well as the multiple viewpoints and types of data sought and included in the study, contributed to the "trustworthiness" of the findings.

The collaboration of the staff of the facility and their willingness to undertake this study was another strength. This collaboration helped make the research effort go smoothly.

Also, the researcher, in preparation for the study, took a Hospice Volunteer training course and learned from experts in the field of hospice care. This helped greatly to alleviate discomfort in dealing with hospice residents and their families

and friends. Personally experiencing the facility at different times while doing informal observations was another strength.

The feelings and experiences of the three user groups --staff, volunteers, and family and friends of patients -- about the quality of the physical environment of the facility and the environs were explored in depth. Also, important dimensions to inform the design of future hospices to best meet the needs of all users were identified.

The study generated knowledge concerning the use of post occupancy evaluation methodology for evaluation of hospice facilities, such as utilizing multiple viewpoints in discussions with users instead of, for example, walk-through observations in a sensitive facility such as a hospice. Use of architecture as a tool in the therapeutic process to improve the quality of remaining life for hospice patients and their families was another strength. Findings that contribute to the field of hospice design and renovation were also obtained. Post occupancy evaluation methodology involves a plethora of different methods for evaluating a facility. In the case of this study, talking to users was an effective means of collecting information in a sensitive setting such as Hospice House. The contextualization of post occupancy evaluation and its application to a hospice setting enabled identification of issues that were specific to the three user groups of the facility. Thus, physical and architectural features that contribute to user satisfaction with a hospice facility were specified.

In summary, the data collected from this research are believed to be valid because of the following reasons:

1. Familiarity of the researcher with the data.
2. Personally experiencing spaces within the facility at different times of the year, as well as different times of the day or night. Also, experiencing the positive and the negative features as described by users through informal walk-through observations.
3. Eliciting multiple viewpoints about the building and the grounds by having talked to different groups of users.
4. Eliciting the viewpoint and intent of designers with regard to the physical structure of the facility.

In this final reflection, it is important also to comment on the shortfalls of the study. The study participants were all Caucasian and all lived in the Portland metropolitan area. Thus, generalization of study results may be limited, and the findings should be considered as preliminary. The fact that patients could not be included in the data collection stage of the study was another shortfall. Also, some users' experiences were from months earlier, and they had to recall their feelings and experiences.

Recommendations for Hospice Facility Design

Based upon the findings of the case study presented above, the following recommendations are offered to architects and designers of hospices for designing future hospice facilities:

1. The facility should be sited in a natural setting, where users will have easy and direct access to the outdoors. At the same time, it should also be centrally located in the metropolitan area.
2. Landscaping is an essential element of hospice facility design. Efforts should be made to create gardens and to use garden accents such as gazebos, topiaries, and birdfeeders.
3. A variety of outdoor areas should be made available to users for sitting, walking, and enjoyment of nature.
4. There should be enough level area outdoors to maneuver patients who are on wheelchairs.
5. The facility, especially the patient rooms, should have a view of the outdoors, preferably naturalistic settings or gardens.
6. Efforts should be made to design the facility and its furnishings to be as homelike as possible. Spaces within the facility should be designed to allow flexibility to users so they can make the surroundings as comfortable as possible.
7. Patient rooms should be spacious enough, with closet space, and bathrooms, so that patients and their families can bring personal belongings.
8. A variety of comfortable furnishings should be provided in the patient room, including recliners, chairs with wheels, and tables or shelf space to set things on.
9. Multi-purpose rooms or spaces that could be used for a variety of uses should be included in the design of the facility.

