



**THE WASHINGTON INSTITUTE**  
**FOR MENTAL ILLNESS RESEARCH & TRAINING**

**PATIENT MORTALITY AT WESTERN  
STATE HOSPITAL, 1989-1994**

**THE CHARACTERISTICS OF RESIDENTS  
WHO DIED IN COMPARISON TO  
PATIENTS TREATED**

**REPORT 1 OF 3**

**The Washington Institute, Western Branch  
Western State Hospital**

**and**

**Office of Research and Data Analysis  
Department of Social and Health Services**

**APRIL 1997**

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**Report 1 of 3**

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

#### **Background**

Across the U.S., death rates in psychiatric hospitals are higher than in the general population. In Washington, patient deaths in state mental hospitals have been increasing recently. A 1992 study found that Washington was comparable to the neighboring states of Oregon, Idaho, and California in mental hospital patient deaths, and lower than the U.S. average death rate for state and county mental hospitals for the period 1983-1991 (Kamara, 1993). One recommendation was to further study patient mortality at the institutional level in view of the changing population, policies, and regulations. This study resulted from that recommendation.

#### **Major Issues and New Policies**

The following are new reforms, regulations and policies which had been implemented, and the observed trends in the WSH patient population:

1. The WSH patient population is declining in terms of admissions, discharges, and daily population (ADP).
2. Patient deaths, particularly natural deaths, increased during the period 1989-1994.
3. New statewide reforms implemented earlier, such as State Senate Bill (SSB) 5400 and Regional Support Networks (RSN), seem to be diverting less acute patients away from WSH.
4. The Advance Healthcare Directives Policy (withholding/withdrawing life sustaining treatment - "The Right to Die Policy") has been in effect since 1989.
5. The Do Not Resuscitate Order ("Death With Dignity") has been in effect as a policy since 1989.

6. New/additional hospice functions provided at WSH have been more responsive to patient needs.

### **Purpose of the Study**

This study is an evaluation of patient deaths at WSH during January 1, 1989 to December 31, 1994. It examines why deaths increased, which residents died, whether they are different from those treated, and whether the deaths are preventable or expected. This report, the first of three, reviews the types and causes of death, and presents aggregate comparisons of residents who died with those who were treated. The next two reports will look at natural and unnatural deaths separately in more detail, including their annual variations and trends.

## **METHODS AND DATA SOURCES**

Data were collected from the Quality Assurance and the Medical Records sections of WSH, and the Patient Medical Records (CMR) database on the 204 residents who died during the study period. For comparison, data were assembled on the 9,280 discharges and the 10,377 total patients (14,370 treatment records) handled during the study period. Death rates were analyzed in terms of discharges and total patients treated, and the demographic and institutional characteristics were compared.

## **FINDINGS**

### **CHANGES IN PATIENT POPULATION**

During 1989-1994, the mean ADP was 986 while the in-residence patient count (ADC) averaged 960. Admissions averaged 2,439, while discharges averaged 2,497. The ADP and ADC declined by 17% each, admissions by 40% and discharges by 35%. Enrolled patients at the end of the year (including long stay patients) declined by 25%, while annual patients declined by 32%.

### **DEATH RATE**

Of the 204 deaths occurring during 1989-1994, 88% were natural and 12% were unnatural. Based on discharges, these deaths translate to a hospital mortality rate of 1.36%, with a

natural death rate of 1.19% and an unnatural death rate of 0.17% (Table A).

TABLE A. PATIENT DEATH RATES, 1989-1994

Type	Deaths	Deaths as % of Discharge
Natural	179	1.19
Unnatural	25	0.17
Total	204	1.36

## Cause of Death

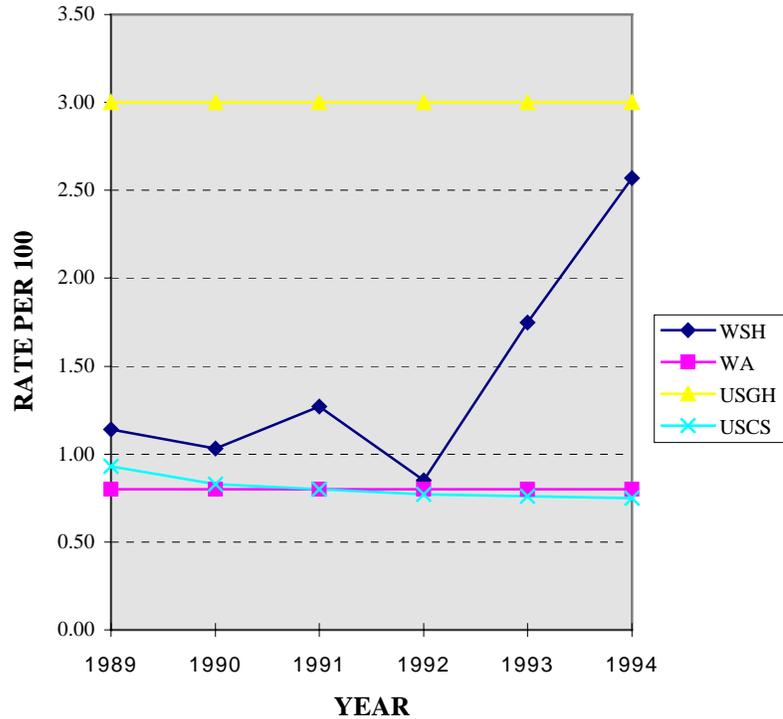
### Death Trends in WSH, Washington, and U.S. General and Psychiatric Hospitals

About 56% of all deaths and 64% of natural deaths were associated with circulatory or respiratory problems, while 60% of unnatural deaths were suicides.

As shown on Figure B, the WSH resident mortality rate during 1989-94 ranged from 0.85% of discharges in 1992 to 2.57% in 1994, averaging 1.36%. The general mortality rate in Washington was stable at 0.8% during the same period. The expected general hospital death rate in the U.S. is 3% (Hanken & Water, 1994). For state and county mental hospitals across the U.S., the annual patient death rate was 1.5% in 1983, 1.1% in 1986, and 0.97% in 1988 (Kamara, 1993), with recent rates being 0.83% in 1990 and 0.77% in 1992 (CMHS/NIMH, 1996).

Between 1983 and 1992, patient mortality rates in Washington Mental Hospitals were lower than the national average for state and county mental hospitals (Kamara, 1993), while the WSH rates were higher. In 1992, the WSH, Washington, and U.S. state and county mental hospital death rates were about equal (see Figure B). However, in 1993 and 1994, WSH death rates increased rapidly. Assuming that the declining trend in national psychiatric hospital death rates was sustained during 1993 and 1994, the WSH patient death rate would be far in excess of the national trend for those years.

**FIGURE B. TRENDS IN DEATH RATES: U.S. GENERAL HOSPITALS, U.S. COUNTY AND STATE MENTAL HOSPITALS, WASHINGTON STATE, AND WSH**



## DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

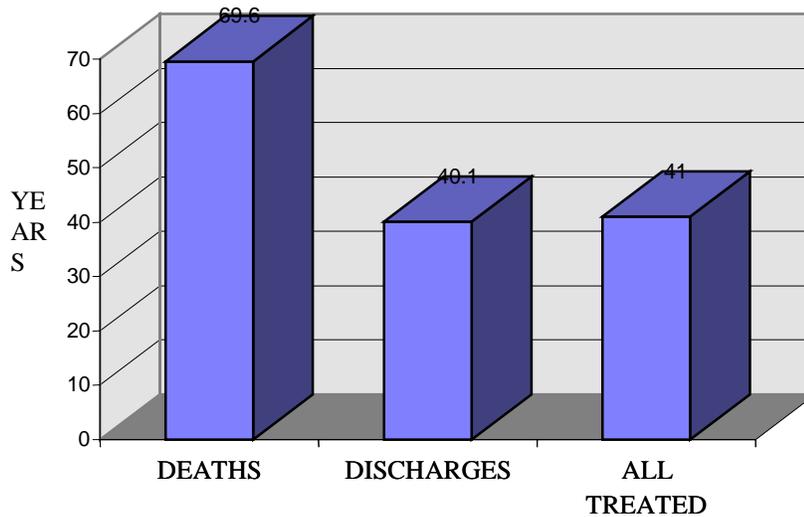
The average resident who died differed in many ways in demographic and social characteristics from the average patient who was in treatment during the same period.

### Age

The average patient who died was much older (mean age = 70 years) than the discharged or treated patient (mean ages = 40 and 41 years respectively) (see Figure C). In Washington, the mean age at death increased barely from 69.74 years (1989) to 70.44 (1994). This is the same as the mean age for WSH resident deaths. The oldest patient who died was 101 years old. About 75% of those

who died were older than 60 compared to 13% of discharges.

FIGURE C. MEAN AGES OF CLIENTS



**Gender**

Slightly more males died (68%) than were discharged (65%).

**Marital Status**

The patients who died were more often married (28%) or widowed (19%) than those who were discharged (13% and 4% respectively). On the other hand, those discharged were more often single (48%) than those who died (27%).

**Race/Ethnicity**

There were more Whites (94%) and fewer African-Americans (3%) among those who died than among those who were discharged (82% and 10% respectively).

**Religion**

Regardless of the type of religion, the proportion of residents with indicated religious preference was higher among those who died (61%) than among discharges (23%) or patients treated (19%).

**Education**

Patients with 12th grade education or less were fewer among those who died (42%) than among discharges (55%).

However, patients with an unknown educational attainment level were more among those who died (42%) than among those who were discharged (22%).

**Occupation**

About 55% of residents who died were retired compared to 3% of those discharged. However, unknown cases constituted 14% of deaths and 69% of discharges.

**Veteran Status**

Whereas all the residents who died had a known veteran status, 72% of those treated had no such record. Of the known cases, 11% of those who died were veterans compared to 7% of those treated.

**Summary**

In terms of a demographic profile, the average resident who died was far older than the average patient treated, and more likely to be a married or widowed White male, who is a retired and religious non-veteran. Majority of the differences between those who died and discharges appear to be related to the huge age difference.

**INSTITUTIONAL CHARACTERISTICS**

**Psychiatric Diagnosis**

About 57% of the residents who died had organic psychotic conditions compared to 8% of all those treated. On the contrary, half of those treated had other disorders compared to only one-quarter of those who died. Patients with schizophrenic disorders comprised 19% of those who died and 32% of those treated.

**Medical Problems**

The residents who died had physical/medical illnesses averaging 8 per person and ranging up to 21. Comparative data were not available for all patients who were treated.

**Most Serious Illnesses**

The most serious illnesses that affected the residents who died were circulatory ailments (including heart/cardiac, lymphatic, and blood-related problems) and respiratory illnesses (including lung and pulmonary conditions, pneumonia, and asthma).

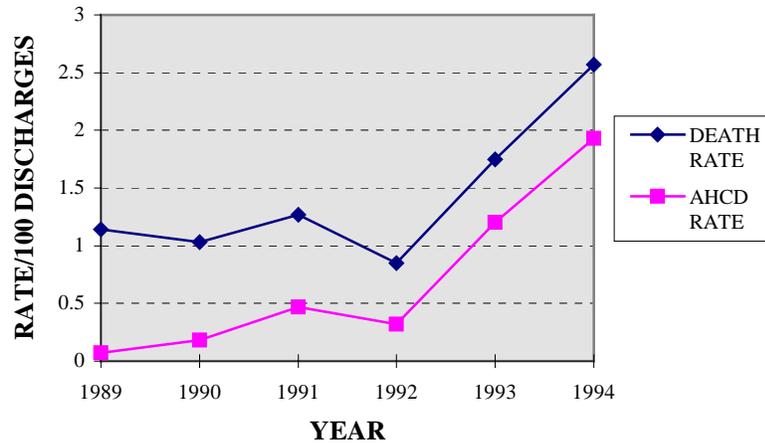
**Cancer Occurrence**

Only 6.4% of deaths were related to cancer.

<b>Length of Stay</b>	The mean stay of patients who died was 1 year and 7 months, compared to 4.4 months for discharges and 8.6 months for those treated. On the whole length of stay is declining for all patients.
<b>Type of Care Before Admission</b>	About 37% of the residents who died were nursing home referrals compared to 3% of those discharged. Referrals from home/self care comprised 44% of those discharged compared to 24% of those who died.
<b>Prior Admission</b>	Of the patients who died, 59% had no prior admission, and 24% had 1 or 2 prior admissions. Comparable data were not available for all patients treated.
<b>Reason for Admission</b>	Patients admitted as “gravely disabled” under the old law comprised 40% of deaths, but only about 3% of those treated. On the other hand, those gravely disabled (health, safety, cognition, volition) constituted 31% of those treated but only 1% of those who died.
<b>Admission Authority</b>	Voluntary admissions comprised 4% of deaths and 11% of those treated. The majority of residents who died (59%) were originally admitted under 72-hour or emergency detention authority, compared to 41% of those who were treated. About 31% of deaths and 32% of those treated were court-commitments (14, 30, 90, and 180 days) or court-order detentions.
<b>Commitment County</b>	Commitments in King and Pierce Counties constituted nearly half (48%) of the patients treated compared to 64% of those who died.
<b>County of Residence</b>	King and Pierce County residents constituted just over half (52%) of those treated and 60% of deaths.
<b>Effect of New Policies</b>	The advanced healthcare directives (AHCD) and DNR policy have offered WSH terminal patients the hospice services which were formerly provided by other hospitals to which they were transferred just before death. Among those who died, the annual rate of increase in the number

of residents who had active DNRs in place was highly correlated with the death rate (see Figure D).

**FIGURE D. RELATIONSHIP BETWEEN HEALTHCARE DIRECTIVES AND DEATH RATE**



## Summary

In terms of an institutional profile, the average patient who died was very sick, with 8 medical problems, of which respiratory and circulatory conditions were the most debilitating. He/she was likely to have a psychiatric diagnosis of organic psychosis, with no prior admission to WSH. The admission authority was likely to be 72-hour or emergency detention, with a tendency to have been admitted as “gravely disabled (old law)”. He/she was likely to have been a resident of, and committed at, King or Pierce County.

## CONCLUSION

The following are specific conclusions observed from the study:

1. The implementation of SSB 5400 and the creation of the RSN's are having the intended effect of reducing WSH patient population. This has resulted in the movement of some younger residents out of the institution as older and sicker patients tend to accumulate.
2. There is an increasing referral rate of very old patients from nursing homes; this is another reason for their accumulation. Many of these old patients have no prior admission at WSH and have a short stay prior to death.
3. New or changes in institutional regulations and policies have facilitated the provision of hospice-like services to old terminal patients which were formerly provided by other hospitals; this is having an increasing effect on patient deaths.
4. The WSH patient death rate during the period 1989-1990 was higher than the U.S. average mortality rate for state and county mental hospitals.

As the institutional population continues to age due to natural reasons, patient movements, and referrals, the number of old and sick patients who are above the Washington State natural life expectancy of 70 years will continue to accumulate. Therefore, with patient deaths constituted mostly by these residents, overall death rates would be expected to continue to increase in the near future until the effects of new policies and legislations stabilize.

However, since the influx of old patients (and the institutional death rate) actually both rose significantly after 1992, two things seem to be happening:

1. The RSNs appear to be sending more old persons to WSH who die shortly after.
2. After a few years, the RSNs will have referred most of the very old patients to WSH, so that later referrals would include fewer old people. Thus the number of deaths should decline, but the death rate would likely increase.

As to whether housing old terminal patients at WSH is a good policy or not depends on a number of considerations. First, the issue needs to be assessed in light of hospital policy. Second, the cost of their care-taking relative to other patients needs to be assessed. Third, the cost of their care-taking at WSH relative to other treatment alternatives also needs to be assessed. Finally, the absolute costs of their care-taking at WSH need to be weighed against the benefits of the provided services not only to them but to their families as well.



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# CHAPTER 1

## INTRODUCTION

In psychiatric patient care, reducing death rate is an important outcome measure and a strong indicator of treatment efficacy (Ahrens, 1994). In Washington, like other states, the death rate of mental hospital patients is higher than the general mortality rate. Though seemingly high, a 1992 study found that mental hospital death rates in Washington and the neighboring states between 1983 and 1991 were lower than both the U.S. expected mortality rate for general hospitals and the U.S. average mortality rate for state and county mental hospitals (Kamara, 1993). Nevertheless, one recommendation of that evaluation was to study the types of, and increases in, patient deaths at the institutional level in the face of the changing patient types, regulations, and institutional policies.

This study is a logical follow-up, focusing on deaths in Western State Hospital (WSH) from January 1, 1989 to December 31, 1994. It is a detailed evaluation of patient deaths, including demographic and institutional comparisons of residents who died with those who were treated during the same or a comparable period. This report, the first of three, presents aggregate comparisons of residents who died during 1989-1994 with patients who were treated during January 1, 1991 to December 31, 1994. Treated patients include discharges during the period as well as patients who were admitted before or during that period and were discharged after December 1994 or are still in residence. The second and third reports will present detailed evaluations of natural and unnatural deaths respectively in comparison to deaths and discharges.

## ISSUES AND POLICY CHANGES

### 1. DECLINING HOSPITAL PATIENT POPULATION

At WSH, the major population measures recorded are the average daily census (ADC), the average daily population (ADP), admissions (inflow), and discharges (outflow). Two other important measures which capture population change are the enrolled patients at the end of the year, and the annual pool of patients at risk of dying.

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The definitions of these 6 measures, how they are used at WSH and in this research, and their trends over the last six years are presented below.

A. Average Daily Census (ADC)

The daily census, taken at midnight everyday, determines the number of occupied beds each day excluding temporary observation and evaluation patients. The ADC then is each day's census totaled over the month and divided by the number of days in the month. Thus it is the mean of a daily body count of residents who are physically present at the hospital on the days of the census, excluding in-resident patients who are on temporary observation or evaluation (WSH, 1994). Currently, there are very few patients admitted on temporary observation.

As shown on Table 1, the ADC increased slightly from 1,011 in 1989 to a high of 1,032 in 1991, and declined steadily to 840 in 1994. The difference between the 1989 and 1994 levels represents a decline of 17% (see Table 1).

TABLE 1. PATIENT FLOW AND POPULATION  
CHANGES, 1989-1994

TYPE	1989	1990	1991	1992	1993	1994	MEAN	PERCENT CHANGE
ADC	1,011	1,018	1,032	965	895	840	960	-16.9
ADP	1,041	1,047	1,060	989	916	861	986	-17.3
Admissions	2,911	2,797	2,779	2,358	2,027	1,759	2,439	-39.6
Discharges	2,893	2,808	2,761	2,483	2,168	1,868	2,497	-35.4
Enrolled Patients#	1,458	1,444	1,445	1,338	1,210	1,097	1,332	-24.8
Annual Patients*	4,351	4,252	4,206	3,821	3,378	2,965	3,829	-31.9

# WSH patients enrolled on December 31 of the respective year.

\* A duplicated count of the total patients at risk of dying; equals discharges during the year plus enrolled patients.

B. Average Daily Population (ADP)

ADP is defined as each day's census count at midnight plus the number of patients on authorized leave for seven days or less, totaled over the month and divided by the number of days in the month. The ADP does not include

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temporary evaluation patients. The term average daily population was used at WSH through 1994. Since then it has been replaced in the data dictionary by the term Average Daily Census with Authorized Leave (WSH, 1994). However, they both represent the same thing. The term ADP is used consistently in this study and in all the reports.

ADP is higher than ADC, and has been so consistently by an average of 26 patients in the last 6 years (see Table 1). The ADP increased from 1,041 in 1989 to a high of 1,060 in 1991, and declined progressively to 861 in 1994.

C. Admissions

Admissions represent the total number of new patient registrations during the year. The number of admissions does not equate to the number of unique individuals who used WSH services. Rather, it may be a duplicated count of patients registered during the year. A patient may be admitted, discharged, and then readmitted more than once during the year. Regardless of the duration of stay, each admission or readmission is counted as a unique registration.

As shown on Table 1, annual admissions declined by nearly 40 percent, from 2,911 in 1989 to 1,759 in 1994, with an annual average of 2,439.

D. Discharges

Discharges are the total numbers of patient releases from all WSH responsibility, including deaths. Like admissions, discharges are also a duplicated count of all unique releases. Discharges have declined from 2,893 in 1989 to 1,868 in 1994, with an annual average of 2,497. From 1989 to 1991, discharges were slightly less than admissions, but since 1992, they have slightly surpassed admissions.

E. Enrolled Patients at the End of the Year

Enrolled patients at the end of the year are all patients who were on WSH roll on December 31 of the respective year. This includes all patients admitted on or before December 31 of the respective year and discharged after that date or remained in residence. It includes patients with long stay such as those who were in residence for several years before the beginning of the year and stayed in residence all year, as well as those admitted during the respective year and remained in residence at the end of the year. Enrolled patients also include patients on

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placement or leave from WSH who were not yet formally discharged from WSH roll.

On December 31, 1989, there were 1,458 enrolled patients. This number decreased gradually every year down to 1,097 by December 31, 1994 - a decline of 25%. Of those enrolled on December 31, 1994, 145 were admitted in 1993 and 489 in 1994. The one patient in residence on December 31, 1994, with the longest stay was admitted in 1959. Even though ADC declined during the six-year period, as a percentage of the total patients enrolled, it has increased steadily from 69% in 1989 to 71% in 1990 and 1991, 72% in 1992, 74% in 1993 and 77% in 1994.

The declines in both ADC and ADP are just one-sixth, whereas the declines in admissions and discharges are over one-third each. The 25% decline in enrolled patients is much less than those of both admissions and discharges. The decline in discharges is also slightly slower than that of admissions. Thus, the slower decline in enrolled patients implies that patients with long stay may not be declining fast.

#### F. Annual Patients at Risk

This is the pool of patients who were treated during the year, whether they were discharged during the year or remained in residence. Thus it is the total annual patients at risk of dying; i.e., any patient who was enrolled for at least one day during the year. There are two methods of computing patients at risk. One method is by adding all admissions during the year to the patient enrollment at the beginning of the year, i.e., January 1 of the respective year. The second method is by adding all discharges during the year to the enrollment of December 31 of the respective year. In a prospective study, the former method is perhaps more appropriate. Since this is a retrospective study, the latter method has been adopted in the calculation of patients at risk.

As shown on Table 1, the total patients at risk declined by 32% during the six-year period, from 4,351 in 1989 to 2,965 in 1994. This is a further explanation of the slower decline in the ADC and ADP, and perhaps a result of the moderate decline in enrolled patients.

## 2. INSTITUTIONAL DEATHS

Total WSH patient deaths are defined as the number of in-residence deaths plus patient deaths occurring within seven days of release from WSH's in-residence status. This includes deaths within seven days in all types of releases, i.e., discharge, authorized leave, less restrictive release, conditional release, and temporary assignment (WSH, 1994). During the last six years, annual deaths ranged from 21 in 1992 to 48 in 1994,

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averaging 34 a year. Whereas the years 1989, 1990 and 1992 were lower than average, the rest were above average (see Table 2).

In absolute terms, 1994 deaths were 46 percent higher than 1989 deaths, while discharges declined by approximately 40 percent in the last six years. As a percentage of discharges, deaths have increased from 1.14 percent in 1989 to 2.57 percent in 1994. As a percentage of patients who were at risk of dying, the death rate increased from 0.76 percent in 1989 to 1.62 percent in 1994. The lower rate of increase in terms of annual patients at risk of dying is due to the fact that even though deaths have increased and discharges have declined substantially, the total number of annual patients treated is declining at a slower rate than discharges.

TABLE 2. ANNUAL PATIENT DEATHS AS A PERCENTAGE OF DISCHARGES AND PATIENTS AT RISK (1989-1994)

YEAR	DEATHS	DISCHARGES	ANNUAL PATIENTS	DEATHS AS % OF DISCHARGES	DEATHS AS % OF ANNUAL PATIENTS
1989	33	2,893	4,351	1.14	0.76
1990	29	2,808	4,252	1.03	0.68
1991	35	2,761	4,206	1.27	0.83
1992	21	2,483	3,821	0.85	0.55
1993	38	2,168	3,378	1.75	1.12
1994	48	1,868	2,965	2.57	1.62
TOTAL*	204	14,981	22,973	1.36	0.89
MEAN	34	2,497	3,829	1.36	0.89

\* For annual clients, this is the cumulative total or duplicated count of annual patients treated. The unduplicated total of patients treated during the six year period was 16,078.

Many studies (Corten et al., 1988; Kamara, 1989; Batten & Kamara, 1992; Burvill & Hall, 1994; Kamara et al., 1994) have found excess standardized natural mortality rates among psychiatric patients in different situations. The rates observed at WSH seem to reflect the same trend.

### 3. THE EFFECTS OF STATE SENATE BILL (SSB) 5400 AND THE CREATION OF THE REGIONAL SUPPORT NETWORKS (RSN)

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In 1989, SSB 5400 was passed “. to establish a community mental health program which shall help people experiencing mental illness to retain a respected and productive position in the community” (State of Washington, 1989). This bill mandated the provision of county-based mental health services to ensure six objectives:

- i. Access to services for both adults and children;
- ii. Accountability through monitoring and reporting standards;
- iii. Standards for minimum service delivery;
- iv. Priorities for the use of available resources;
- v. Coordination of service provision among state agencies; and
- vi. Statewide coordination of services.

The implementation of SSB 5400, mental health managed care, and the subsequent establishment of the RSNs may have resulted in a “diversion” of less “acute” patients away from WSH, or the movement of more “higher functioning” patients out of WSH, thereby possibly accentuating a relative increase in more “debilitated” high risk residents who are more complicated, complex, and difficult to treat both psychiatrically and medically. Whether the relatively recent high influx of such elderly residents is a direct result of the dynamics of patient movements between RSNs and WSH would be difficult to determine as this study was not designed to answer that question.

#### 4. ADVANCE HEALTHCARE DIRECTIVES - WITHHOLDING/WITHDRAWING LIFE-SUSTAINING TREATMENT (“THE RIGHT TO DIE”) POLICY

A policy on the reduced use of life-prolonging mechanical or treatment support (sometimes called “the right to die” policy) has been implemented at WSH since 1989. Outlining the procedures for withholding or withdrawing life sustaining treatment to patients at their request, the policy document (Appendix 1, WSH Policy Number 2.3.10, Health Care Directive (issued 12/1/91) provides information and advice on patients’ right to issue an advanced directive concerning their health care, including withholding or withdrawing life-sustaining treatment in instances of a terminal condition, before they are incapable of making that decision. Further, a follow-up policy directive titled “Withholding and Withdrawing Life-Sustaining Treatment,” (Appendix 2, WSH Policy Number 2.3.12, 12/31/1992), establishes the principles and procedures to be followed by treatment staff in implementing the policy. Staff are to respect this right of a patient particularly in three important circumstances:

- i. When the patient is in a terminal condition;
  - ii. When the patient is in a permanent unconscious condition; and
  - iii. When the patient’s or surrogate’s choice may affect a compelling state interest.
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During the few years of implementation, this policy seems to be having a hastening effect on death in cases where natural death might otherwise have been delayed. But this may be true only in the short-run. When the number of patients activating this policy stabilizes in the long run, its effect might not be an increase in the death rate, but possibly decreases in the average age at death and length of hospital stay prior to death, assuming that the rate of intake of elderly patients remains constant. If their intake rate increases even with declining overall intake, then the high death rate could be sustained or exceeded.

#### 5. THE “DO NOT RESUSCITATE” POLICY (“DEATH WITH DIGNITY”)

Since 1989, the DNR policy, commonly called the “death with dignity” policy, has been in effect at WSH (Appendix 3, WSH Policy Number 2.3.5, issued 02/19/1989). According to the guidelines, the DNR policy:

“... is a written order which states that in the event of a respiratory or cardiac arrest, cardiopulmonary resuscitation (CPR) measures will not be initiated. DNR refers to those aspects of CPR including endotracheal intubation, mechanical ventilation, cardiac massage, defibrillation, epinephrine use, vasopressor therapy and anti-arrhythmic drugs. Oxygen administration, oropharyngeal suction and Heimlich maneuver may be performed.” (Appendix 3).

The DNR order affects only respiratory or cardiac arrest, and excludes all other therapeutic interventions for comfort, and services such as support counseling, which continue to be provided to all patients regardless of who has an active DNR order or not.

The emphasis of the DNR policy is to preserve the dignity of the individual, and to assure that necessary measures of comfort are maintained at all times by the provision of nursing, hygienic, and comfort care, and analgesics to all patients, including those who have elected to forego a specific life-sustaining therapy.

When a DNR order is established on a patient, CPR will be withheld on that patient for as long as there is an active DNR order except in the case of an accident or suicide attempt. Also the emergency team (Code 4 team) will not be called on that patient except for an accident or suicide attempt.

The DNR order may be contributing to more undelayed deaths, thereby increasing deaths in the short-run. Like the right-to-die policy, the long-term effects of the death-with-dignity policy are reductions in mean age and hospital length of stay before death.

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6. THE PROVISION OF NEW/ADDITIONAL FUNCTIONS

WSH now seems to provide additional “new” functions of a hospice nature than before. The changes in policy which allow patients to die at the hospital with dignity and without prolonging the inevitable appears to be more responsive to the needs of some patient types, particularly old people, many of whom appear to be terminal by virtue of both age and illness.

Before this policy, patients in these circumstances would have been moved to another facility prior to death and lived there beyond the seven days WSH uses to count institutional deaths. Even though they would still die at the other institution later, they would not be counted as WSH deaths. Now that these deaths occur at WSH, the mortality rate of these old patients is relatively high, seemingly increasing recently. Elsewhere, Burvill & Hall (1994) report greater than expected standardized mortality rates among elderly depressed patients, with patients younger than 75 years having a relatively better chance of survival.

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## **CHAPTER 2**

### **METHODOLOGY**

#### **PURPOSE OF STUDY**

As a follow-up to the earlier study on patient deaths in Washington State mental hospitals (Kamara, 1993), this study is an in-depth analysis of patient deaths which occurred at WSH between January 1, 1989 and December 31, 1994. The intent includes the following:

1. To determine why patient death rates at WSH are increasing, and to attempt to recommend preventive measures, if any, especially for unnatural deaths.
2. To determine which particular types of patients are dying and why.
3. To determine whether the patients who are dying are any different from the others being treated and discharged, or those who continue to receive treatment for a long time.
4. To ascertain whether the deaths, especially natural deaths, are unexpected, and if so, what needs to be done, or perhaps whether the natural mortality rates are expected in the light of changing regulations and aging patients.

The data presented in this report are aggregate comparisons of the characteristics of patients who died during the six-year period of 1989-1994 with those who were discharged and all those who were treated during 1991-1994. In this analysis, the comparison of deaths is not broken down into the separate categories of natural and unnatural deaths, nor is it broken down into annual trends within the six-year period. Those specific comparisons and trends are presented in two other detailed reports which follow later.

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## RESEARCH/POLICY QUESTIONS

The increase in patient deaths in the light of changes in regulations resulted in the need to address the following policy questions:

1. Is the patient mortality rate at WSH increasing?
2. Of natural and unnatural mortality rates, which type is increasing faster?
3. What is the commonest method of death?
4. What is the commonest cause of death?
5. Is cancer a major factor?
6. Has the suicide rate decreased and has the natural/expected mortality rate increased? Are drugs related to these changes? How do these changes compare with findings elsewhere as reported in the literature?
7. What is the commonest method of suicide among WSH patients? How does it compare with other situations?
8. How do the demographic, social, and institutional characteristics of patients who died differ from those of patients treated during the same or similar period?
9. Are more older patients being admitted?
10. Are more older patients dying?
11. Is average length of stay increasing?
12. Is the population of patients with organic mental disorders changing?
13. Are new statewide regulations and institutional policies such as (1) SSB 5400, (2) the “right to die”, and (3) “death with dignity” affecting patient mortality?

## DATA SOURCES

Data for the study were obtained from three main sources: (1) the Quality Assurance Department of WSH, (2) the Medical Records Department of WSH, and (3) the Patient Medical Records (CMR) database.

At the onset of the study, a list of all WSH patients who died between January 1, 1989 and December 31, 1994 was assembled. This list, consisted of 204 in-residence deaths, including deaths within seven days in all types of releases (WSH, 1994).

A data collection instrument covering the scope of the research was designed and used in collecting information on the deceased patients. With the assistance of research staff of the Quality Assurance section of WSH and a nurse of the Medical Records section, a database containing information on the demographic, social, and institutional/treatment characteristics of the deceased patients was compiled manually from the patient medical records. Then, using the hospital discharge database, another database was extracted and compiled for all discharges that occurred during the study period.

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A total of 14,981 discharges occurred between January 1, 1989 and December 31, 1994. For the purpose of comparison and computing death rates, the database on discharges was constructed on the same basis as that on patient deaths. However, some problems were encountered. Some of the detailed information which had already been collected on deceased residents was not available in computerized form for discharged patients for the six-year period. In particular, getting reliable information for the earlier years posed insurmountable problems considering the available staff resources and time. As such, the period for which the most reliable and somewhat complete discharge information was obtained was for January 1, 1991 through December 31, 1994. Although discharges for the six-year period totaled 14,981, during 1991-1994 discharges totaled 9,280 (see Table 1). This database formed one of the two bases of comparison. Each record and practically every field in this database had to be verified against medical records and other discharge information in the Hospital Integrated Information System (HIIS) file in order to ensure both completeness and reliability.

Additional information was collected from the HIIS file on all residents who were admitted before or during the study period and were still enrolled on December 31, 1994. These residents, numbering 1,097 on December 31, 1994, included both long-term residents who have been there before or during most of the period as well as some recently admitted potential short-termers who are likely to stay for a few months to a year. Whereas 221 of the 1,097 were admitted before January 1, 1989, the rest were admitted during the study period but remained in residence after the study period.

With the numbers of annual admissions, discharges, and enrolled patients known, the total number of patients at risk of dying during the year was calculated for each year and for the six years as a whole. Patients at risk of dying were defined as all those who received treatment from WSH for at least one day during the year, regardless of whether they were discharged during the year or were still in residence at the end of the year. The six-year total of patients at risk was 16,078 (22,973 treatment records), while the total patients for the period 1991-1994 was 10,377 (or 14,370 treatment records). Since detailed data on discharged residents were not available for the period 1989-90, comparison data on the characteristics of patients treated during the year were limited to the same period as that for discharges, i.e., January 1991 through December 31, 1994.

Finally, the medical records of all deceased residents were read to verify which ones had active advance healthcare directives in terms of both the "right to die" and "death with dignity" policies.

## **ANALYSIS**

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The first step in the analysis was to tabulate the types of death as percentages of discharges and total patients at risk. Then the causes and modes of death were analyzed. Deaths were then disaggregated into natural and unnatural, and annual mortality rates were computed based on discharges for each of the six years. Even though the discharge database did not include detailed information for 1989 and 1990, discharges were known for those two years as well. Thus it was possible to calculate death rates for all the six years individually, as well as the period as a whole. (Note that in this analysis, deaths are part of the total number of discharges).