10. There should be areas provided for users to socialize with other users.
11. The facility should provide opportunities for users to get away, but still be within close proximity of the patient care unit.
12. Other than a main facility kitchen, there should be plans for a kitchen closer to where the patient rooms are located. This will be for the use of all users, especially family and friends of patients.
13. The areas of service, i.e., storage rooms, medicine rooms, tub rooms, and laundry rooms, should be within easy access for the staff and volunteers.
14. The facility should include an area specifically designed as a staff lounge, for staff and volunteers to take their breaks in.
15. Bathrooms should be provided specifically for the use of family and friends of patients, so that they do not have to use the patient's bathroom, which may have infection problems.
16. Spaces should be provided for meetings and counseling.
17. Enough office space for the staff of the facility should be available.
18. Natural elements should be brought in as much as possible, such as natural light and earth-tone colors.
19. All patient care spaces, including patient rooms, hallways, elevators, and outdoor walkways, should be designed to be easily accessible for patients in wheelchairs and patients who are bed-bound, or need to be transferred via gurney.

Recommendations for Future Research

Based upon the findings of the study, the following recommendations are offered for future research:

1. Research should be designed to include participants who have had a great deal of experience with the facility and whose experience is recent. In the present research, some of the respondents had a limited recollection of the facility under study, because their experience was from several months earlier.
2. The viewpoints of all users should be tapped, including those of patients, to learn about their feelings and experiences with the physical structure and environs of the facility. In the present research, the viewpoints of patients were not collected because the facility suspended its operation in the midst of the data collection stage.
3. To more successfully elicit user responses about a facility, a medium should be used to simulate the environment being studied. This can be achieved by using floor plans, drawings, photos, slides, videos or a combination of these during the interview. In the present research, using floor plans of the facility was very effective, especially in circumstances where the interview did not take place at the facility. This helped the respondents to remember spaces within the building and the grounds of the facility.
4. Review of the facility's history and its design process should be integral to any post occupancy evaluation. This will establish an understanding of

the goals and intentions in designing the facility, and will aid in comprehension of why things were designed as they are.

5. A knowledgeable person or persons within the facility should act as the researcher's guide. An effort should be made to seek individuals who are intimately familiar with the facility, and who are willing to walk the researcher through the facility.

6. Unobtrusive observations should be made within the facility, whether formal or informal as a supplement to interviews. Because any research dealing with terminally ill people and their families is extremely sensitive, the need for unobtrusive data collection methods is essential. Such methods do not require the cooperation of the subjects, and may even be invisible to them (Webb, Campbell, Schwartz, and Sechrest, 1966). Webb and colleagues (1966) describe these measures as "nonreactive research," because the researcher observes or collects data without interfering in the ongoing flow of everyday events. Marshall and Rossman (1995) also report that unobtrusive measures can be used without arousing notice from subjects as long as the researcher is aware of the ethical issues in dealing with participants. A possible method for doing this at a hospice facility is for the researcher to take the role of a participant observer. Such observations will help the researcher to experience the facility as well as assessing activity and use levels.

7. Unobtrusive data collection could be aided by the use of audiotapes, hidden cameras, and infrared photos (Marshall and Rossman, 1995). Time-lapse

photography is another tool that can be used to assess activity levels and use of various parts of the facility in sensitive environments.

8. Photographs and slides should be used as visual aids not only to refresh the researcher's memory about what was learned but also to facilitate the sharing of findings.

9. Finally, systematic studies should be conducted to evaluate multiple patient rooms as compared to single rooms.

REFERENCES

- Bechtel, Robert B. (1989). Advances in POE Methods: An Overview. In W.F.E. Preiser (Ed.), Building Evaluation (pp. 199-206). New York: Plenum Press.
- Bednar, Michael J. (1977). Barrier Free Environments. Stroudsburg, PA.: Dowden, Hutchinson, and Ross, Inc.
- Buckingham, Robert W. (1983). The Complete Hospice Guide. New York: Harper and Row Publishers.
- Burnell, George M. (1993). Final Choices: To Live or to Die in an Age of Medical Technology. New York and London: Insight Books.
- Carey, Deborah Allen. (1986). Hospice Inpatient Environments. New York: Van Nostrand Reinhold Company.
- Carp, Francis M. (1976a). A Senior Center in Public Housing for the Elderly. Gerontologist, 16:243-249.
- Carp, Francis M. (1977). Impact of Improved Living Environment on Health and Life Expectancy. Gerontologist, 17:242-249.
- Carp, Francis M. (1976b). User Evaluation of Housing for the Elderly. Gerontologist, 16:102-111.
- Carpman, Janet Reizenstein. (1986). Design That Cares. Chicago, Illinois: American Hospital Publishing, Inc.
- Chan, Lo-Yi. (1976, Dec.). Hospice: A New Building Type to Comfort the Dying. AIA Journal, 42-45.
- Chase, Deborah. (1986). Dying at Home With Hospice. St. Louis: C.V. Mosby Company.
- Corr, Charles A., and Corr Donna M. (1983). Hospice Care Principles and Practice. New York: Springer Publishing Company.