Two methods were applied both based on discharges. The first is the method of computing death rate recommended by Hanken & Water (1994), which expresses hospital death rate as the percentage of discharges that end up in death. The second method is a more widely applicable epidemiological approach to reporting death rates, which expresses mortality rate as the number of deaths per 100,000 of the population. In this case since death is a form of discharge, the death rate is expressed per 100,000 discharges. This is the method which has been adopted in this study.

The third major analysis was a comparison of the percentage distribution of the demographic and social characteristics of residents who died with those who were discharged. These included age, gender, marital status, race/ethnicity, religion, education, occupation, and veteran status.

Finally, the institutional factors or treatment variables of residents who died were compared with those who were discharged. These included psychiatric diagnosis, physical or medical problems diagnosed, the most serious illness, deaths related to cancer, length of hospitalization, type of care before admission, prior admissions, reason for admission, admission authority, county of commitment, and county of residence.

In the comparisons presented in this report, only aggregate data on the patient characteristics of all deaths combined were compared against discharges and total patients at risk. The disaggregated analyses of natural and unnatural deaths and their annual trends are presented in two other separate reports.

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## CHAPTER 3

### DEATHS AND THEIR CAUSES

#### TYPES OF DEATH

Table 3 shows the types of death as percentages of discharges and total patients. Of the 204 deaths, there were 179 natural deaths, 15 suicides, 8 accidents, and 2 homicides. In terms of the 14,981 discharges during the six-year period (see Table 2), natural deaths were 1.20%, suicides 0.10%, accidents 0.05%, and homicides 0.01% (see Table 3). As proportions of the 16,078 unduplicated patients at risk during the period, natural deaths constituted 1.11%, suicides 0.09%, accidents 0.05 %, and homicides 0.01 %.

TABLE 3. TYPES OF PATIENT DEATH

TYPE	DEATHS (1989-94)		% OF DISCHARGES	% OF TOTAL PATIENTS
	No.	%		
Natural	179	87.7	1.20	1.11
Accidental	8	3.9	0.05	0.05
Suicide	15	7.4	0.10	0.09
Homicide	2	1.0	0.01	0.01
TOTAL	204	100.0	1.36	1.27

*Note: During 1989-1994, discharges were 14,981, and the total patients at risk (unduplicated) were 16,078.*

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## **CAUSES OF DEATH**

The primary causes of natural death among patients were pneumonia and heart/cardio-pulmonary problems. These two causes constituted respectively 29% and 28% of all deaths, together accounting for 56.4% of all deaths (see Table 4). In comparison, all other natural causes accounted for less than one-third of all deaths.

TABLE 4. CAUSES OF DEATH (1989-1994)

CAUSE	ALL DEATHS	
	No.	%
<b>NATURAL</b>		
No Organ Specified	3	1.5
Brain/Cerebral	9	4.4
Heart/Cardiopulmonary	56	27.5
Breast	1	0.5
Liver/Pancreas/Kidney	10	4.9
Abdomen (1)	6	2.9
Colon	4	2.0
Pneumonia	59	28.9
Respiratory (2)	6	2.9
AIDS	6	2.9
Sepsis	7	3.4
Blood/Lymphatic (3)	8	3.9
Undefined Condition	4	2.0
<b>ACCIDENTAL</b>		
Hanging/Strangulation	2	1.0
Asphyxia	3	1.5
Drowning	1	0.5
Other/undefined	2	1.0
<b>SUICIDE</b>		
Hanging/Strangulation	6	2.9
Asphyxia	1	0.5
Poisoning/drug overdose	3	1.5
Drowning	1	0.5
Jumping from bridge/height	3	1.5
Other	1	0.5
<b>HOMICIDE</b>		
Strangulation	1	0.5
Assault by other	1	0.5
<b>TOTAL</b>	<b>204</b>	<b>100.0</b>

1. Includes alimentary/gastric system, and peritoneum.

2. Includes aspiration and asthma.

3. Includes leukemia, haemorrhage, and haematoma.

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The predominance of lung diseases as a major cause of psychiatric patient death has been reported elsewhere as well (Licht et al., 1993).

## MODES OF DEATH

Excluding natural causes, the commonest mode of unnatural death was hanging, comprising of 4 percent (8 cases) (see Table 5). Deaths due to jumping from a bridge or a height constituted 1.5% (3 cases). Asphyxiation or strangulation (not by hanging) constituted 2% (4 cases). Ingestion of foreign matter and drowning each constituted 1% (2 cases each). Poisoning/drug overdose constituted 1.5% (3 cases).

TABLE 5. MODES OF DEATH		
MODE	ALL DEATHS	
	No.	%
Natural	179	87.7
Hanging	8	3.9
Asphyxia/Strangulation (not by hanging)	4	2.0
Jumping (height/bridge)	3	1.5
Drowning	2	1.0
Assault by other	1	0.5
Poisoning/drug overdose	3	1.5
Ingestion (foreign matter)	2	1.0
Other	2	1.0
TOTAL	204	100.0

## DEATH RATES

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On Table 6, deaths are disaggregated by natural and unnatural causes, and two mortality rates are presented. The first, the standard method of computing hospital patient mortality rate, is basically the number of deaths per 100 discharges (Hanken &

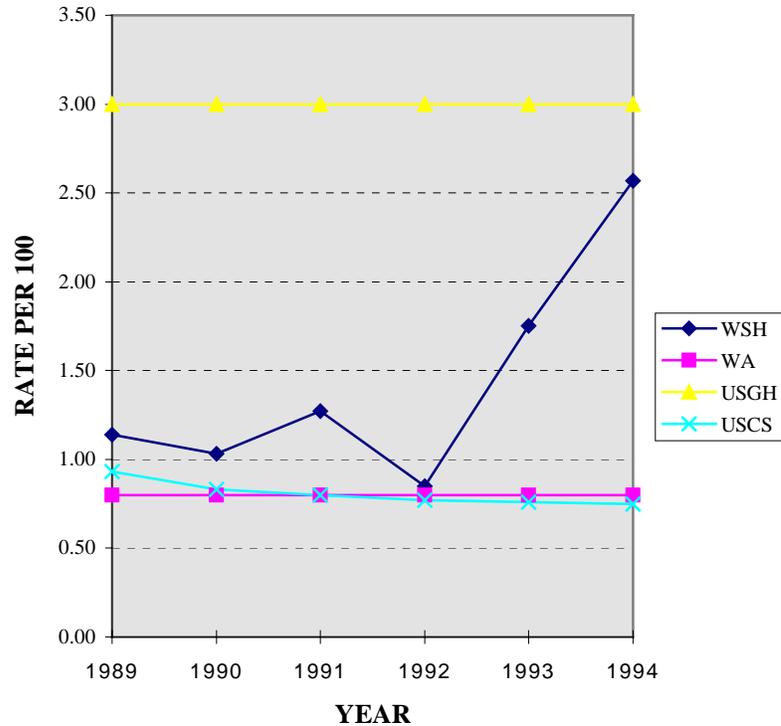
Water, 1994). In other words, this is the percentage of patient discharges which end up in deaths. According to Hanken & Water (1994), across the United States as a whole, three percent of all short-term hospitalizations in general hospitals end up in death. But this applies more to medical hospitals than mental health hospitals. With regard to state and county mental hospitals across the U.S., patient mortality rate was 1.5% in 1983, 1.1% in 1986, and 0.97% in 1988 (Kamara, 1993). More recent data show this rate at 0.83% in 1990 and 0.77% in 1992 (CMHS/NIMH, 1996).

TABLE 6. PATIENT DEATH RATES AT WSH BY TYPE, 1989 TO 1994

YEAR	TYPE	DEATHS	DISCHARGES	RATE/100 DISCHARGES	RATE/100,000 DISCHARGES
1989	Natural	29		1.00	1,002
	Unnatural	4		0.14	138
	Total	33	2,893	1.14	1,141
1990	Natural	25		0.89	890
	Unnatural	4		0.14	142
	Total	29	2,808	1.03	1,033
1991	Natural	28		1.01	1,014
	Unnatural	7		0.25	254
	Total	35	2,761	1.27	1,268
1992	Natural	16		0.64	644
	Unnatural	5		0.20	201
	Total	21	2,483	0.85	846
1993	Natural	37		1.71	1,707
	Unnatural	1		0.05	46
	Total	38	2,168	1.75	1,753
1994	Natural	44		2.36	2,355
	Unnatural	4		0.21	214
	Total	48	1,868	2.57	2,570
TOTAL	Natural	179		1.19	1,195
	Unnatural	25		0.17	167
	Total	204	14,981	1.36	1,362
MEAN	Natural	29.8		1.19	1,195
	Unnatural	4.2		0.17	167
	Total	34.0	2,497	1.36	1,362

Between 1983 and 1992, patient mortality rates in Washington Mental Hospitals were lower than the national average for state and county mental hospitals (Kamara, 1993), but the WSH rates were higher than the U.S. average. In 1992, the three rates were about equal (see Figure 1). But with the rapid increase in WSH death rates in 1993 and 1994, should the declining national trend be sustained during 1993 and 1994, then the WSH patient death rate would be far in excess of the national average.

**FIGURE 1. TRENDS IN DEATH RATES: U.S. GENERAL HOSPITALS, U.S. COUNTY AND STATE MENTAL HOSPITALS, WASHINGTON STATE, AND WSH**



The second mortality rate, the number of deaths per 100,000 discharges, is adapted from the most widely used epidemiological method of reporting death rate specifically among the general population. It is noteworthy that the two methods are practically the same; the only difference being that the latter is a multiple of the former by 1,000.

During the six-year period, the overall mortality rate for all causes was 1.36 deaths per 100 discharges, of which 1.2 deaths per 100 discharges were attributable to natural causes and 0.16 deaths per 100 discharges to unnatural causes (see Table 6). The yearly mortality rates varied from a low of 0.85 deaths per 100 discharges in 1992 to a high of 2.57 per 100 discharges in 1994. The rates for the years prior to 1993 were lower than the six-year average. The annual rate of natural death varied from a low of 0.64 deaths per 100 discharges in 1992 to a high of 2.36 deaths per 100 discharges in 1994. With respect to unnatural deaths, the rate was lowest in 1993 at 0.05 deaths per 100 discharges and highest in 1991 at 0.25 deaths per 100 discharges.

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The most striking increase in the natural death rate occurred in 1993 when it approached nearly three times that of the previous year. The increasing trend set in 1993 was sustained in 1994 with nearly 40 percent increase.

The Washington general mortality rate for the period 1989-1994 was very stable at 0.8 deaths per 100 residents (see Figure 1).

In comparison, the mean WSH patient mortality rate for the six-year period was higher than the national average for U.S. state and county hospitals. Whereas the difference was relatively small during the earlier years, the gap has been widening considerably since 1992.

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## CHAPTER 4

### DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

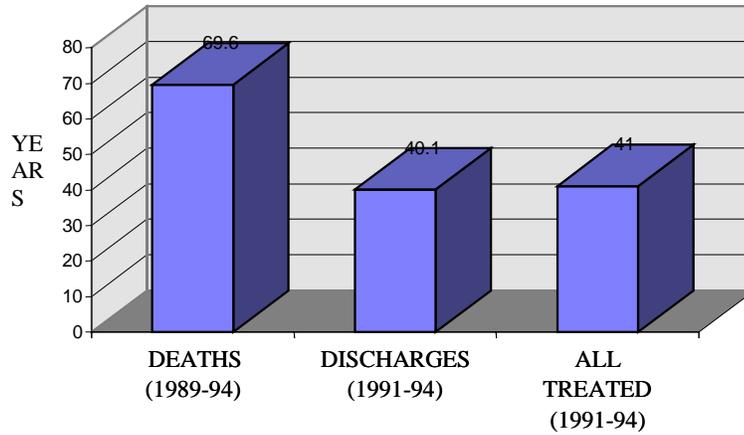
In this analysis, the patients who died during 1989-1994 were compared with discharges and patients at risk of dying during 1991-1994. As noted earlier, data on the comparison groups were not available for 1989-1990. However, assuming that the characteristics of patients during 1991-1994 did not differ much from 1989-1990, comparisons of the three groups for the respective periods are nonetheless meaningful.

#### AGE

Three age categories were computed separately: (a) discharge age for discharges, (b) age at death for those who died, and (c) age on December 31, 1994 for in-residents. The average age of both discharges and total patients at risk was 41 years each. In contrast, average age for deaths during 1989-1994 was almost 70 years (see Figure 2 and Table 7). The minimum and maximum ages of discharges and patients at risk were respectively 16 and 98 years. On the other hand, the minimum age for deaths was 23, while the maximum was 101 (see Table 7). Patients aged 61 years and over constituted 13-14% of those treated during 1991-1994 and up to 75% of deaths. About 70-71% of discharges and patients at risk were aged between 23 and 50, in contrast with 19% of deaths. At the other extreme, only 7-8% of discharges and patients at risk were aged over 70 compared with 60% of deaths. Further, whereas over 6% of patients who died were older than 90 years, among the other two groups, the corresponding proportion was less than 0.5%.

On average, the patients who died were far older than the typical patient treated during 1991-1994. The bulk of deaths were due to old age and associated problems of aging. This is consistent with findings elsewhere of high mortality trends among old depressed patients (Burvill & Hall, 1994; Casadebaig & Quemada, 1991), sometimes with long hospital stay (Stokes & O'Connor, 1989). Among the elderly, depression is found to have both causal and inadvertent links with mortality (O'Brien & Ames, 1994).

**FIGURE 2. MEAN AGES OF PATIENTS**



**TABLE 7. AGE COMPARISON**

COHORT	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-94)	
	No.	%	No.	%	No.	%
1-22	0	0.0	845	9.1	872	8.4
23-30	8	3.9	2,087	22.5	2,210	21.3
31-40	17	8.3	2,840	30.6	3,113	30.0
41-50	13	6.4	1,651	17.8	1,909	18.4
51-60	13	6.4	677	7.3	820	7.9
61-70	30	14.7	520	5.6	623	6.0
71-80	60	29.4	418	4.5	529	5.1
81-90	50	24.5	213	2.3	270	2.6
91-100	12	5.9	29	0.3	31	0.3
101 +	1*	0.5	0	0.0	0	0.0
<b>TOTAL</b>	<b>204</b>	<b>100.0</b>	<b>9,280</b>	<b>100.0</b>	<b>10,377</b>	<b>100.0</b>
<i>Minimum Age</i>	23		16		16	
<i>Maximum Age</i>	101		98		98	
<i>Mean Age</i>	69.61		40.8		41.0	
<i>(% aged 61 and over)</i>	75.0		12.8		14.0	

\* Died in 1990

*Note: The duplicated count of patients treated during 1991-1994 was 14,370, but the total unduplicated patients treated during the same period was 10,377.*

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## GENDER

Table 8 summarizes gender ratios of patients who died during 1989-1994, discharges (1991-1994), and total patients treated (1991-1994). Even though the proportion of females who died was slightly lower than the other two groups, the gender ratios were quite similar. Among those who died, the female:male ratio was 32:68, compared to 36:64 among discharges and 35:65 among all patients treated. This observation is similar to the finding by Craig & Lin (1984) of no difference in sex ratio of mortality rates among patients with organic brain syndrome, schizophrenia, or other disorders.

TABLE 8. GENDER COMPARISON

GENDER	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-94)	
	No.	%	No.	%	No.	%
Female	65	31.9	3,322	35.8	3,663	35.3
Male	139	68.1	5,958	64.2	6,714	64.7
TOTAL	204	100.0	9,280	100.0	10,377	100.0

## MARITAL STATUS

There were differences in marital status even though the proportions of 'unknowns' were unequal between those who died (9%) and the other two groups (16-18%) (see Table 9). The percentages of single, widowed, or married patients were about equal between discharges and patients treated, but different between these two groups and those who died. The single/never married patients were fewer among those who died (27%) than among the other two groups (48-49%). On the other hand, there were more married or widowed patients among those who died (47%) than among the other two groups (27-28%). The percentages of divorced patients (14-15%) and those separated (2-4%) were similar among the three groups. Thus the patients who died had more marital stability than the typical patient, which could be a reflection of the age difference.

## RACE/ETHNICITY

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Whites constituted 82% of both discharges and patients treated during 1991-94 and 94% of those who died during 1989-1994 (see Table 10). This is a surprising difference, considering the proportion of Whites among the patient population, and also the fact that the category of 'unknown/other' comprised only few cases.

TABLE 9. MARITAL STATUS

STATUS	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Unknown	18	8.8	1,476	15.9	1,857	17.9
Single/ Never Married	55	27.0	4,547	49.0	4,981	48.0
Divorced	31	15.2	1,336	14.4	1,453	14.0
Widowed	38	18.6	325	3.5	363	3.5
Separated	4	2.0	380	4.1	405	3.9
Married	58	28.4	1,216	13.1	1,318	12.7
TOTAL	204	100.0	9,280	100.0	10,377	100.0

TABLE 10. RACE AND ETHNICITY

RACE/ ETHNICITY	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
White	192	94.1	7,647	82.4	8,551	82.4
African-American	7	3.4	956	10.3	1,079	10.4
Asian/Pacific Islander	2	1.0	46	0.5	83	0.8
American Indian/Aleut	1	0.5	121	1.3	135	1.3
Hispanic/Mexican	1	0.5	204	2.2	228	2.2
Unknown/Other	1	0.5	306	3.3	301	2.9
TOTAL	204	100.0	9,280	100.0	10,377	100.0

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Excluding Asians, all other racial/ethnic categories had smaller proportions among the patients who died than among discharges or patients treated. The deaths of two Koreans accounted for the high proportion of Asians among the patients who died.

## RELIGION

There was considerable difference in religious preference between the patients who died and the other two groups (Table 11). Proportionally, regardless of religion, more believers died (61%) than were treated or discharged (19-23%).

TABLE 11. RELIGIOUS PREFERENCE

RELIGION	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Protestant (Non-Denom.)	44	21.6	232	2.5	280	2.7
Catholic	35	17.2	529	5.7	602	5.8
Lutheran	10	4.9	93	1.0	93	0.9
Other Christians	28	13.7	566	6.1	42	0.4
Jewish	3	1.5	28	0.3	31	0.3
Other Religion	5	2.5	742	8.0	882	8.5
Unknown/No Preference	79	38.7	7,090	76.4	8,447	81.4
TOTAL	204	100.0	9,280	100.0	10,377	100.0

It is hard to tell whether these figures reflect a true difference (as the literature suggests) or just an artifact of the higher proportion of 'unknown/no preference' cases particularly among the comparison groups. However, this problem reflects the difficulty in collecting this information which some patients do not feel as comfortable to reveal as they do with other types of information. Chances are that since unnatural deaths were relatively few, if religious preference was known for most respondents, the differences in the proportion of religious believers might have been similar across the three groups.

A further problem is that in two databases, the 'no preference' category had the same code as 'unknown'. Among discharges, it was further complicated by the fact that missing cases alone constituted 62%, leaving the truly 'unknown/no preference' category at 15%.

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## EDUCATION

The proportion of patients with unknown educational levels was higher among those who died (42%) than among discharges (22%) or patients treated (24%) (Table 12).

TABLE 12. EDUCATION

YEARS OF EDUCATION	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
0-8	31	15.2	603	6.5	664	6.4
9-12	54	26.5	4,612	49.7	5,002	48.2
13-16	28	13.7	1,745	18.8	1,899	18.3
17-21	5	2.5	260	2.8	280	2.7
Unknown	86	42.2	2,060	22.2	2,532	24.4
TOTAL	204	100.0	9,280	100.0	10,377	100.0
<i>Mean Years (excluding unknowns)</i>	10		11.8		11.8	

Of the known cases, the proportion of patients who attained eighth grade or less was over twice as high among those who died (15%) as among discharges or patients treated (6-7%). Conversely, the proportions with 9th to 12th grade education were nearly twice as high among discharges and total patients (48-50%) as among those who died (27%).

Whereas the proportions with 17 to 21 years of education were practically the same at about 3% for all three groups, there were more patients with 13 to 16 years of education among discharges and patients treated than among the patients who died.

## OCCUPATION, EMPLOYMENT AND RETIREMENT

The occupational frequencies (Table 13) show interesting differences. Among those who died, 'unknowns' comprised 14% while among the comparison groups they were over two-thirds. Further, retirees among those who died (55%) were far more than among the other two groups (3% each). Possible explanations for this difference are the diminishing

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likelihood of discharge of older patients because of problems associated with aging, and the increasing likelihood of natural death for the same reasons.

Proportionally, unemployed patients were more among the comparison groups (16%) than among those who died (7%). However, these percentages must be viewed cautiously, and comparisons of specific categories may not be meaningful in the light of the high proportion of 'unknowns' among both comparison groups.

TABLE 13. OCCUPATION

TYPE	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Unemployed	14	6.9	1,522	16.4	1,702	16.4
Retired	113	55.4	251	2.7	322	3.1
Housewife/Homemaker	15	7.3	65	0.7	73	0.7
Custodian (1)	5	2.4	148	1.6	166	1.6
Cook (2)	5	2.4	74	0.8	93	0.9
Logger/Lumberman	4	2.0	19	0.2	21	0.2
Machinist (3)	10	4.9	288	3.1	291	2.8
Clerical	1	0.5	139	1.5	145	1.4
Buyer/Salesperson	4	2.0	65	0.7	73	0.7
Professional (4)	4	2.0	130	1.4	145	1.4
Other (5)	0	0.0	176	1.9	218	2.1
Unknown	29	14.2	6,403	69.0	7,129	68.7
TOTAL	204	100.0	9,280	100.0	10,377	100.0

1. Includes gardener and laborer.

2. Includes baker, bus boy, waiter, receptionist, dishwasher, food services.

3. Includes printer, cab and truck driver, auto repairman, and mechanic.

4. Includes administrator, teacher, nurse, engineer, attorney, writer, financial expert, etc.

5. Includes painter, construction/steel worker, carpenter, student, musician, artist, barber, beautician, etc.

## VETERAN STATUS

The veteran status of all patients who died was known while for the other two groups the proportions with unknown veteran status were as high as 72% each (see Table 14).

TABLE 14. VETERAN STATUS

STATUS	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Unknown	0	0.0	6,700	72.2	7,461	71.9
Non-Veteran	181	88.7	1,912	20.6	2,148	20.7
Veteran	23	11.3	668	7.2	768	7.4
<b>TOTAL</b>	<b>204</b>	<b>100.0</b>	<b>9,280</b>	<b>100.0</b>	<b>10,377</b>	<b>100.0</b>

Veterans constituted 11 percent of those who died and 7% each of the other two groups. The high proportions of cases with an unknown veteran status among discharges and patients who were in treatment, and non-veterans among the patients who died make comparisons of these data very difficult. As such the numbers should also be interpreted cautiously.

## SUMMARY

The mean age of the patients who died was much higher than those of discharges or patients treated. The majority (75%) of deaths were patients older than 60 years, of whom nearly half were over 80. Fewer older patients were discharged, with many terminal ones staying at WSH till death.

The proportion of males among those who died was higher than those among discharges or patients treated. Proportionally, more single/never married patients were discharged or in treatment, but more married patients died. Proportionally more Whites and Asians (Koreans) died than were discharged or remained in treatment. The proportion of religious believers, regardless of which, was higher among those who died than among discharges or patients in treatment.

A possible demographic profile of the patient who died was an old, retired, religious, non-veteran white male, with many medical or physical problems.

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## **CHAPTER 5**

### **INSTITUTIONAL CHARACTERISTICS**

The institutional characteristics discussed in this chapter include the patient's primary discharge diagnosis, diagnoses for physical/medical problems, cancer-related deaths, duration of hospital stay, pre-admission level of care, prior admissions, reason for admission, admission authority, county of residence, and county of commitment. Where possible, the characteristics of patients who died during 1989-1994 were compared against discharges and patients treated during 1991-1994. In some cases, due to data limitations, comparisons were limited to those who died versus discharges only.

### **PSYCHIATRIC DIAGNOSIS**

The diagnostic categories for psychiatric illnesses were broadly grouped based on the following combinations of Axis I codes. Organic psychotic conditions included all DSM III-R diagnostic codes of 290.00 through 294.80. Schizophrenic disorders included all diagnoses of 295.10 through 295.95. Other disorders, including affective disorders,

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personality disorders, alcohol and substance use or induced disorders, etc., comprised of all other diagnostic codes (296.20 through 319, and V15.81 through V71.09).

All patients who died and 95% of those who were discharged had a discharge diagnosis identified (Table 15). About 11% of the patients treated did not have discharge diagnoses simply because they were not yet discharged by the end of 1994. The proportions of patients with organic psychotic conditions and schizophrenia were practically the same among discharges and total patients, while those with other disorders were slightly different between the two groups.

Among the patients who died, patients with organic psychotic conditions (57%) were proportionally seven times more than those among the comparison groups (8%). Similar high mortality rates have been observed elsewhere for patients with organic and symptomatic psychosis (Saugstad & Odegard, 1979).

TABLE 15. PRIMARY DIAGNOSIS AT DISCHARGE

CONDITION	ALL DEATHS (1989-94)		DISCHARGES (1991-94)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Unknown	0	0.0	501	5.4	1,152	11.1
Organic Psychotic Conditions	116	56.9	733	7.9	789	7.6
Schizophrenic Disorders	39	19.1	3,016	32.5	3,227	31.1
Other Disorders	49	24.0	5,030	54.2	5,209	50.2
TOTAL	204	100.0	9,280	100.0	10,377	100.0

\* The high proportion of unknown diagnosis among total clients results from the fact that discharge diagnosis is used here, and an undischarged client at the end of 1994 would not have one.

The proportion of patients with schizophrenia and other disorders among those who died was smaller than those of the other two groups. On the contrary, high mortality rates of schizophrenic patients have been reported elsewhere (Allebeck, 1989; Kamara, 1989).

## PHYSICAL/MEDICAL PROBLEMS

The patient medical records contained concise information on medical diagnoses for the range of physical problems co-occurring with the patient's mental illness. However, the information was not computerized. For patients who died, the ICD-9 diagnoses were collected manually and tabulated. Due to time and staff constraints, the same information could not be collected manually for all patients treated during 1989-94. The breakdowns of the medical problems of patients who died are shown on Table 16.

The patients who died had on average 7.64 medical problems per person, and ranging up to 21. Whereas three patients had no medical problems, 4% (9 patients) had one or two, 22% had three to five, 53% had 6 to 10, and 19% had over 10 problems. The high preponderance of medical problems indicates that, in addition to mental illness, the patients who died were on average very sick physically.

There was a moderate positive correlation between age and medical problems ( $R=0.35$ ), implying that older patients seemed to have more medical problems. Since those who died were preponderantly old, they also had more medical problems. In addition, there was a very weak negative correlation between medical problems and length of stay ( $R<-0.1$ ), implying a slight tendency that the sicker the patient the shorter the length of stay. This means that old patients were brought to the hospital very sick, and tended to die shortly after admission.

TABLE 16. PHYSICAL/MEDICAL PROBLEMS

NUMBER OF PROBLEMS	ALL DEATHS (1989-1994)	
	No.	%
0	3	1.5
1 or 2	9	4.4
3 - 5	44	21.6
6 - 10	109	53.4
11 - 15	31	15.2
16 - 20	7	3.4
21 +	1	0.5
TOTAL	204	100.0
<i>Minimum</i>	0	
<i>Maximum</i>	21	
<i>Mean</i>	7.64	

## THE MOST SERIOUS ILLNESSES

The ICD-9 codes for the diagnosed medical problems were listed on the patient's chart in order of severity or debilitation. The first listed problem was the most debilitating to the patient and the last was the least. As shown on Table 16, over 70% of the patients had 6 or more problems, and one had up to 21. The ten most debilitating problems were tabulated as shown on Table 17. The cells represent percentages of

patients suffering from the condition, while the columns represent the order of severity of the debilitation.

Circulatory problems included heart, cardiac, and blood-related conditions, leukemia, lymphatic conditions, hemorrhage and haematoma. Respiratory problems included the lungs, pulmonary conditions, aspiration pneumonia, and asthma. Digestive conditions included problems related to the abdomen, peritoneum, gastric system, and the alimentary canal as a whole.

Circulatory and respiratory illnesses were the most serious debilitations, together being the first diagnosis for 58% of patients. Together they also accounted for at least 25% of each of the first 6 debilitations. Circulatory problems alone accounted for 20% of each of the first 6 debilitations. Neoplasms (cancers) (7%) and infectious diseases (3%) accounted for a small proportion of illnesses diagnosed first. Elsewhere, cardiovascular diseases (Allebeck, 1989; Mortensen & Juel, 1990) and lung diseases (Mortensen & Juel, 1990) have been reported as the major causes of death among mentally-ill patients.

TABLE 17. MEDICAL PROBLEMS MOST FREQUENTLY DIAGNOSED

PROBLEM/ CONDITION	ORDER OF DEBILITATIVE IMPORTANCE*									
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
None	1.5	2.9	5.9	12.3	21.1	27.5	39.2	50.5	65.2	73.5
Circulatory	30.9	30.4	31.4	24.5	19.6	19.6	14.2	8.8	5.9	4.4
Respiratory	27.5	15.7	11.8	5.9	9.3	6.9	4.9	3.4	1.0	1.5
Neoplasms (Cancers)	7.4	4.4	3.9	2.9	1.5	0.0	0.0	2.0	0.5	0.0
Endocrine	4.4	11.3	5.4	10.8	8.3	5.4	6.9	5.9	2.9	2.9
Digestive	5.4	6.9	6.4	8.3	5.9	5.4	6.4	5.9	2.9	2.9
Infectious Diseases	2.9	4.4	4.4	6.9	3.9	2.9	4.4	2.0	0.5	1.5
Other	20.0	24.0	30.8	28.4	30.4	32.3	24.0	21.5	21.1	13.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Ordinal columns represent the order of debilitation, i.e., "1st" is the most debilitating.  
Note: Cells are percentages.

## CANCER-RELATED DEATHS

Contrary to popular belief, the proportion of patient deaths related to cancer is very small, at just about 6% during 1989-1994 (see Table 18). This result is similar to other findings elsewhere (Craig & Lin, 1981; Allebeck, 1989). As a matter of fact, one study reported a decrease in mortality rate among male psychiatric patients with cancer (Mortensen & Juel, 1990).

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TABLE 18. DEATHS RELATED TO CANCER

TYPE	ALL DEATHS	
	No.	%
Related to Cancer	13	6.4
Not Related to Cancer	191	93.6
TOTAL	204	100.0

### LENGTH OF HOSPITALIZATION

Two types of length of stay are computed and used at the hospital. The distinctions of these are as follows:

1. **Inpatient (In-Residence) Length of Stay:** This is the time between admission and discharge when the patient was on in-residence status. It excludes time spent outside the institution on less restrictive status, conditional release, authorized or unauthorized leave, or temporary assignment.
2. **Total Length of Stay:** This is the entire period from admission to discharge. It is the total time when a patient is under the jurisdiction of WSH. Some patients are discharged gradually through community placement on trial basis while remaining the responsibility of WSH. If trial placement is successful, they are then discharged as of the time that it is judged to be successful, not when they were physically moved out.

Data presented on Table 19 represent solely the total length of stay for all the three categories of patients. The minimum length of stay for each of the three categories of patients was one day. With regard to different durations of stay, whereas 76% of discharges and 70% of total patients stayed for three months or less, among the patients who died, the corresponding proportion was about 32%. Of the 65 patients who constituted that 32%, 53 were 60 years of age or older, and 27 were 80 years or older.

TABLE 19. LENGTH OF HOSPITALIZATION

DURATION	ALL DEATHS (1989-1994)		DISCHARGES (1991-1994)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
0-3 Mos.	65	31.9	7,034	75.8	7,222	69.6
3-6 Mos.	31	15.2	937	10.1	1,110	10.7
6 Mos. - 1 Yr.	37	18.1	594	6.4	716	6.9
1-3 Yrs.	38	18.6	473	5.1	706	6.8
3-5 Yrs.	16	7.8	130	1.4	249	2.4
5-10 Yrs.	12	5.9	93	1.0	218	2.1
Over 10 Yrs.	5	2.5	19	0.2	156	1.5
<b>TOTAL</b>	<b>204</b>	<b>100.0</b>	<b>9,280</b>	<b>100.0</b>	<b>10,377</b>	<b>100.0</b>
<i>Minimum Stay (Days)</i>	<i>1</i>		<i>1</i>		<i>1</i>	
<i>Maximum Stay (Years)</i>	<i>20.1</i>		<i>20.04</i>		<i>35.5</i>	
<i>Mean Stay (Years)</i>	<i>1.59</i>		<i>0.38</i>		<i>0.72</i>	

*Note: The 9,280 patients discharged during 1991-1994 had a cumulative length of stay of 3,379 years, while the 1,097 patients enrolled on December 31, 1994 (comprising mostly of residents with long periods of stay) had a cumulative length of stay of 3,943 years.*

Of those who died, more stayed in treatment longer than three months than the other two groups. In contrast, more of the other two groups stayed less than 3 months.

The maximum stay among deaths and discharges was 20.1 years each. On the other hand, among total patients, the maximum stay was 35.5 years. Similarly, because of increasing long-termers, the mean stay of patients who died (1 year and 7 months) and that of total patients (8.6 months) were higher than that of discharges (4.4 months).

An interesting statistic is the cumulative stay, the period of stay of all patients from admission to death, discharge, or December 31, 1994. The cumulative stay of the 204 patients who died was 325 years, while that of the 9,280 discharges was 3,379 years. On the other hand, the 1,097 patients in treatment had a cumulative stay of 3,943 years. Considering that the long-term/undischarged patients were less than one-eighth of those discharged, these length of stay differences are phenomenal.

### **Length of Stay of Patients Discharged Annually**

Data on Table 19A show years of stay for yearly discharges, and average stay per discharge, for 1991 - 1994. Yearly discharges declined consistently from 2,761 in 1991 to 1,868 in 1994 - about one-third. On the other hand, cumulative stay by discharged patients and the mean stay both increased between 1991 and 1992, but have been declining since. Since the decline in stay is faster than the decline in annual discharges, the result is that the rate of decline of mean stay is considerably slower for short term patients.

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TABLE 19A. LENGTH OF STAY OF DISCHARGED PATIENTS  
BY YEAR (1991-1994)

STAY (YEARS)	1991	1992	1993	1994	% CHANGE 1991-94
Total Stay	2,434	2,554	1,262	1,224	-49.7
Mean Stay	0.88	1.03	0.58	0.66	-25.0
Total Discharges	2,761	2,483	2,168	1,868	-32.3

**Length of Stay of Long-Term Patients in Residence on December 31, 1994**

The definition and selection of long-term patients were difficult. In this analysis, long-term patients in residence on December 31, 1994 are defined as patients in residence on that date who had been in residence for all six years of the study period, or for several years during that period. Thus, patients with long stay who were in residence during some part of the six- year study period and were discharged before December 31, 1994 are not included in this analysis. The group of patients selected from which long-termers were analyzed (1,097 patients) comprised of all patients in residence and undischarged on December 31, 1994. This group was further differentiated into subgroups of patients who were in residence before January 1, 1989 (i.e., 1959-1988), and those in residence each year through December 31, 1994.