Farbstein, Jay. (1989). Advances in Post Occupancy Evaluation Applications: An Overview. In W.F.E. Preiser (Ed.), Building Evaluation (pp. 289-298). New York: Plenum Press.

Frey, James H., and Fontana, Andrea. (unpublished). The Group Interview in Field Research.

Gulak, Morton B. (1991, Jul.). Architectural Guidelines for State Psychiatric Hospitals. Hospital and Community Psychiatry. 42(7):705-707.

Gutkowski, Silvio, Ginath, Yigal, and Guttman, Flor. (1992, Sep.). Improving Psychiatric Environments Through Minimal Architectural Change. Hospital and Community Psychiatry. 43(9):920-923.

Hospice House, Inc. (1990). All About Hospice House. Portland: Hospice House.

Kidder, Louise H. (1981). Research Methods in Social Relations. New York: Holt, Reinhart, and Winston.

Koff, Theodore H., and Ittleson, William. (1980). A Post Occupancy Evaluation of Hillhaven Hospice. Tucson: University of Arizona.

Koff, Theodore H. (1980). Hospice, a Caring Community. Cambridge, Massachusetts: Winthrop Publishers, Inc.

Kohn, Judith. (1976, Oct.). Hospice Building Speaks on Many Emotional Levels to Patient, Family. Modern Health Care, 6(4):56-57.

Kohut, Jeraldine M., and Kohut Sylvester. (1984). Hospice: Caring for the Terminally Ill. Springfield, Illinois: Charles C. Thomas, Publisher.

Kriebel, Marjorie. (no date). Inpatient Hospice Facilities: Programmatic Requirements of the Patient Room. 223-230.

Krueger, Richard. (1988). Focus Groups. Thousand Oaks, CA.: Sage Publications.

Locke, Lawrence F., Spirduso, Waneen W., and Silverman, Stephen J. (1987). Proposals That Work. Newberry Park, CA.: Sage Publications.

Lyman, Karen A., Pynoos, Jon, and Cohen, Evelyn. (1993, Summer). Occupational Stress and Workplace Design: Evaluating the Physical Environment of Alzheimer's Day Care. Journal of Architectural and Planning Research. 10(2):130-145.

Marshall, Catherine, Rossman, Gretchen B. (1995) Designing Qualitative Research. Thousand Oaks, CA.: Sage Publications.

Moos, Rudolf H., Lemke, Sonne, and David, Thomas G. (1987). Priorities for Design and Management in Residential Settings for the Elderly. In V. Reginer, and J. Pynoos (Eds.), Housing the Aged: Design Directions and Policy Considerations (pp 179-205). New York: Elsevier.

Moos, Rudolf H., and Lemke, Sonne. (1984). Multiphasic Environmental Assessment Procedure (MEAP) Manual. Palo Alto: Stanford University Social Ecology Lab.

Moos, Rudolf H., and Lemke, Sonne. (1980). Assessing the Physical and Architectural Features of Sheltered Care Settings. Journal of Gerontology, 35(4):571-783.

Morgan, David M. (1988). Focus Groups as Qualitative Research. Newberry Park, CA.: Sage Publications.

Morgan, David M., and Spanish, Margaret T. (1984). Focus Groups: A New Tool for Qualitative Research. Qualitative Sociology, 7(3):253-270.

Nasar, Jack L. (1994, May). Urban Design Aesthetics: The Evaluative Qualities of Building Exteriors. Environment and Behavior. 26(3):377-401.