Of the 1,097 undischarged patients on December 31, 1994, 221 were admitted before 1989 (see Table 19B). The earliest admission among this group was in 1959. About 10 patients in residence at the end of 1994 were admitted before 1970, and 63 before 1980. From 1980 to 1988, an additional 158 were admitted. Patients with long stay increased to 250 in 1989, 304 in 1990, and 373 in 1991.

TABLE 19B. CUMULATIVE LENGTH OF STAY OF PATIENTS  
UNDISCHARGED ON DECEMBER 31, 1994

STAY (YEARS)	1959-88	1989	1990	1991	1992	1993	1994
Total Cumulative Stay	510.2	515.7	520.2	523.6	526.1	527.5	527.9
Number of Patients	221#	250	304	373	463*	608*	1097*

# Patients admitted during 1959-1988 who were still in residence on 12/31/94.

\* The 1992, 1993, and 1994 figures include many recent admissions who were undischarged on 12/31/94. Note that 489 of these were admitted in 1994.

Periodic cumulative stay was calculated by adding the length of stay of patients in residence on December 31, 1994 from admission to the end of the year in question. Thus on Table 19B, each year's figure is separate and unique. At the end of 1988, the cumulative stay of the 221 patients in residence on December 31, 1994 and admitted before 1989 was 510 years. Similarly, the 250 patients undischarged as of December 1994 admitted prior to 1990 had 516 years of cumulative stay in 1989. By 1993 and 1994, the corresponding figures for patients undischarged in 1994 and admitted before or during those years were each 528 years. Since later years include many admissions (489 in 1994), the 1994, 1993, and to some extent 1992 figures seem less meaningful reflections of the long term trend. The cumulative stay of long term residents is increasing.

### **TYPE OF CARE BEFORE ADMISSION**

There were differences between discharges and deaths in pre-admission level of care (see Table 20). First, whereas none of those who died was referred from jail, 16% of discharges were jail referrals. Second, fewer patients among those who died were referred from home/self care than among discharges, but referrals from another hospital were higher among those who died.

TABLE 20. TYPE OF CARE BEFORE ADMISSION

TYPE OF CARE	ALL DEATHS (1989-94)		DISCHARGES (1991-94)	
	No.	%	No.	%
None/Unknown	33	16.2	1,781	19.2
Home/Self Care	48	23.5	4,055	43.7
Home/Supportive Assistance	6	2.9	28	0.3
Residential Treatment Center	3	1.5	130	1.4
Crisis Residential Center	2	1.0	4	0.0
Skilled Nursing Facility	76	37.3	297	3.2
Congregate Care	3	1.5	155	1.7
Adult Family/Group Home	3	1.5	158	1.7
Other Hospital	26	12.7	640	6.9
Other Setting	2	1.0	529	5.7
Street	2	1.0	37	0.4
Jail	0	0.0	1,466	15.8
TOTAL	204	100.0	9,280	100.0

The third difference is that only 3% of discharges were referrals from a skilled nursing facility as compared to 37% (76 patients) of those who died. More than two-thirds of those referrals (51 patients) were aged 75 or older. This means that 25% of those who died were nursing home referrals. Of the 76 nursing home referrals, 36 died within 6 months of admission. Considering that the mean number of deaths per year for the last 6 years was 34 (see Table 2), this figure is quite alarming. The belief that a disproportionate number of old patients are referred to WSH from nursing homes seems to be supported by the referral data.

### PRIOR ADMISSIONS

Data on prior admission (Table 21) were obtained for all deaths, but could not be compiled manually for others treated. About 59% of those who died had no prior admission, i.e. they died during their first admission to WSH. About 24% had one or two prior admissions while 17% had 3 or more. The mean was 1.5 and one patient had up to 24. The 121 patients with no prior admission were very old; 85% of them (105 patients) were 60 years or older, and 43% (52 patients) were over 80. In fact, the oldest patient among all those who died, aged 101, had no prior admission, and stayed for only 12 days. Prior admission was moderately negatively correlated with age ( $R = -.31$ ). This finding is consistent evidence in support of the high referral rate from nursing homes.

TABLE 21. PRIOR ADMISSIONS

PRIOR ADMISSIONS	ALL DEATHS	
	No.	%
None	121	59.3
1 or 2	49	24.0
3 - 5	17	8.3
6 - 10	13	6.4
11 +	4	2.0
TOTAL	204	100.0
<i>Minimum</i>	0	
<i>Maximum</i>	24	
<i>Mean</i>	1.5	

**REASON FOR ADMISSION**

Table 22 shows comparisons of the three groups (deaths, discharges, and total patients) by reason for admission. The majority of patients (45-59%) were admitted because they were a risk to themselves or others. All sub-categories are comparable between discharges and total patients. Further, the combined proportions of patients who were at risk of serious harm either to themselves, others, or property were comparable for the three groups, at about 51-54%.

TABLE 22. REASON FOR ADMISSION

REASON	ALL DEATHS (1989-1994)		DISCHARGES (1991-1994)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Gravely Disabled (Old Law)	82	40.2	251	2.7	259	2.5
Gravely Disabled - Health/Safety	1	0.5	1,717	18.5	1,889	18.2
Gravely Disabled - Cognition/Volition	1	0.5	1,234	13.3	1,349	13.0
Serious Harm - Risk to Self/Others	93	45.6	4,594	49.5	5,085	49.0
Serious Harm - Risk to Property	10	4.9	380	4.1	415	4.0
Voluntary	4	2.0	21	0.2	21	0.2
Other Involuntary	13	6.4	1,083	11.7	1,359	13.1
TOTAL	204	100.0	9,280	100.0	10,377	100.0

A major difference in the reason for admission between the patients who died and the other two groups was that patients admitted with gravely disabled conditions under the old law constituted 40% of all deaths, but only 3% of discharges and total patients treated. Regardless of whether they were admitted under the old or new law, all the “gravely disabled” patients combined make up 41% of the patients who died, compared to 34% of the other two groups.

### ADMISSION AUTHORITY

Voluntary admissions comprised 4% of deaths and 11% of discharges or respectively patients treated. About 59% of deaths were admissions under 72-hour observation or emergency detention, while only 41-42% of the other groups were admitted under these authorities (see Table 23).

TABLE 23. ADMISSION AUTHORITY

AUTHORITY	ALL DEATHS (1989-1994)		DISCHARGES (1991-1994)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Voluntary	9	4.4	1,058	11.4	1,100	10.6
72-Hour Observation or Emergency Detention	120	58.8	3,935	42.4	4,213	40.6
Court Commitment #	64	31.4	1,515	16.3	1,837	17.7
90-Day Observation	3	1.5	25	0.3	21	0.2
Revocation *	5	2.5	269	2.9	291	2.8
Criminal Insanity	3	1.5	21	0.2	52	0.5
Court Order Detention	0	0.0	1,540	16.6	1,494	14.4
Other	0	0.0	917	9.9	1,370	13.2
TOTAL	204	100.0	9,280	100.0	10,377	100.0

# Includes 14, 30, 90, and 180 days court commitments.

\* Includes 90 and 180 days revocations.

Court commitment comprised 31% of deaths in contrast with 16-18% of discharges and patients treated. The proportions for 90-day observation, revocation, and criminal insanity were comparable for the three groups. Whereas none of the patients who died

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was under court-order detention, 17% of discharges and 14% of patients treated were admitted under this authority, which is used for the legal offender unit to determine competency to stand trial.

**COUNTY OF COMMITMENT**

A majority of patients were committed from Pierce (32%) and King (23%), which together accounted for 55% of discharges and total patients, and 64% of deaths (Table 24). King County (34%) had more deaths than its proportion of discharges or total patients, whereas Pierce County (30%) had a smaller proportion among deaths than among discharges and total patients. Other counties with reasonable contributions across the three groups were Snohomish (7%), Clark (6-7%), Kitsap (4%), and Cowlitz (3%). About 10-12% of discharges and total patients had an “unknown” commitment county.

TABLE 24. COUNTY OF COMMITMENT

COUNTY	ALL DEATHS (1989-1994)		DISCHARGES (1991-1994)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Clallam	1	0.5	157	1.7	156	1.5
Clark	14	6.9	608	6.6	571	5.5
Columbia	0	0.0	0	0.0	1	0.0
Cowlitz	7	3.4	179	1.9	176	1.7
Franklin	0	0.0	0	0.0	1	0.0
Grays Harbor	5	2.5	191	2.1	187	1.8
Island	4	2.0	65	0.7	62	0.6
Jefferson	0	0.0	0	0.0	4	0.0
King	69	33.8	2,158	23.3	2,113	20.4
Kitsap	8	3.9	337	3.6	322	3.1
Klickitat	1	0.5	1	0.0	1	0.0
Lewis	3	1.5	135	1.5	125	1.2
Mason	0	0.0	0	0.0	2	0.0
Pacific	1	0.5	68	0.7	62	0.6
Pierce	61	29.9	2,993	32.3	2,883	27.8
Skagit	6	2.9	212	2.3	208	2.0
Snohomish	15	7.4	650	7.0	643	6.2
Spokane	0	0.0	0	0.0	5	0.0
Thurston	7	3.4	339	3.7	311	3.0
Whatcom	2	1.0	210	2.3	208	2.0
Yakima	0	0.0	0	0.0	1	0.0
Unknown	0	0.0	977	10.5	2,336	22.6
TOTAL	204	100.0	9,280	100.0	10,377	100.0

**COUNTY OF RESIDENCE**

The frequency distributions of patients by county of declared residence is shown on Table 25.

TABLE 25. COUNTY OF RESIDENCE

COUNTY	ALL DEATHS (1989-1994)		DISCHARGES (1991-1994)		TOTAL PATIENTS (1991-1994)	
	No.	%	No.	%	No.	%
Clallam	1	0.5	162	1.7	166	1.6
Clark	12	5.9	618	6.7	581	5.6
Columbia	0	0.0	0	0.0	1	0.0
Cowlitz	7	3.4	175	1.9	176	1.7
Franklin	0	0.0	0	0.0	1	0.0
Grays Harbor	5	2.5	236	2.5	239	2.3
Island	5	2.5	74	0.8	73	0.7
Jefferson	0	0.0	0	0.0	10	0.1
King	69	33.8	2,583	27.8	2,594	25.0
Kitsap	8	3.9	339	3.7	332	3.2
Kittitas	0	0.0	0	0.0	1	0.0
Lewis	3	1.5	140	1.5	135	1.3
Mason	0	0.0	0	0.0	9	0.1
Pacific	1	0.5	62	0.7	62	0.6
Pierce	54	26.5	2,919	31.5	2,843	27.4
Skagit	4	2.0	174	1.9	176	1.7
Snohomish	14	6.9	634	6.8	643	6.2
Spokane	0	0.0	0	0.0	2	0.0
Thurston	7	3.4	323	3.5	301	2.9
Wahkiakum	0	0.0	0	0.0	1	0.0
Whatcom	3	1.5	211	2.3	208	2.0
Yakima	0	0.0	0	0.0	4	0.0
Other Counties	0	0.0	161	1.7	145	1.4
Out of State	1	0.5	2	0.0	2	0.0
Out of U.S.	1	0.5	1	0.0	1	0.0
Unknown	9	4.4	466	5.0	1,669	16.1
TOTAL	204	100.0	9,280	100.0	10,377	100.0

Among the patients who died, King County residents constituted 34% - exactly the same proportion as that of the county of commitment. Pierce County residents, the next largest group, constituted 27% among the patients who died. This proportion was slightly less than that of patients committed from Pierce County. With respect to

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discharges and total patients, the proportions of King County residents were respectively 28% and 29%. The corresponding proportions for Pierce County were 32% and 31% respectively. In terms of county of commitment, King and Pierce together constituted about 64% of deaths. Similarly, in terms of county of residence their combined proportion of deaths was also as high as 60%.

Snohomish County residents comprised 7% of deaths, discharges, or total patients; Clark County residents were 6-7% across the three categories; Kitsap County about 4%; Thurston County about 3-4%; and Cowlitz County about 2-3%. Unlike the county of commitment, the county of residence was much better identified, with “unknowns” being less than 5%.

## **SUMMARY**

The average patient who is dying at WSH is 60% likely to be suffering from organic psychotic conditions, and more likely to be referred from a nursing home, self care or other hospital, than from elsewhere. He/she will likely have on average eight medical/physical problems, the worst of which will be either a circulatory or respiratory condition, and will likely die from pneumonia or cardiopulmonary conditions but without cancer being related to death.

On average the patient who is dying will likely have less than two prior admissions which will negatively correlate with age, and the length of stay will decline over the years. The admission reason of this patient will likely be risk to self/others, and would be admitted under the authority of 72-hour observation or emergency detention, with a greater likelihood of coming from King or Pierce County than elsewhere.

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## **CHAPTER 6**

### **DISCUSSION AND CONCLUSION**

#### **INSTITUTIONAL POPULATION CHANGES**

State Senate Bill (SSB) 5400 and Managed Care Mental Health Reform allowed for the creation of Regional Support Networks (RSN) and the implementation of prepaid health plans (PHP) starting in 1993. The convenience and options of psychiatric care and service delivery created by these reforms have resulted in the intended target of reducing state psychiatric institutional population. Consequently, the patient population of WSH has declined considerably and continues to decline (see Table 1).

Underlining the WSH population decline is a complex interplay of subtle demographic changes in recent admissions and long-term patients. As a consequence of the reforms, as patients are moved out of the institution to community settings in trial or permanent placement, aging long-termers have become the least likely to be discharged or moved out of the institution. Instead, younger patients are more likely to be moved out. At the same time, the proportion of younger patients being admitted is declining. As such the proportion of older patients and their mean age continue to increase.

Data on Table 26 show that based on admission age, the proportion of short-term admissions with ages 18-50 has declined from 82% in 1991 to 75% in 1994. On the other hand, the proportion of patients admitted with ages over 50 has increased from 18% in 1991 to 25% in 1994. The effect of this population movement and age dynamics is that regardless of the dwindling trend in the patient population, the mean admission age of patients discharged between 1991 and 1994 continued to increase. This is significant especially since undischarged aging long-termers have not been factored in the data shown on Tables 26 and 27 and Figure 3.

With respect to discharge age, the patients aged 50 or less have declined from 81% of discharges in 1991 to 74% in 1994 (see Table 27). On the other hand, discharged patients aged over 50 have increased from 19% in 1991 to 26% in 1994. Thus, similar to the increasing trend in mean admission age, the mean discharge age is increasing even faster probably because of the increase in older patients (see Figure 3).

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TABLE 26 ADMISSION AGE OF PATIENTS DISCHARGED  
DURING 1991-1994 (PERCENT OF PATIENTS)

AGE-COHORT	1991	1992	1993	1994
18-22	8.9	5.8	6.6	5.0
23-50	72.7	73.0	71.4	70.0
51-75	14.2	15.8	16.8	19.1
76 +	4.2	5.4	5.2	5.9
TOTAL	100.0	100.0	100.0	100.0
<i>Discharges</i>	<i>2,761</i>	<i>2,483</i>	<i>2,168</i>	<i>1,868</i>
<i>Mean Age (Years)</i>	<i>39.4</i>	<i>41.1</i>	<i>41.4</i>	<i>42.9</i>

TABLE 27 DISCHARGE AGE OF PATIENTS DISCHARGED  
DURING 1991-1994 (PERCENT OF PATIENTS)

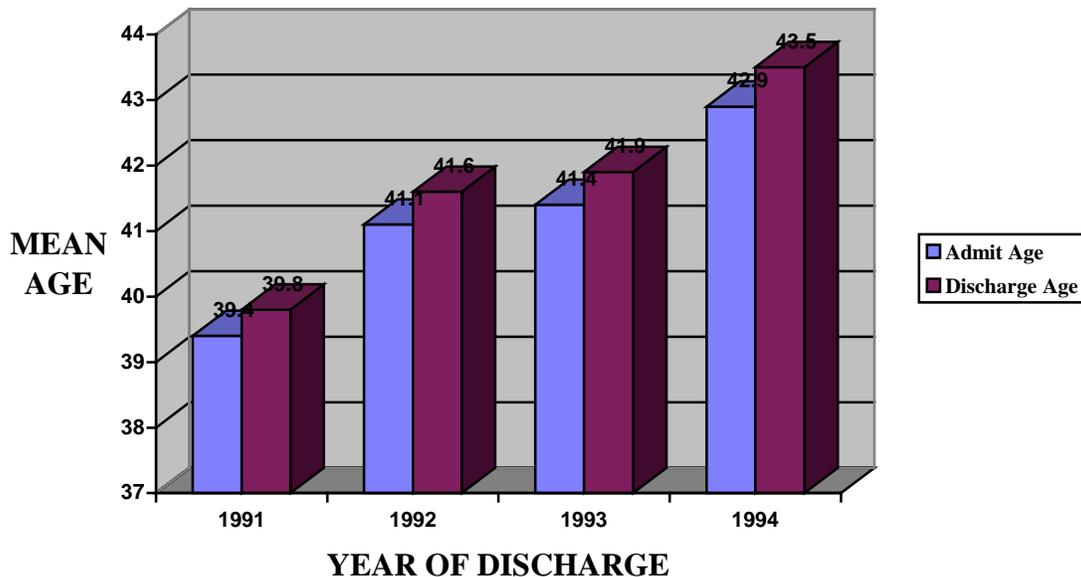
AGE-COHORT	1991	1992	1993	1994
18-22	8.3	5.2	5.8	4.6
23-50	72.9	73.0	71.6	69.2
51-75	14.4	16.1	17.0	19.6
76 +	4.4	5.7	5.6	6.6
TOTAL	100.0	100.0	100.0	100.0
<i>Discharges</i>	<i>2,761</i>	<i>2,483</i>	<i>2,168</i>	<i>1,868</i>
<i>Mean Age (Years)</i>	<i>39.8</i>	<i>41.6</i>	<i>41.9</i>	<i>43.5</i>

Differences in length of stay of patients admitted during 1991-1994 cannot be compared meaningfully because of survival effects, as more patients admitted earlier, say in 1991, are likely to be discharged sooner than those admitted more recently. However, the analyses of data on discharged patients and patient movements reveal the following things about the population:

1. The geriatric proportion of the WSH patient population is increasing.

2. The average age of the institutional patient continues to increase, and as young patients continue to be moved out, average age will increase even further.
3. Since older patients have more physical/medical problems and the WSH population is getting older, the average patient will have more medical problems than before.
4. Since a good number of older patients are terminal in nature, it is normal to expect natural deaths to increase.