Neal, Margaret B. (1985). Socialization and Ideal Expectations for the Health Professional Role in the Provision of Quality Terminal Care for the Urban Elderly. Portland State University, Doctoral Dissertation.

Newman, Oscar. (1972). Defensible Space: Crime Prevention Through Urban Design. New York: MacMillan.

Ornstein, Suzy. (1992, Jan.). First Impressions of the Symbolic Meanings Connotted by Reception Area Design. Environment and Behavior. 24(1):85-110.

Preiser, Wolfgang F.E., Rabinowitz, Harvey Z., and White, Edward T. (1988). Post-Occupancy Evaluation. New York: Van Nostrand Reinhold Company.

- Rabinowitz, Harvey Z. (1989). The Uses and Boundaries of Post Occupancy Evaluation: An Overview. In W.F.E. Preiser (Ed.), Building Evaluation (pp 9-18). New York: Plenum Press.
- Siebold, Cathy. (1992). The Hospice Movement: Easing Death's Pains. New York: Twayne Publishers.
- Stoddard, Sandol. (1978). The Hospice Movement. New York: Vintage Books.
- Thompson, Travis, Robinson, Julia, Graff, Miles, and Ingenmey, Rita. (1990, Nov.). American Journal on Mental Retardation. 95(3):328-341.
- Ulrich, Roger S. (1979). Visual Landscapes and Psychological Well-Being. Landscape Research. 4, 17-23.
- Ulrich, Roger S. (1984). View Through a Window May Influence Recovery From Surgery. Science. 224, 420-421.
- Ulrich, Roger S., Simons, Rober F., Losito, Barbara D., Fiorito, Evelyn, Miles, Mark A., and Zelson, Michael. (1991, September). Stress Recovery During Exposure to Natural and Urban Environments. Journal of Environmental Psychology. 11(3):201-236.
- Webb, Eugene J., Campbell, Donald T., Schwartz, Richard D., and Sechrest, Lee. (1966). Unobtrusive Measures: Nonreactive Research in the Social Sciences. Chicago: Rand McNally.
- White, Edward T. (1989). Post-Occupancy Evaluation from the Client's Perspective. In W.F.E. Preiser (Ed.), Building Evaluation (pp 19-34). New York: Plenum Press.
- Zimmerman, Jack M. (1986). Hospice Complete Care for the Terminally Ill. Baltimore: Urban and Schwarzenberg.
- Zimring, Craig M., and Reizenstein, Janet E. (1980, Dec.). Post Occupancy Evaluation: An Overview. Environment and Behavior, 12(4):429-450.

APPENDIX A

Statement of Informed Consent

STATEMENT OF INFORMED CONSENT

I, _____, hereby agree to participate in the research project titled "Physical and Architectural Features That Contribute to Satisfaction With Hospice Facilities," conducted by Arezu Movahed, a graduate student at the School of Urban and Public Affairs, Portland State University, under the supervision of Dr. Margaret B. Neal.

I understand that the study involves my participation in a tape-recorded discussion regarding my evaluation of the physical environment of Hospice House. I also understand that there will be some inconvenience to me, in terms of giving up an hour or two of my time to participate in the interview. However, I reserve the right to talk about only those things with which I feel comfortable.

It has been explained to me that the purpose of the study is to investigate about the physical environment of Hospice House. It has also been explained to me that the purpose of the interview is to collect data for research, and that I may not receive any direct benefit from participating in this study. My participation, however, will help to provide knowledge in the field of hospice planning and design.

The investigator, Arezu Movahed, has offered to answer any questions I may have about the study and what is expected of me in this study. I have been assured that all information I give will be kept confidential and neither my name nor other identifying information will ever be revealed in publications or any discussions of the findings.

I understand that I am free to withdraw from participation in this study at any time without jeopardizing my relationship with Hospice House or Portland State University.

I have read and understand the foregoing information and agree to participate in this study.

Date _____ Signature _____

If you have any questions regarding this study, please contact Arezu Movahed at 725-3432; or if you experience problems that are the result of your participation in this study, please contact the Chair of the Human Subjects Research Review Committee, Office of Grants and Contracts, 303 Cramer Hall, Portland State University, 725-3417.

APPENDIX B

Oral History/Architectural Intent Interview Guide

Oral History/Architectural Intent Interview Guide

The initial interview questions from informants in the oral history sessions will be broad-based and open-ended, and would funnel down into more specific questions.

1. I am studying the physical environment of Hospice House. That is, I am looking at the building and the grounds. What I am interested to know is the process of the design of Hospice House. Think back to the days when you were asked to design the facility.

How did you first get involved in the project?

2. Let's go back to the days when you were designing the facility, before any sketches were made.

What were your ideas and your goals in designing the facility?

What did you have in mind?

What did you want to accomplish?

Your response will help me find out if your original intentions were met, and whether the designed spaces are used as they were originally intended?

The interview would funnel down into more specific questions

3. What was your intent in incorporating each of the physical areas into the design?

What was your intent in designing each space as it is?

The more specific questions will be covered at the end of the interview.

4. What changes were made to the plan from the beginning to the end of the design process?

Which are the features you mostly like in the design of Hospice House?

Probes include asking of examples.

APPENDIX C

Staff and Volunteer Focus Group Guide

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Staff and Volunteer Focus Group Guide

The funnel structure will be aimed for in this focus group. I will start with a general question and allow the group to tell me some of their personal views. If time allows, I would then go into specific questions asking about specific areas within the facility.

Introduce myself, and thank everyone for coming to the focus group. Help yourselves with the refreshments.

Opening Remarks: As you all know, I am doing a Post Occupancy Evaluation of Hospice House. Specifically, I am looking at people's feelings and experiences about the physical environment of Hospice House. I am interested in both the building and the grounds. All of you have worked at Hospice House for some time and have a unique perspective of this facility. I would like to hear you talk about your individual perspectives and experiences of the physical environment of Hospice House, and your insights on what you think works or does not work in order for this place to be used as a hospice facility. Tell me what is functional or not functional with the building and the grounds.

Let's talk about your own perspectives as staff and volunteers at this facility, and the things that are meaningful to you. If there is time at the end you can tell me about other users (for example, family members and patients) and what they think as good or bad about the physical environment.

First, I would have to pass around these Statements of Informed Consent. Why don't you each take two copies; look them over; and write your names at the top and sign and date it at the bottom. It basically says that you have agreed to participate in today's focus group, that your names will be kept confidential, that you have agreed for the interview to be tape recorded, and that you can ask questions or stop the interview any time you want. Please sign the copies and return one to me; the other copy is for you to keep.

Give them some time to read and sign.

In order to make it easier to discuss specific areas within the facility, I would like to pass these floor plans around. Please take one.

BEGIN TAPE

Why don't you each tell me your names. I have met some of you prior to this focus group, but there are people whom I do not know.

1. The major thing I would like to know is what each of you think are the good features and the bad features of the physical environment.

What is functional for a hospice and what is not?

If you could go back to the architect, what would you tell him needs to be changed, modified, or added?

How about if you go back to the interior designer?

2. Let's now discuss the facility in terms of each room or each area. What changes or modifications would you like to see in each of these areas:

(Refer to the floor plan)

- Loading/unloading area
- Reception area
- The kitchen
- The upstairs
- Other areas in Henningsen House
- Patient care unit
- Common area
- Patient rooms
- nurse's station
- storage areas
- bathrooms
- nurse's office
- quiet room

Is anything missing in any of these areas?

- The basement
- The outdoor space
- The courtyard
- The terrace garden
- Parking

3. Before you leave, I would like all of you to know that I really appreciated your participation. I am interested in getting as much information as I can; so, if anyone of you had things that you didn't want to share as part of a larger group or didn't get a chance to talk about, please give me a call.

I'm also interested in doing some individual interviews with staff and volunteers as a follow-up discussion of what we did today. Please let me know if you are willing.

Thank you for sharing your experience.