**FIGURE 3. ADMISSION AND DISCHARGE AGES  
OF PATIENTS DISCHARGED DURING  
1991 - 1994**



### **INCREASING MORTALITY RATES**

In general, the mortality rate has been increasing since 1989. Between 1989 and 1992, it fluctuated between 1.27 per 100 discharges (1991) and 0.85 (1992). Since then, it has increased to 2.57 per 100 discharges in 1994 (see Table 6). The increase in the unnatural mortality rate is low while that of natural mortality is high. The mean WSH patient mortality rate of 1.36% for the six-year period is currently higher than the average of less than 1.0% for U.S. county and state mental hospitals.

### **INCREASING NATURAL MORTALITY RATES**

Natural deaths have averaged 87% of all deaths between 1989 and 1994, ranging from 76% in 1992 to 97 % in 1993. The 1994 rate (92%) is slightly lower than the 1993 rate. Conversely, unnatural deaths declined from a high of 24% in 1992 to 3% in 1993 (See Table 28). Suicides comprised the largest proportion of unnatural deaths, followed by accidents, with both occurring mostly between 1989 and 1992. There have been very few homicides, one each in 1992 and 1994.

TABLE 28. TYPES OF DEATH, 1991-1994

TYPE		1989	1990	1991	1992	1993	1994
Natural	No.	29	25	28	16	37	44
	%	87.9	86.2	80.0	76.2	97.4	91.7
Accidental	No.	2	1	3	0	0	2
	%	6.1	3.4	8.6	0.0	0.0	4.2
Suicide	No.	2	3	4	4	1	1
	%	6.1	10.3	11.4	19.0	2.6	2.1
Homicide	No.	0	0	0	1	0	1
	%	0.0	0.0	0.0	4.8	0.0	2.1
TOTAL	No.	33	29	35	21	38	48
	%	100.0	100.0	100.0	100.0	100.0	100.0

## THE COMMONEST CAUSE OF DEATH

The commonest causes of death, pneumonia (29%) and heart/cardiopulmonary problems (28%), together accounted for 57% of all deaths. They also constituted 33% and 31% of natural deaths respectively.

In terms of debilitating medical illnesses, the most frequently diagnosed medical conditions were circulatory and respiratory problems. Circulatory problems were reported at least 20-31% of the time for each of the first six most debilitating illnesses diagnosed. Respiratory problems comprised the first most debilitating condition for 28% of the patients, the second for 16%, and the third for 12% of the patients. Elsewhere, lung diseases (Licht et al., 1993) and circulatory problems (Casadebaig & Quemada, 1989) have also been reported as predominant causes of psychiatric patient mortality.

## THE EFFECT OF CANCER ON MORTALITY RATES

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Constituting only 7% of all deaths, cancer (neoplasm) was not a major factor in patient deaths at WSH during the period 1989-1994. Elsewhere, cancer has also not been found to be a major factor in mental patient deaths (Craig & Lin, 1981; Black & Winokur, 1987).

## **DECREASING SUICIDE RATES**

The frequency of annual suicides varied from 2 in 1989 to 4 each in 1991 and 1992 and down to 1 each in 1993 and 1994. Even though they comprise the majority of unnatural deaths, suicides seem to be on a decreasing trend during 1993 and 1994.

Craig & Lin (1981b) reported that psychotropic drugs tend to lower mortality. In a retrospective study, Taiminen (1993) reported that patients who survived had lower neuroleptic doses and more often used benzodiazepines. However, Piesiur et al. (1986) reported that psychiatric patients who were dependent on benzodiazepines had three times higher mortality rates than the general population, but they were not different from non-dependent patients with comparable psychiatric illnesses.

The decrease in suicide rates at WSH is alleged to be due to two anti-psychotic drugs, clozapine and respiradone, which are more effective for people with refractive psychotic disorders.

## **THE COMMONEST METHOD OF SUICIDE**

During the period 1989-1994, the commonest method of suicide was hanging or strangulation. Of the 15 suicides which occurred during the six-year period, 6 (40%) occurred by hanging or strangulation. A similar effect was observed in a study of forensic psychiatric patients at Oregon State Hospital, with hanging constituting 93% of forensic and 83% of non-forensic suicides (Kamara, 1989).

## **DIFFERENCES IN PATIENT CHARACTERISTICS**

With regards to demographic factors, the mean age of patients who died during 1989-1994 (70 years) was much higher than that of all patients treated (41 years) regardless of whether or not they were discharged (see Table 7). In terms of gender proportions, there were slightly fewer females among those who died (32%) than among those treated (35%) (see Table 8). There were fewer single/never married patients among those who died (27%) than among those treated (48%). But there were more married or widowed patients among those who died (28% and 17% respectively) than among those treated

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(13% and 14% respectively) (see Table 9). Racial proportions were different with Whites constituting 94%

and African-Americans 3% of those who died as compared to 82% and 10% respectively of those treated (see Table 10). An important difference is that believers in any religion constituted 61% of those who died as compared to only 19-24% of those treated (see Table 11).

Comparisons of groups based on educational achievement were inconclusive based on the high proportion of 'unknowns' (see Tables 12).

The proportion of retired patients among those who died was almost 19 times that of patients treated (see Table 13).

Information on veteran status was not comparable due to the numerous 'unknowns' among those who were treated (see Table 14). However, the veteran status of all patients who died was known, and 89% were non-veterans.

With regard to institutional characteristics, patients with organic psychosis constituted 57% of patients who died but only 8% of those treated - over 7 times more (Table 15).

The patients who died had on average about 8 medical/physical problems; comparable data were not available for patients treated (Table 16). The most serious medical problems were those relating to the circulatory system (31%) and respiratory conditions (28 %) (Table 17). Cancer was not a major factor in patient deaths (Table 18).

The minimum stay for patients who died as well as others was one day (Table 19). The mean stay of patients who died was just over 1 year and seven months, compared to about 4.5 months for discharges, and 8.5 months for patients treated.

The proportion of patients referred to WSH from skilled nursing facilities was 12 times as high among those who died as among discharges (Table 20). Referrals from other hospitals among those who died was almost twice as much as among those treated.

Three out of every five patients who died had had no prior admission while one out of four patients had one or two prior admissions (Table 21). Only 17% had more than two prior admissions. The major difference in reason for admission was that 40% of patients who died were admitted under the old law as gravely disabled, which speaks to their length of stay at the institution (Table 22). More of the patients who died were admitted under the 72-hour observation or emergency detention authority than those treated (Table 23).

The proportion of patients from King County was slightly higher among those who died than among those discharged or total patients (Table 24). Other county proportions were similar between those who died and those treated. The distributions of patients in terms of county of residence were generally similar across the three groups (Table 25).

## **INCREASED ADMISSION RATE OF OLDER PATIENTS**

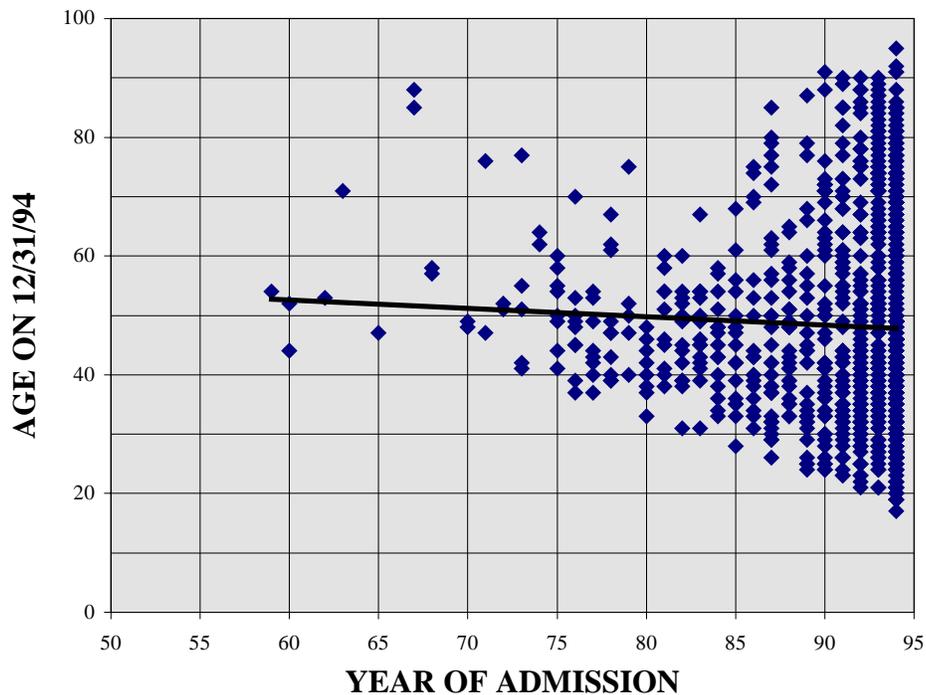
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Figure 4 is a scatterplot of patients who were in residence on December 31, 1994 and not discharged until after that date, distributed by age on December 31, 1994 and year of admission. These include long-termers plus newly admitted short-termers at the time. The current patient with the longest stay was admitted in 1959. Whereas no long-termers admitted prior to 1990 has reached age 90, at least seven patients admitted since 1990 are at least 90 years of age, and a significant number are well over 70 years. In short for some reason, many really old patients are recently being admitted at WSH.

Since the longer patients remain in residence the more they age, ideally, if the trend of younger admissions had continued, the relationship between current age and year of admission would be a reasonably steep negative slope. However, since many old patients are now being admitted, the regression line on Figure 4 is a very gentle decline.

**FIGURE 4. RELATIONSHIP BETWEEN AGE AND YEAR OF ADMISSION OF PATIENTS IN RESIDENCE ON DECEMBER 31, 1994**



What the data show on the increasing proportions of newly admitted, old, frail, patients raises questions about the appropriateness of their admissions. The institution may not have much choice in the matter of their admission for as long as the patients are determined to be increasingly demented with age, especially if that condition is further complicated by a poor health condition. It is clear from the data that since this group of patients is going to continue to be substantial, appropriate policy measures need to be

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implemented with the proper treatment regimen instituted to accommodate them in the best way possible.

### **INCREASED MORTALITY RATE OF OLDER PATIENTS**

Since many old and sick patients are now being admitted, because of their short life expectancy between admission and death, deaths would be expected to continue to increase at WSH. Of the 204 patients who died during 1989-1994, 75% (153) were older than 60 years as compared to 13-14% of discharges or patients treated during 1991-1994. But of the 9,280 discharges during 1991-1994, only 1,448 (16%) were aged over 60. During the period 1989-1994, people aged 55 or over have comprised 20% of the Washington population, while those aged 65 or over have comprised about 12%.

Of the 142 patients who died during 1991-1994, 112 (79%) were aged over 60. This results in an age-specific mortality rate for patients over 60 of about 7.7 per 100 patients (or 7.7%). In the state as a whole, the age-specific mortality rate for people aged 55 or over has been 3.3% during the period 1989-1994. For people aged 65 or over, the age-specific mortality rate has varied slightly between 4.7% and 5.0% during 1989-1994. Thus, mortality rates of older people are much higher at WSH in comparison to the general population. This finding is similar to others on older depressed patients elsewhere (Burvill & Hall, 1994; Casadebaig & Quemada, 1991).

### **DECLINING LENGTH OF STAY**

The average length of stay of discharged patients increased from 10.7 months in 1991 to over one year in 1992, and declined to 8 months in 1994 (see Table 19A). For patients in residence, the mean stay declined from over two years in 1989 to 10.6 months in 1993 (see Table 19B). Note that the low averages for recent years include many new admissions who are potential short-termers. The reduction in length of stay is also related to recent demographic changes occurring at WSH, particularly the influx of very old patients. This influx translates to a higher likelihood of natural deaths because of shorter life-expectancy, which preempts the likelihood or opportunity for a long hospital stay.

### **INCREASE IN PATIENTS WITH ORGANIC MENTAL DISORDERS**

Table 29 shows changes in population by discharge diagnosis. Patients with organic psychotic conditions increased from 7.4% in 1991 to 10% in 1994. The proportion of patients diagnosed with schizophrenic disorders remained constant at 32-33%. On the other hand, the proportion of patients with other disorders fluctuated between 50% and

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57%. It is also noteworthy that the reliability of discharge diagnostic data was quite high, with only 4% of 'unknown' cases in 1994 as compared to 10% in 1991.

## THE EFFECT OF NEW POLICIES AND REGULATION CHANGES

New regulations and policies that have been implemented include Advanced Health-care Directives involving withholding/withdrawing life-sustaining treatment (see Appendices 1 and 2) and a 'Do Not Resuscitate' (DNR) order (see Appendix 3). Before an active policy is applied on a capable patient, he or she has to give consent. When a patient is incapable of making that decision, a surrogate, family member or legal guardian, gives the consent based on the wishes of the patient.

TABLE 29. DIAGNOSES OF DISCHARGED PATIENTS  
1991-1994

TYPE		1991	1992	1993	1994
Unknown	No.	283	137	69	77
	%	10.2	5.5	3.2	4.1
Organic Psychotic Conditions	No.	204	171	169	187
	%	7.4	6.9	7.8	10.0
Schizophrenia	No.	880	807	692	618
	%	31.9	32.5	31.9	33.1
Other Disorders	No.	1,394	1,368	1,238	986
	%	50.5	55.1	57.1	52.8
TOTAL	No.	2,761	2,483	2,168	1,868
	%	100.0	100.0	100.0	100.0

*Note: A discharge diagnosis was not available for the 1,097 patients who were still undischarged as of December 31, 1994.*

The three strong sentiments most frequently expressed by patients and surrogates are:

“... The patient expressed wish for no heroic life support ..... in the event of cardiopulmonary arrest or catastrophic illness.”

“... Let nature take its course.”

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“... Do nothing to prolong natural course of events.”

The cases reported on Table 30 include only patients with active advance healthcare directive/DNR order at the time of death among the patients who died.

It is not the total number of patients who had active DNR orders. Further, it does not include discharged patients or patients in treatment who had an active DNR policy during the study period.

TABLE 30. THE EFFECT OF ADVANCED HEALTHCARE DIRECTIVES (A.H.C.D.)

YEAR	DEATHS	DEATHS WITH A.H.C.D.	%
1989	33	2	6.1
1990	29	5	17.2
1991	35	13	37.1
1992	21	8	38.1
1993	38	26	68.4
1994	48	36	75.0
TOTAL	204	90	44.1

*Note: Advanced Healthcare Directives (A.H.C.D.) include a 'Do Not Resuscitate' order and withholding/withdrawing life sustaining treatment.*

Forty-four percent of all the patients who died during 1989-1994 had an active DNR order. Whereas only few of the deaths during the early part of the period were associated with DNRs, by the end of the six-year period, the overwhelming majority of the patients who died had DNRs. The percent of patients with DNR among those who died was 6% in 1989 and 17% in 1990. During 1991 and 1992, nearly two out of every five patients who died had an active DNR. This ratio jumped to 2 out of every 3 in 1993, and to 3 out every 4 in 1994. Thus the increase in the numbers of deaths with active healthcare directives has been substantial especially between 1991 and 1994.

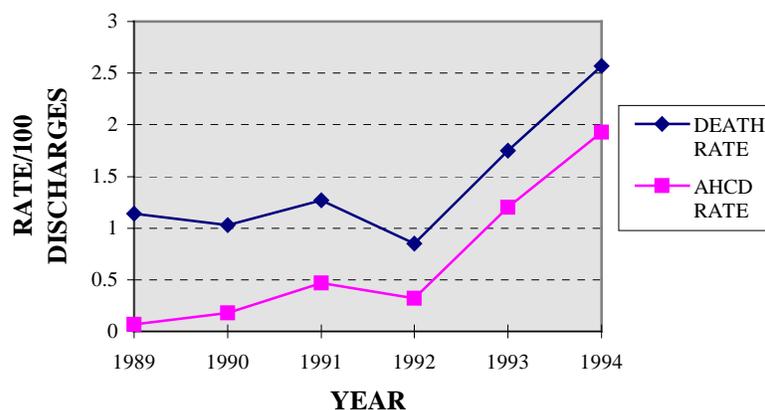
In Figure 5, trends in the annual DNR rate of patients who died and the annual patient death rate expressed as percentages of discharges over the six-year period are shown. Ideally, if data and time were available, DNR information would have been collected on all patients who were in treatment during the study period regardless of whether they died, were discharged, or remained in treatment. Since the death rate is expressed in terms of discharges, the DNR rate also should be ideally expressed in the same terms.

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This means that ideally two ratios should have been compared: (1) the proportion of active DNRs among those who died, and (2) all DNRs among discharges (or total patients treated) as a percentage of all discharges (or total patients treated). In that regard and in the absence of the second figure, the DNR rates expressed both on Table 30 and Figure 3 must be considered relative rather than absolute measures. This means that the reported DNR rate is the death-related rate rather than the rate of total DNR occurrence among patients treated during the study period.