APPENDIX D

Family and Friend Focus Group Guide

Family and Friend Focus Group Guide

The funnel structure will be aimed for in this focus group (as in all other previous interviews). I will start with a general question and allow the group to tell me some of their personal views. If time allows, I would then go into specific questions asking about specific areas within the facility.

Introduce myself, and thank everyone for coming to the interview. Help yourselves with the refreshments. Pass around a floor plan of Hospice House for reference.

Before we begin, I would have to pass around these Statements of Informed Consent. Why don't you each take two copies; look them over; and write your names at the top and sign and date it at the bottom. It basically says that you have agreed to participate in today's interview, that your names will be kept confidential, that you have agreed for the interview to be tape recorded, and that you can ask questions or stop the interview any time you want. Please sign the copies and return one to me; the other copy is for you to keep.

Give them some time to read and sign.

The other thing I will pass around is the Supplementary Information Sheet which I would like you to fill out. It will help me describe who participated in the focus group interview.

Pass around Supplementary Info. Sheet and wait for them to fill out.

Opening Remarks: As you all know, I am looking at people's feelings and experiences about the physical environment of Hospice House. I am interested in both the building and the grounds. As you are all people who have used Hospice House for several days when your family members or friends were here, I would like to know what you most liked and least liked about the building and the grounds. The findings of my study will help architects and designers of hospices and health care facilities to plan better facilities in the future.

1. First of all, how do you feel about the layout and the structure of Hospice House. How do you feel about the design of the facility?

Depending on how much time the above question takes the following questions will be asked.

2. We talked a little bit about the following. What are some of the good and bad aspects of those areas:
 - Entry into the facility
 - Entry into the building
 - Patient care wing
 - Patient rooms
 - Kitchen facilities
 - facilities for family/friends to stay
 - outdoor space
3. I was originally planning to talk to some people being cared for at Hospice House. Unfortunately that is not possible anymore. Could you try to recount for me your family members' or friends' experience and perceptions of the facility? what were their concerns regarding the building and the grounds?
4. To wrap up and give the interview an ending:
What are your wishes to improve the physical environment of Hospice House? What would you change?

Ending Remarks: I guess our time is up. If there are things that any of you did not feel comfortable sharing as part of a group, or if there are other things about the quality of the physical space of Hospice House that you would like to discuss, I'll be happy to do an individual interview with you. You have my phone number on the pink sheets you received with Linda Downey's letter, and I have also left some extra copies on the table.

Thank you very much for coming.

APPENDIX E

Letter of Family Recruitment and Abstract of Study

March 7, 1991

Dear _____,

We continue to look at how we can contribute to the greater cause of hospice care and future patients. Currently, we are involved in a study of Hospice House's building and grounds. Of particular interest are the physical features that contributed to and detracted from the quality of the hospice care we provided. Learning about these physical features will facilitate the design of other hospices and health care facilities so that they can best meet the needs of patients and families. The person who is doing the study is a graduate student at Portland State University; her name is Arezu Movahed.

As you are someone who has direct experience with Hospice House, I am asking you if you would be willing to help with this study. If you agree, you would be interviewed by Arezu either as one of a group of family members or individually, at a location of your choice (here at Hospice House, at your home, or wherever you would like) for about an hour to an hour and a half. Everything you said would be anonymous; none of us here at Hospice House would have any way of knowing who said what. The kinds of questions Arezu (pronounced Ah-re-zu) would be asking you would be, "What rooms did you like best, and why?" "What areas didn't you like, and why?" "What about the garden--did you go there, and if so, what did you like and dislike?", etc. As I said above, the goal of the study is to help others learn from our experience here at Hospice House so that physical improvements in the design of hospices and other health care facilities can be made.

If you would be willing to be interviewed by Arezu, either alone or as one of a group of family members, please call Arezu at 725-3434 (days) or 227-3801 (evenings) or you may call me and I will let Arezu know of your willingness to participate.

Thank you for considering this request.

Sincerely,

Linda Downey
Executive Director

ABSTRACT OF DOCTORAL STUDY**PHYSICAL AND ENVIRONMENTAL FEATURES
THAT CONTRIBUTE TO
SATISFACTION WITH HOSPICE FACILITIES**

By: Arezu Movahed
Graduate Student
Portland State University
227-3801 (home)
725-3432 (work)

The purpose of this study is to investigate the physical environment (building and grounds) of a free-standing hospice facility to identify the features that would contribute to the design and renovation of other hospices and health care facilities that plan to adopt a hospice program of care. Although the number of inpatient hospice facilities is growing, information about the ways in which their physical environments enhance or impede user satisfaction or quality of care is scarce. In this study, an attempt will be made to examine how architectural factors combine in a hospice setting to meet the needs of the dying and their families and those who work in hospices.

Specifically, this study will use a qualitative, case study approach to describe the feelings and experiences of people who have used Hospice House concerning the physical environment of that facility. Interviews will be conducted with staff, volunteers, and family and friends of Hospice House patients to explore design issues that are of concern to them.

The findings of the study will be of use to designers, architects, and planners of health-care facilities such as hospices and nursing homes, in conceptualizing essential components of design, in order to create better health-care facilities in the future.

APPENDIX F

Staff and Volunteer Individual Interview Guide

Staff and Volunteer Individual Interview Guide

The funnel structure will be aimed for in the individual interviews with staff. I would start with a general question and allow the respondents to tell me some of their personal views. From a general/broad question, I would then go into more specific kind of questions.

I. Demographic information

First, I would like to start out by finding out just a little bit about you.

1. M/F Age:
2. Could you tell me how long you worked at Hospice House?
3. What was your job here at HH? What did you do? Your job title?
4. What is your professional training/education?

Opening Remarks: As you know, I'm looking at people's feelings and experiences with the physical environment of Hospice House.

I am interested in both the building and grounds, and would like to find out how satisfied the people who have used HH on a regular basis are with the building and grounds.

For somebody who has already participated in the focus group:

I got some really interesting views on this in the group session earlier, but I want to find out some of the more specific things that you have to say, because often, people don't get enough chance to talk in a group as much as they want, or sometimes what is said in a group makes you think about other things that you wish you had said.

For somebody who did not participate in the focus group:

I got a kind of a general overview picture about this from a group of staff whom I interviewed earlier. What I would like to do today is to get into more specific things and to hear your personal point of view as a xxxxxxxx who has worked at HH.

II. Opening question

How do you feel about the layout and structure of the building and grounds? The design of the building and grounds?

probe: How does the layout/design make some things work well, and create problems for performing other tasks?

III. Behavior mapping kind of questions to find out how events correspond to locations the respondents use within the facility.

1. Would you try to recount for me a normal day of work at HH?

probe: Where you spend time, places/areas in the facility you use in a normal day.

2. Were there tasks or functions that you wanted to do, but the physical facilities were not adequate for them?

probe: Where you wish you would spend time for a particular activity, or an activity you wanted to do and there was no place for.

3. I had originally planned to interview some patients, but as you know, that now is not possible. So, instead, could you help me by talking about the ways in which the patients used the building and grounds.

probe: What the patients' experiences and satisfaction was with the building and grounds?

probe: What their concerns were regarding the building and grounds?

IV. Room by room information

Here I would go through the floor plan area by area to find about the respondent's feelings and experiences about each specific area/room.

A. One of the things I'm really interested in is the xxxxxxxxxx. Or:

One of the things that came up in previous interviews is the xxxxxxxxxx.

Or:

One of the things that I've heard other people talk about is the xxxxxxxxxx.

1. What do you think are some of the best features in the way it is designed?

2. What are some of the less desirable features?

OR:

1. One of the things you mentioned earlier was the xxxxxxxxxx, could you talk more about some of the good aspects of that area?

2. How about some of the less desirable features of that area?

Go through the following areas:

- the reception area
- the corridor to the patient care unit
- the common area in the patient care unit
- the nurse's station
- the patient rooms
- the outdoor space
- any other areas/rooms (either indoors or outdoors) that you wish to talk about?