**FIGURE 5. RELATIONSHIP BETWEEN HEALTHCARE DIRECTIVES AND DEATH RATE**



There was an interesting correlation between death rate and the death-related DNR rate per 100 discharges. Between 1989 and 1992, death-related DNR policies were few, but still somewhat related to the death rate. Since 1992, the DNR rate has increased significantly, and is highly positively correlated ( $r^2 = 0.92$ ) with the death rate as shown on Figure 5).

The advanced healthcare directives and DNR policy have basically offered WSH patients the hospice services which were formerly provided by other hospitals to terminal patients who were transferred out just before death. Now, rather than being transferred to other hospitals where they are likely to die soon after the seven-day period of WSH responsibility, terminal WSH patients activate their “right to die” at WSH, and “with the dignity” of applying no “mechanical” or “chemical” resuscitation, or the application of life-prolonging mechanisms.

It is conceivable that these new policies are going to continue to influence deaths positively until such time that the effect optimizes or perhaps maximizes. With time, when all patients who are likely to have active healthcare directives do so promptly, the

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short-term effects would be hastened deaths, while in the long run there would be little or no net effects. Thus in the long-run, the number of deaths will stabilize or even decline slightly.

## **CONCLUSION**

In general, based on recent changes in the demographic and institutional characteristics of patients, WSH seems to be entering into an era in which the typical patient admitted and treated at the hospital is much older and sicker medically than patients admitted and treated previously. These older and sicker patients now tend to have shorter hospital stays, with an increasing likelihood of dying at the hospital within a relatively short time after their admission.

Thus, mortality rates at WSH should be expected to continue to increase precisely because of this huge potential for increase in natural deaths. This is perhaps one important reason why the next detailed studies on natural and unnatural deaths separately and their trends are important.

## **RECOMMENDATION**

As a matter of priority, perhaps of urgency, a basic system needs to be set up to computerize information on patient characteristics in an interactive and perhaps shared database. This will serve as a tool for both in-depth studies and analyses of trends as well as facilitating quick retrieval of data to respond to policy questions.

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## **APPENDICES**

### ***APPENDIX 1. HEALTHCARE DIRECTIVE***

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number:	2.3.10	Date Issued:	12/1/91
Policy:	HEALTHCARE DIRECTIVE	Date Revised:	01/23/95

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**PURPOSE:** To inform and advise all patients of their right to make an Advance Healthcare Directive concerning healthcare before the patient is incapable of making these decisions, including withholding or with-drawing life sustaining treatment in instances of a terminal condition.

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**SCOPE:** To include all patients or their surrogate decision makers at Western State Hospital.

**POLICY:** All patients at Western State Hospital will be informed of their rights under the Federal Patient's Self Determination Act (OBRA 1990) and RCW 70.122 (Natural Death Act); concerning Advance Healthcare Directives, i.e., Living Wills, Durable Power of Attorney for Healthcare, Do Not Resuscitate (DNR), Organ Donation, Life Support System, Hydration and Food, etc.

1. Western State Hospital will provide a written brochure to each patient upon his/her admission/readmission to WSH. An inquiry will be made of each patient whether they have an Advance Healthcare Directive. If they do not, they will be asked if they wish to have information concerning  
  
Advance Healthcare Directives. The presence or absence of an Advance Healthcare Directive will be documented in their medical records.
- 2.\* When the patient's admission mental status precludes discussing the Advance Healthcare Directive, the treatment team will address this issue during the preparation of the Master Treatment Plan.
3. The hospital will not discriminate against an individual based on whether or not he/she has executed an Advance Healthcare Directive.
4. The hospital will respect all Advance Healthcare Directives of the individual patient. If any Advance Healthcare Directive prepared by a patient cannot be followed, efforts will be made to transfer the patient to a facility which can execute the Advance Healthcare Directive.
5. When a staff physician's personal belief prohibits his/her respecting the Advance Healthcare Directive of the patient, the care of the patient will be transferred to another physician.
6. The hospital will provide for the education and training of staff on issues concerning Advance Healthcare Directives.
7. A member of the multi-disciplinary treatment team will inquire of a patient at WSH whether they have an Advance Healthcare Directive, assist them in obtaining information regarding Advance Healthcare Directives and document their absence or presence in the medical records. Should

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the patient desire to prepare an Advance Healthcare Directive, the treatment team will refer the patient to the Institutional Services Contractor.

8. The Healthcare Directive will be discussed with the patient and updated during the annual review of the psychosocial assessment.

RESPONSIBILITY: The Medical Director will be responsible for implementing and monitoring this policy.

SOURCE: RCW 70.122 - (Natural Death Act)  
Patient's Health Determination Act (PSDA) - (Omnibus Reconciliation Act of 1990)  
WSH Policy 2.2.7, Organ/Tissue Donation  
WSH Policy 2.3.5, Do Not Resuscitate  
WSH Policy 2.5.6, Informed Consent  
WSH Policy 2.3.12, Withholding/Withdrawing Life-Sustaining Treatment

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.      Date  
Medical Director

\* added in 1993

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***APPENDIX 2. WITHHOLDING/WITHDRAWING LIFE-  
SUSTAINING TREATMENT***

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number:	2.3.12	Date Issued:	12/31/92
Policy:	WITHHOLDING/WITHDRAWING LIFE- SUSTAINING TREATMENT	Date Revised:	03/01/93

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**PURPOSE:** To establish principles and procedures to be followed whenever the treatment team encounters the possibility of withholding/withdrawing life-sustaining treatment.

**SCOPE:** All treatment staff members at Western State Hospital.

**POLICY:** The withdrawal/withholding of life-sustaining treatment presents complex issues. Each case will be unique.

The subject will arise in three situations:

1. the patient is in a terminal condition;
2. the patient is in a permanent unconscious condition; or
3. the patient's or surrogate's choice may affect a compelling state interest.

This policy is designed with a degree of flexibility that recognizes that circumstances surrounding life-sustaining treatment will be as individual as the lives of the affected patients. All methods of life-sustaining treatment are designed to sustain, restore or replace a vital function that

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has been seriously impaired. Treatment may be intended as temporary, to give the body the opportunity to recover from major

damage. Patients, who have reached an incurable or irreversible point in a terminal, unconscious or unacceptable condition, may have become dependent on one or more life-sustaining treatments. If there is no hope of recuperation, within reasonable medical judgment, withholding/withdrawing life-sustaining treatment becomes a valid question. Paramount consideration will be given to the course of treatment that will provide the patient with comfort and dignity.

Philosophy:

All staff members have responsibility for promoting and nurturing a therapeutic alliance with the patient. This responsibility is especially important in a state psychiatric hospital, where many patients lack support networks or are without friends or family.

Principles:

1. Competent patients and incompetent patients (through surrogates/advance directives) have the right to make informed decisions regarding the termination of life-sustaining treatment. Without a reason to declare a compelling state interest, these decisions will be honored. The physician shall provide medical information regarding the possibility of extending life under humane, comfortable conditions and document prior expressed wishes of the patient and current attitudes of the family.
2. When an incompetent patient has an advance directive which addresses the condition, the hospital will honor the patient's request as set forth in the document, subject to a compelling state interest to the contrary. The hospital's or surrogate's desires cannot override the advance directive except by court order.
3. All information needed to make an informed decision about health care, including withholding/withdrawing life-sustaining treatment, shall be provided to the decision-maker.
4. Decisions made for incompetent patients by surrogate decision-makers should be guided by the patient's own wishes, as far as they can be determined. If the patient has never been competent or has never

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expressed an opinion concerning life-sustaining treatment, the surrogate shall make decisions in the best interest of the patient.

5. Life-sustaining treatment includes such interventions as medication and artificially or technologically supplied respiration, nutrition and hydration, which sustains, restores or replaces a vital function and serves only to prolong the process of dying. Life-sustaining treatment does not include treatment given solely to alleviate pain or maintain comfort.
6. Withholding/withdrawing of life-sustaining treatment will occur without court intervention for patients in a terminal or permanent unconscious condition or in a physical condition which the patient or surrogate and physician agree that withholding or withdrawing life-sustaining treatment does not violate a compelling state interest.
7. This policy applies to situations where such treatment serves only to artificially prolong dying. Under appropriate circumstances and with informed consent, a physician will cease or omit life-sustaining treatment. This policy does not authorize or condone any affirmative or deliberate act or omission to end life other than to permit the natural process of dying.
8. The hospital shall attempt to resolve all disagreements with the patient or surrogate on whether life-sustaining treatment should be withheld or withdrawn in a professional and informal manner. This may include transfer or discharge. The last resort shall be judicial review.
9. The hospital will not withhold or withdraw life-sustaining treatment from an incompetent patient who does not have an applicable advance directive or surrogate without a court order. WSH shall initiate court proceedings when the patient is diagnosed in a terminal or permanent unconscious condition and the allowing of the natural process of dying is in the patient's best interests. All such cases will be reviewed by the Bio-Ethics Subcommittee.
10. The decision to provide treatment is based on whether such treatment provides sufficient benefit to the patient. Where nutrition and hydration are provided through medical intervention and serve to prolong life, yet provide no benefit in terms of sustaining a patient for possible recuperation, they may be regarded as other types of life-sustaining treatment. Artificial nutrition and hydration in this context refers to

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feeding tubes and hyperalimentation lines, which supply food, formulas, fluids or water; it does not refer to offering food, formula, fluids or water to the patient by mouth. When the subject of withholding/withdrawing artificial nutrition/hydration arises, refer to addendum A, discontinuing/not initiating nutritional support.

11. If the patient is pregnant, refer the matter to the Bio-Ethics Subcommittee for review. (Generally, life-sustaining treatment will not be withheld or withdrawn on pregnant patients without a court order.)

Definitions:

1. Terminal Condition means an incurable and irreversible condition caused by illness, injury or disease, that within reasonable medical judgment will cause death within a reasonable period of time in accordance with accepted medical standards, and where the application of life-sustaining treatment serves only to prolong the process of dying. A terminal condition must be documented in writing by the examining physician.
2. Permanent Unconscious Condition means an incurable and irreversible condition in which the patient is medically assessed within reasonable medical judgment according to accepted medical standards as having no reasonable probability of recovery from an irreversible coma or a persistent vegetative state. This condition must be documented in writing by the treating physician and an additional examining physician.
3. Brain Death is the irreversible cessation of all functions of the entire brain, including the brain stem, as determined by accepted medical standards. Patients with brain death are legally deceased in Washington State. Continuation of measures to prolong physiological functioning is not required. However, requests by the surrogate or family to maintain physiological functioning for a reasonable time for the purposes of organ procurement or for gathering of family members shall be honored.
4. Compelling State Interest. The courts of the State of Washington review the following criteria in determining whether the individual's right to refuse treatment should be overridden by the state's interest in medical treatment contrary to the patient's or surrogate's wishes:
  - a. preservation of life,
  - b. protection of innocent third parties,

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- c. preservation of medical integrity, and
  - d. prevention of suicide.

Patients at WSH are treated according to the level of care appropriate for them. This treatment is based primarily on the patient's medical prognosis. Treatment decisions are made after consulting with other medical personnel, the patient, family, the Bio-Ethics Subcommittee, when necessary, in accordance with state and federal law, and as otherwise specified in this policy.

Levels of Treatment:

In all levels of treatment, measures to assure the comfort of the patients must be instituted and continued.

1. Maximal therapeutic effort (total support): Prognosis is one of complete or substantial recovery. With the consent of the patient, surrogate or upon a court order finding a compelling state interest to treatment, maximal therapeutic effort shall be maintained.
2. Selective limitation of therapy: Patients with poor prognosis for life due to multiple organ failure or irreversible disease process. Determination of treatment depends largely on the patient's prognosis and the express wishes of the patient or surrogate.
3. Discontinue life-sustaining treatment: Life-sustaining treatment shall be withheld or withdrawn when the patient or surrogate and physician agree (or by court order when there is an irreconcilable difference of opinion) that further treatment offers no proportionate benefit.

Proportionate Benefit:

1. A treatment does not offer proportionate benefit to patient when:
  - a. the patient does not, or probably will not, experience it as a benefit;  
or
  - b. it does appear to confer some benefit, but when measured against the burdens it places on the patient by infringing upon personal values or in terms of discomfort, it does not significantly improve the quality of the patient's life.

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2. A treatment does offer proportionate benefit to a patient when:
- a. the patient does or there is a significant chance that he will experience some benefit from it; and
  - b. when measured against the burdens it places on the patient in terms of discomfort, it improves the quality of the patient's life.

SOURCE: AMH Accreditation Manual for the Hospital, Patient Rights Chapter.

RESPONSIBILITY: The Medical Director shall be responsible for the implementing and monitoring of this policy.

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.                      Date  
Medical Director

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### **APPENDIX 3. DO NOT RESUSCITATE (DNR) ORDER**

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number: 2.3.5	Date Issued: 02/19/89
Policy: DO NOT RESUSCITATE (DNR) ORDER	Date Revised: 03/24/94

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**PURPOSE:** Provide guidance regarding DNR orders.

**SCOPE:** All WSH staff.

**POLICY:** The dignity of the individual must be preserved and necessary measures to assure comfort must be maintained at all times by the provision of appropriate nursing care, hygienic care, comfort care, and analgesics to all patients, including those who have elected to forego a specific life-sustaining therapy.

1. Unless consent to a DNR order has been given, everyone admitted to Western State Hospital is presumed to consent to cardio-pulmonary resuscitation (CPR). CPR will be withheld on patients with a current DNR order, No Code Status upon admission, or determined medically futile. A DNR order will not apply in the case of accident or suicide attempt.
2. Code or No Code Status will be established upon admission and reviewed and reordered annually as part of the Patient Self-Determination Act. Status will also be considered during treatment plan reviews.
3. For patients who are not competent to make decisions and who do not have advance directives, authorized persons per WSH policy 2.5.6 will be consulted .

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4. When a decision is made, after discussion with the patient and/or surrogate decision maker to issue a DNR order, the attending physician will write the DNR order on the PTO sheet and document on the DNR flow sheet the basis for the DNR order and the discussion with those involved in that decision. The DNR order shall be reviewed and reordered annually or upon the request of those involved in the DNR decision. The physician shall initiate a review if there is a significant improvement in the patient's physical status.
  5. Surrogates may be previously appointed by the patient, court ordered guardian, or may be the patient's spouse, adult child, parent, or adult sibling. The surrogate is required to make decisions that would be consistent with the patient's wishes ("substituted judgment") or, if those are unknown, on the basis of the patient's best interest.
  6. When the DNR order is in effect, the code 4 team is not called except for accidents or suicide attempts.

#### GENERAL GUIDELINES

- A. Definition: A Do Not Resuscitate Order (DNR) is a written order which states that in the event of a respiratory or cardiac arrest, CPR measures will not be initiated. DNR refers to those aspects of CPR including endotracheal intubation, mechanical ventilation, cardiac massage, defibrillation, epinephrine use, vassopressor therapy and antiarrhythmic drugs. Oxygen administration, oropharyngeal suction and Heimlich maneuver may be performed.
  1. A competent patient or surrogate has the right to refuse treatment, including the initiation of resuscitative measures, no matter how detrimental such refusal may be to his/her health. Patients who provide informed consent for medical care also decide whether to consent to refuse resuscitation in the event of a respiratory or cardiac arrest. A patient who experiences a respiratory or cardiac arrest as the result of an accident or suicide attempt will be resuscitated.
  2. The DNR order represents an appropriate medical plan for record purposes.

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3. DNR orders relate only to the action to be taken in the event of respiratory or cardiac arrest. Other appropriate therapeutic interventions for comfort will continue at all times unless counter-indicated.
  4. All patients, including those for whom a DNR order has been written, shall be offered support counseling, including chaplaincy, to provide the necessary comfort.

#### B. Discussion and Implementation

Determining whether a DNR order is appropriate:

1. The attending physician plays the major role in discussing DNR decisions with the patient or surrogate, the patient's family and/or health care team.
2. Time Frame -- Information regarding advance directives (including DNR orders) must be provided to patients upon admission.

If the patient or surrogate expresses a desire to have a DNR order or if the patient is not capable of expressing an opinion but has a previous DNR, determination as to DNR status will be made as soon as practicable upon admission, but in any event no later than two weeks following admission.

3. Interim -- Patient identified as at risk or severely medically compromised will have their DNR status determined on a priority basis.

If such a patient requires a surrogate, telephone consent from surrogates will be accepted, provided that the conversation is telephonically witnessed by a WSH switchboard operator. The conversation must be thoroughly documented. There will be follow-up consent forms signed by the surrogate.

4. If the patient or surrogate expresses a desire to have a DNR order, the physician will discuss the option of a DNR status with the patient:
  - i) If a patient is clearly not capable but has made clear explicit prior statements about a desire not to be resuscitated in the event they are no longer capable of participating in such decisions, this preference shall be respected. The physician shall document the statements (such as an advance directive) in the chart, and refer the matter to the Bio-Ethics Committee.

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- ii) If a patient is questionably capable of making an informed choice about DNR then the physician must promptly contact a non-attending psychiatrist regarding an evaluation. The evaluating psychiatrist will document the patient's mental and emotional capacity to make a rational and informed choice.
  
  - iii) If the patient is determined to be incapable of making an informed choice about the code status, then a surrogate must be found to make the decision in order of priority. A surrogate may be a court-appointed guardian of the person, a representative named in a durable power of attorney for health care, a spouse, adult child, parent or adult sibling. Please see WSH Policy 2.5.6 for more detail.
  
  - iv) In locating a surrogate, the social worker will make the initial contact and facilitate a telephonic or in-person meeting between the physician and the surrogate. Other interested persons such as family members, chaplains, nurses and psychologists may be invited to participate.
  
  - v) If the patient is incapable of making decisions concerning his/her own treatment and there is no legal guardian, no family and no advance directives: The attending physician may not write a DNR order.

The attending physician is responsible for consulting with the Bio-Ethics subcommittee or the Attorney General's Office regarding the advisability of filing a guardianship action. The health care team shall be guided by the standard that treatment which is futile need not be imposed upon the patient. The attending physician may seek opinions from members of the health care team, which may include other attending physicians, nurses, psychologists, social workers and chaplains.

- vi) If a patient is found to be competent to make a decision regarding code status, the attending physician will discuss the order with the patient, and if appropriate, the patient's family. The patient's decision will be respected.

When the decision has been made to issue a DNR order:

5. The attending physician shall write a formal order to that effect in the patient's chart and shall write an explanation of the grounds for this decision in the patient's progress notes. The flow sheet will be completed.

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6. If the attending physician is not physically able, a physician responsible or the officer on duty (O.D.), after consultation with the attending physician, will write the order which must be countersigned by the attending physician at the first available time. If possible, the DNR order shall be deferred until the attending physician is available.
  7. The physician writing the order will immediately communicate with the RN in charge of the patient's care. All shifts will be informed of the cancellation.
  8. Cancellation of the DNR order will immediately be communicated to the RN in charge of the patient's care. All shifts will be informed of the cancellation.

C. Documentation and Communication:

1. Documentation in the chart by the physician will include the DNR order, progress note indicating rationale, DNR discussion with the patient's family or surrogate, and discussion with other treatment team members. Consultation with the Bio-Ethics Subcommittee if indicated.
2. The patient's attending physician is responsible for communication to the charge nurse of the ward and other members of the staff that a DNR order has been written or withdrawn.
3. Verbal or telephone DNR orders will not be accepted. Except for an interim order as outlined in B.3.

D. Review and/or Cancellation:

1. Given the fluctuation and variability of the medical status of many patients, a DNR order will be received by the attending physician any time there is a significant change in the patient's physical status annually.
    - a. The review will ensure that the order continues to reflect the current evaluation of the medical status, the patient or surrogate preference, and competency.
    - b. Progress notes will reflect this periodic view.
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2. A DNR order may be canceled at any time by a request of a competent patient.
  3. A DNR order may be reviewed by the attending physician at any time on the request of the patient's surrogate, family member, legal guardian, or any health care team member involved in the DNR decision. The order may or may not be canceled after review.

RESPONSIBILITY: The Medical Director is responsible for implementing and monitoring this policy.

SOURCES: RCW 70.122, Washington National Death Act  
RCW 7.70.065  
RCW 11.94, Durable Power of Attorney for Health Care  
Accreditation Manual for Hospitals (AMH)  
WSH Policy 2.3.10  
WSH Policy 2.5.6.

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.                      Date  
Medical Director

Attachment: Patient Rights

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## ***APPENDIX 4. PATIENT DEATHS***

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number: 2.2.6  
Policy: PATIENT DEATHS

Date Issued: 10/18/90  
Date Revised: 04/04/95

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**PURPOSE:** Establish a process by which the quality of patient care in the clinical performance of hospital staff is reviewed when an inpatient dies at Western State Hospital or within seven days of release, authorized leave, or unauthorized leave.

**SCOPE:** All hospital patient deaths.

**POLICY:** The Clinical Director of each unit of the hospital shall ensure that an Administrative Incident Report and documentation of all events relating to the death of any patient is completed. The Clinical Director will review all deaths as to the appropriateness of care provided, investigate any concerns about the adequacy of care and forward the results of the incident report review and investigation to the Medical Director.

The Superintendent, Medical Director, Chief of Medical Staff, Security, Switchboard, Medical Records Department and Quality Assurance Department shall be notified of all deaths. The Mortality and Morbidity (M&M) Subcommittee will conduct a review of all patient deaths. Facility autopsy percentage and Mortality rate will be tracked.

The Pierce County Medical Examiner shall be contacted for investigation of a death for the following reasons:

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1. Violent deaths.
  2. Suspicious circumstances of the death.
  3. Unknown or obscure causes of death.
  4. Contagious diseases which may constitute a public Harvard.
  5. Unnatural or unlawful causes of death.
  6. Sudden unexpected death.
  7. Body not claimed; no next of kin or legal guardian.

Autopsy will be obtained, whenever possible. Permits for autopsies are to be obtained from the next of kin or legal guardian, when available. Consider potential organ donations (WSH Policy #2.2.7).

When a death is unusual, unexpected or suspicious, an independent outside review will be initiated within one working day of the notification of the death. In all other deaths, to ensure reviewer objectivity, a physician peer reviewer will be assigned on a rotating basis, from the members of the medical staff, to review each death. The physician peer reviewer assigned will not have been involved in the clinical care of the case being reviewed. The identity of the peer reviewer will only be released to the Chief of Pathology and Medical Director, so that confidentiality may be maintained. All deaths, whether unusual, unexpected, suspicious or not, shall be presented and discussed within 30 days of the death at the M&M Subcommittee meeting, to ensure that a quality assurance, peer review is completed in a timely manner.

M&M Subcommittee members will assess the cases based on the internal or external peer reviewer's findings, draw conclusions and make recommendations for follow-up actions as indicated. The minutes of this discussion will document conclusions, recommendations and actions taken.

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The conclusions, recommendations and actions taken will be recorded in the M&M Subcommittee confidential minutes. An executive summary of results or actions taken, due to a mortality, or trend in mortality, will be forwarded to the Patient Care Committee

Committee (Executive Committee of the Medical Staff) and to the Medical Staff for review and approval. The M&M Subcommittee is responsible for forwarding items identified which require follow-up to the appropriate committee, attending physician, treatment team, Discipline Chief or Clinical Director.

All Original Mortality and Autopsy Review documentation will be maintained in the Medical Director's office files. The M&M Subcommittee's minutes and the Clinical Director's Incident Report Review information and documentation are confidential as part of peer review and are not to be distributed outside the hospital. In the cases of suicide, see WSH Policy 2.2.5, "Completed Suicide Measures" for additional information.

Per Department of Social and Health Services (DSHS) Administrative Policy No. 9.03 a departmental Administrative Review Death of Residential Patient's Committee has been established. WSH shall submit the following information to the Director of the Division of Mental Health and the Assistant Secretary of DSHS within 30 days of any patient death in an envelope marked "Confidential." (Exception: Autopsy report within 60 days);

- A. A copy of the Administrative Incident Report and Security Incident Report, if applicable.
- B. Death Summary.
- C. A copy of the evaluation completed By a physician other than the patient's attending physician, of the medical, health care and emergency services provided in the hospital.
- D. A copy of the autopsy report, if any.
- E. Portions of the patient's medical record relevant to the circumstances of the death.

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F. Available records from acute care hospitals or community health care providers related to the death.

G. A determination and notation of whether the death is unusual, unexpected or suspicious.

When the medical director, or superintendent, of Western State Hospital has reasonable cause to believe that inferior, negligent or abusive treatment, or criminal activity either caused was a factor in the death, she/he shall immediately report the death to the Pierce County Sheriff, the Mental Health Division of the DSHS, and the Chief of Medical Staff.

The Superintendent may request involvement of the Office of Special Investigation in the above circumstances, at his/her discretion.

In the case of a completed apparent suicide, employee(s) having first-hand knowledge of the incident shall immediately initiate an Administrative Incident Report and notify the Superintendent of Officer of the day.

RESPONSIBILITY: The Medical Director is responsible for implementing and monitoring this policy.

SOURCE: DSHS Administrative Policy 9.03  
WSH Policy - Administrative Incident Report, 1.1.7  
WSH Policy - Completed Suicide Measures, 2.2.5  
Nursing Service Standard Manual #227  
RCW 68.50.101  
RCW 68.50.020

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.    Date  
Medical Director

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## ***APPENDIX 5. COMPLETED SUICIDE MEASURES***

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number:	2.2.5	Date Issued:	12/04/80
Policy:	COMPLETED SUICIDE MEASURES	Date Revised:	03/10/95

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**PURPOSE:** Establish policy and designate responsibilities in the event of a patient's death by suicide.

**SCOPE:** All Western State Hospital staff members.

**POLICY:** Definition of suicide: Intentional self-inflicted injury resulting in death.

In the event of a completed suicide, employee(s) having first hand knowledge of the incident shall immediately initiate an Administrative Incident Report (DSHS 20-192), and notify their supervisor. The supervisor is responsible to notify the Security Office. The Superintendent must be notified as soon as possible. During regular business hours, the Superintendent's Office will notify the Pierce County Sheriff (call 911). After hours the RN 4 shift coordinator will notify the Sheriff.

An emotional debriefing for staff members and patients involved shall be provided. The staff members shall first meet and discuss issues and feelings relevant to and surrounding the completed suicide. Following, the staff members will have a community meeting with the patients on the ward, encouraging and therapeutically facilitating the group's discussion. It is recommended that the Pastoral Care Department be included.

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A Suicide Review Conference (Psychological autopsy) will be held within five (5) working days post suicide. Composition of the Suicide Review Conference team will be selected by the Clinical Director in whose unit the patient resided.

- A. Suggested members for the review team: Treatment team and involved ward staff members from all shifts and disciplines, a Pastoral Care representative, a Code 4 team representative, a WSH Safety Officer, a Clinical Nurse Specialist, the Chief Psychologist, the Assistant Director of Nursing or Director of Nursing, and the Director of Quality Assurance.
- B. The conference should be scheduled so as to accommodate staff members from all shifts. Staff members, who are off duty, should be notified so they may attend.
- C. Suicide Review Conferences are for administrative purposes only and there shall be no written record or notes of the content of the conference, only the fact that it was convened.

**RESPONSIBILITY:** The Medical Director is responsible for implementing and monitoring this policy.

**SOURCE:** HCFA Standards (QA)  
Accreditation Manual for Hospitals (AMH)

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.    Date  
Medical Director

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## ***APPENDIX 6. PATIENT RIGHTS***

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Western State Hospital  
Fort Steilacoom, Washington

### **PATIENT RIGHTS**

1. A patient has the right to adequate, individualized care and treatment that is free of discrimination by race, religion, sex, sexual preference, ethnicity, age, handicap, or a communicable disease.
2. A patient has the right to privacy within the constraints of an individual treatment plan, and to move about freely in the least restrictive atmosphere that treatment and safety permit.
3. Patients have the right to wear their own clothes, and to have their own personal possessions - unless these clothes or possessions are determined to be dangerous.
4. Patients have the right to individual storage space for private use and to keep a reasonable amount of money for their own purchases.
5. A patient has the right to socialize and participate in recreational activities with other patients.
6. A patient has the right to make and receive a reasonable number of private telephone calls unless his or her written treatment plan prohibits it.
7. A patient has the right to prompt and adequate medical treatment for physical disorders, to know the names of clinical staff responsible for his or her care, and to be informed about the diagnosis and treatment in words he or she can understand. Patients have a right to question any information or instructions they do not understand.

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8. A patient has the right to participate in the development of an individualized treatment plan. This treatment plan must be reviewed periodically. If any of the rights guaranteed here must be denied, then the specific reason for the denial of the right must be justified in the individual treatment plan and must be reviewed at least once a week by the clinical staff responsible for that patient's care.
  9. Patients have the right to know what hospital rules apply to their conduct.
  10. Patients have the right to have ready access to a reasonable amount of writing materials and stamps. Each patient has the right to send and receive uncensored mail unless his or her written treatment plan prohibits it. Patients cannot be prohibited from writing to their lawyers or private physicians.
  11. A patient has the right to see visitors in private during the regular published visiting hours unless his or her written treatment plan prohibits it. A patient's private lawyer or doctor can visit at any reasonable time. A clergy person of one's choice may visit after having received an identification card from the hospital's department of pastoral care.
  12. A patient has the right to secure consultation of a private doctor at his or her own expense. This consultation can visit at any reasonable time.
  13. A patient has the right to secure a lawyer to help with legal problems. This attorney has the right to talk to the attending doctor about the patient's condition. If a patient cannot afford a lawyer, the hospital will provide help in obtaining legal advice. Patients have the right to contact legal services.
  14. Patients have the right to attend religious services and other religious activities. They cannot be forced against their will.
  15. Patients have the right to telephone or write the Superintendent if they have a problem or complaint. The Superintendent is responsible for making sure that all of the patient rights are being protected.
  16. When in the judgment of a physician, a patient is restricted to bed rest or is prohibited access to the outdoors because of an acute medical condition, the physician's order shall be reviewed at least every three days.
  17. Unless there are legal restrictions, a patient has the same civil and legal rights of any other citizen and has the right to vote by absentee ballot unless he or she has
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been declared incompetent. A patient is not considered incompetent merely because of admission to a hospital .

18. Patients have the right to know what use will be made of films, photographs or tape recordings of them when these types of recordings are used in their treatment in the hospital. These types of recordings cannot be made without the permission of the patient or patients involved.
19. Patients have the right to request a writ of Habeas Corpus from the Superior Court if they feel that are being illegally deprived of their liberty.
20. A patient is expected to participate in the making of treatment and discharge plans, and has the right to know what his or her continuing health care requirement will be following discharge from the hospital, and to have help in arranging necessary follow-up care in the community.
21. A patient has the right to secure work outside the hospital if employment will help in treatment and if the individual treatment plan includes it.
22. Patients may be required to do housekeeping tasks such as making their bed and keeping their area neat and clean, but they cannot be forced to work for the hospital against their will. Any work a patient does for the hospital must be part of his/her or individual treatment plan and be performed voluntarily.
23. A patient has the right to be told about any transfer to another hospital program or ward and the reason for the change or transfer. If it is necessary for a patient to be transferred to another hospital, he/she has the right to know the reasons and who will be responsible for his/her care and treatment there.
24. A patient has the right to know the risks, side effects and benefits of all medications and treatment procedures prescribed. A patient has the right, to the extent permitted by law, to refuse specific medication or treatment and to know that alternative procedures are available. The patient has the right to be informed of the medical and legal consequences if prescribed medication is refused.
25. A patient can not be restrained unless a doctor has written orders for this. A patient can not be secluded unless a doctor or registered nurse has written orders for this. If an order for restraint or seclusion has been written, nursing staff will check the patient regularly to determine when these procedures are no longer needed.
26. A patient cannot be subject to experimental research without written consent given by the patient or his/her legal guardian.

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27. The patient's medical record is confidential, and cannot be released to anyone without written consent given by the patient or by his/her legal guardian, except as permitted

by state and federal law. Patients have the right to know who will have access to their records.

28. Patients have the right to know the cost of hospital care and treatment regardless of the source of payment, and any limitation placed on the length of their hospitalization.

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## ***APPENDIX 7. SECURING AND PROTECTING PATIENTS' RIGHTS***

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WESTERN STATE HOSPITAL  
Department of Social and Health Services  
Fort Steilacoom, Washington

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Policy Number:	4.1.2	Date Issued:	04/21/80
Policy:	SECURING AND PROTECTING PATIENTS' RIGHTS	Revised:	05/17/95

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**PURPOSE:** Establish the means by which all rights of patients are secured and protected.

**SCOPE:** All personnel authorized to provide services to Western State Hospital patients.

**POLICY:** In addition to general civil and legal rights enjoyed by all citizens, hospital patients, whether voluntary or committed, have specific patients rights secured by law, hospital and DSHS policies, and Accreditation Standards.

All persons to whom the care of the mentally ill is entrusted shall safeguard the rights and welfare of patients under their care.

Patient Rights shall be posted on all wards and in other prominent places in such a manner as to be visible and accessible to patients, visitors and staff members. These rights will be available to patients in their native language and in Braille. Any employee who observes a violation of a patient's rights or who has a violation of patient's rights brought to their attention shall respond immediately to the observation or complaint. Efforts will be made to resolve the allegation through intervention of the multidisciplinary treatment team. Team members may also wish to

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seek consultation with the Patient Rights Sub-Committee. Staff will assist patients in obtaining and completing the “Alleged Violation of Patient Rights” form (WSH 1-05) that is available on each ward and at the hospital reception desk on Central Campus. Forms may be ordered through publications. Completed forms are forwarded to the Clinical Director or the Superintendent.

The Pierce County Department of Assigned Counsel (DAC) provides a court-appointed “public defender” representation for patients regarding civil commitment issues, including less restrictive placements and other aspects of involuntary treatment. General civil legal advice and assistance to patients are provided through a WSH institutional legal services contractor. Finally, Washington Protection and Advocacy Services is available to address issues of patient abuse/rights, mistreatment, adequacy of care, etc.

**RESPONSIBILITY:** The Medical Director shall be responsible for implementation and monitoring of this policy.

**SOURCE:** JCAHO Consolidated Standards - Patient Rights  
WAC 275-55-241  
RCW 71.05  
WSH Policy 4.1.1 -- Legal Rights  
WSH Policy 4.1.3 -- Mail Rights  
WSH Policy 4.1.4 -- Telephone Rights  
WSH Policy 4.1.5 -- Disposition of Patient Photographs and Use of Audio/Visual Equipment  
WSH Policy 4.1.6 -- Monitoring by Closed Circuit Television or Similar Means  
WSH Policy 4.1.7 -- Patient’s Property (Rights)  
WSH Policy 4.1.8 -- Visitation (Rights)

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Pat Terry, Ph.D., ACSW                      Date  
Superintendent

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Jerry L. Dennis, M.D.    Date  
Medical Director

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