V. ENDING. A general question to give the interview closure. Use an advice giving format to shift from a more specific frame of thought (room by room) back to a more general/broad reference point.

1. Finally: (As a last question:) If someone were to start over the planning and design of HH or if somebody was going to start from scratch designing a hospice facility like HH, what are some things that you would recommend?

VI. I may need to contact you at a later point to clarify some of the points you've made today; would it be alright with you if I called you?

Phone number: _____

Best times to call: _____

APPENDIX G

Family and Friend Individual Interview Guide

Family and Friend Individual Interview Guide

The funnel structure will be aimed for in these interviews (as in all other previous interviews). I will start with a general question and allow the respondent to tell me some of their personal views. I will then go into more specific questions asking about specific areas within the facility; and will wrap it up with another general question.

Before we begin, I would have to ask you to sign the Statement of Informed Consent. Please look it over; and write your name at the top and sign and date it at the bottom. It basically says that you have agreed to participate in today's interview, that your name will be kept confidential, that you have agreed for the interview to be tape recorded, and that you can ask questions or stop the interview any time you want. Please sign the copies and return one to me; the other copy is for you to keep.

Give them some time to read and sign.

- I. The other thing I will pass around is the Supplementary Information Sheet which I would like you to fill out. It will help me describe who participated in the study.

Hand out Supplementary Info. Sheet and wait for them to fill out.

Hand respondent the floor plan of Hospice House for reference.

- II. Opening Remarks: As you know, I am looking at people's feelings and experiences about the physical environment of Hospice House. I am interested in both the building and the grounds. As you are someone who used Hospice House for several days when your family member or friend was being cared for here, I would like to know what you most liked and least liked about the building and the grounds. The findings of my study will help architects and designers of hospices and health care facilities to plan better facilities in the future.
1. So, my first question is, how do you feel about the layout and the structure of Hospice House. How do you feel about the design of the facility?

probe: What are the things that you liked?

probe: What are the things that you disliked?

- III. Behavior mapping questions to find out how family members/friends used the facility.
1. Would you recount for me one of the days that you spent at HH?
Probe: Where did you spent most of your time, which places/areas within the facility did you use?
 2. What other areas within the facility did you use (both inside and out)?
- IV. I was originally planning to also talk to some people being cared for at Hospice House. Now that is not possible anymore. Could you try to recount for me your family members' or friends' experience and perceptions of the facility? what were their concerns/satisfaction regarding the building and the grounds?
- V. Now, lets talk about things you wish had existed here.
1. Were there things that you as a family member or friend of a patient wanted to do at HH, but the physical facilities were not adequate for?

Probe: What are your wishes to improve the physical environment of HH? What would you change?
- VI. Let's go through the floor plan of HH so you can tell me the things that you really liked and disliked in each area:

We talked a little bit about the following. What are some of the good and bad aspects of those areas:
- Entry into the facility
 - Entry into the building/the reception area
 - Patient care wing
 - Quiet room
 - Kitchen facilities
 - Patient rooms
 - facilities for family/friends to stay
 - outdoor space
 - Parking
 - Other areas??
- VII. ENDING. A general question to give the interview closure. Use an advice giving format to shift from a more specific frame of thought (room by room) back to a more general/broad reference point.

1. Finally: (As a last question:) If someone were to start over the planning and design of HH or if somebody was going to start from scratch designing a hospice facility like HH, what are some things that you would recommend?

VIII. I may need to contact you at a later point to clarify some of the points you've made today; would it be alright with you if I called you?

Thank you very much for coming.

APPENDIX H

Family and Friend Interviews Supplemental Information

**Family and Friend Interviews
Supplemental Information**

- 1) What was your relationship to the person cared for at Hospice House?

- 2) How long was your family member or friend at Hospice House?

- 3) What month and what year was your family member or friend being cared for at Hospice House?

- 4) Estimate the number of hours you spent at Hospice House visiting your family member or friend.

- 5) Were you here mostly during days or evenings?

- 6) Do you remember in which room your family member or friend was being cared for?