

PHYSICIAN'S BEHAVIOR IN WITHDRAWING AND WITHHOLDING  
LIFE SUSTAINING TREATMENT: ARE PATIENT'S ADVANCE DIRECTIVES  
BEING FOLLOWED?

By

Paul Brown

Presented to the Public Administration Faculty  
at the University of Michigan-Flint  
in partial fulfillment of the requirements for the  
Master of Public Administration Degree

October 26, 1994

First Reader

*Patricia House*

Second Reader

*Ellis Perlman*

## ABSTRACT

The Patient Self Determination Act of 1990 was intended to ensure that patients over the age of 18 were informed of their rights to accept or refuse medical care and to improve communication between the patient and physician regarding this right. A study of 192 medical records at a 423 bed hospital in eastern Michigan found that 97% of the physicians recording in the patient's medical record honored their patient's wishes as expressed in their advance directive. More than fifty percent of the physicians did not document in the medical record that they communicated with the patient about withdrawing or withholding life support technology. Nineteen percent did not write orders for withdrawing or withholding life support technology in the medical record as required by the patient's advance directive. This study concluded that physicians followed patient's wishes the majority of the time, but did not appropriately document in the medical record evidence that they had communicated with the family regarding advance directives or treatment options. Statistical analysis showed that there was no correlation between physician's natural origin, type of practice, years in practice, patient's gender and patient's age and whether or not the physician documented communication with the patient in the patient's medical record.

PHYSICIAN'S BEHAVIOR IN WITHDRAWING AND WITHHOLDING

LIFE SUSTAINING TREATMENT: ARE PATIENT'S ADVANCE DIRECTIVES

BEING FOLLOWED?

By

Paul Brown BS, RRT

September 15, 1994

## TABLE OF CONTENTS

LIST OF TABLES . . . . .	3
INTRODUCTION . . . . .	4
LITERATURE REVIEW . . . . .	9
HYPOTHESES . . . . .	16
METHODOLOGY . . . . .	18
ANALYSIS AND RESULTS . . . . .	24
DISCUSSION . . . . .	30
POLICY IMPLICATIONS . . . . .	35
APPENDIX A - LIST OF PATIENT CONDITIONS . . . . .	36
REFERENCES . . . . .	37
BIBLIOGRAPHY . . . . .	39

**LIST OF TABLES**

<b>TABLE 1</b>	<b>DESCRIPTIVE STATISTICS . . . . .</b>	<b>25</b>
<b>TABLE 2</b>	<b>CHI SQUARE ANALYSIS OF DOCUMENTATION BY PHYSICIAN . . . . .</b>	<b>26</b>
<b>TABLE 3</b>	<b>CHI SQUARE ANALYSIS OF WHETHER SUPPORT WAS WITHHELD/WITHDRAWN . . . . .</b>	<b>27</b>
<b>TABLE 4</b>	<b>CHI SQUARE ANALYSIS OF ORDER WRITTEN TO WITHHOLD/WITHDRAW SUPPORT . . . . .</b>	<b>28</b>
<b>TABLE 5</b>	<b>MATRIX OF CORRELATION COEFFICIENTS . . . . .</b>	<b>29</b>

## INTRODUCTION

In June of 1990 the United States Supreme Court decided the Nancy Cruzan case. This decision, for the first time, recognized that an individual has the right to make medical treatment decisions for herself. This includes the right to refuse life supporting treatment. The court accepted the principle that a competent person has a liberty interest, protected by the constitution, in refusing unwanted medical treatment under the Due Process Clause of the Fourteenth Amendment.<sup>1</sup> The court also recognized that artificially supplied nutrition and hydration was a medical treatment and could be withheld or withdrawn under the same conditions and considerations as other medical treatment. Lastly, the court upheld the States' right to require clear and convincing evidence of the patient's wishes before withdrawing life supporting treatment.

In October, 1990, the United States Congress continued the work of the Supreme Court. Congress attached the Patient Self Determination Act (PSDA) to the Omnibus Budget Reconciliation Act of 1990 (OBRA 90).<sup>1</sup>

The Patient Self Determination Act (PSDA) is a federally mandated set of rules. It is designed to ensure that all patients over the age of 18, admitted to a health care organization that receives Medicare and Medicaid funding<sup>2</sup>, are informed of their rights to accept or refuse any medical treatment.

The following are rules that organizations must follow to comply with the PSDA.<sup>3</sup>

- \* Upon admission, patients are to be given written information concerning individual rights under the state law, whether statutory or judicial, to make decisions concerning medical care, including accepting or refusing medical or surgical treatment.
- \* Patients are to be given a provider's written policies and procedures concerning the implementation of those rights.
- \* The organization must document in an individual's medical record whether or not he or she has executed an advance directive.
- \* The provider cannot place conditions on the provision of care or discriminate against an individual who has executed an advance directive.
- \* Providers must ensure compliance with the requirements of State law respecting advance directives.
- \* Providers must offer education for staff and community on issues concerning advance directives.

The State of Michigan's response to the requirements of the patient self determination act established the Michigan Durable Power of Attorney for Health Care law (MDPOA). This law gave Michigan residents over the age of 18 the right to sign a legal document identifying a patient advocate. The patient advocate is a person who can make medical treatment decisions for the patient should he or she become incapable of deciding. This document also allows the patient to place her or his wishes regarding health care in writing. These

wishes are expected to be followed by the patient advocate,,  
physicians,, caregivers and other health care providers.1

## The Rationale for Advance Directives.

Many people entering the health care system may experience a time in which they are incapable of making their own decisions about treatments they do or do not want. Technology has advanced over the past twenty years to such a degree that people can have their lives prolonged much longer than was possible earlier. Modern ethical and theological theory allows for the individual to forego medical treatment that is considered disproportionately burdensome to any possible benefits that may be derived from the treatment.

An advance directive is a means of communication that allows individuals to specify either orally or in writing what medical treatment they want or do not want in a particular circumstance. The advance directive is implemented when the person becomes incapable of making his or her own decisions. An advance directive can be oral, as in the case of a spouse telling the other spouse about her or his wishes. Directives can also be in writing in the form of a living will or Durable Power of Attorney for Health Care. In either case, the health care institution is obligated to abide by the individual's wishes.

The purpose of an advance directive is to ensure that the decisions made in the care of the patient are those that deliver the best possible outcome for that patient. This can only be determined by that patient.

The objectives of an advance directive are:

1. To center health care treatment decisions on the patient as an autonomous decision maker as protected by the Fourteenth Amendment.<sup>4</sup>
2. To improve communication regarding health care treatment options among the patient, family, physician and caregivers.

Several medical societies including the American Medical Association have adopted position papers supporting the rights of patients to make their own decisions. In Michigan, several court cases have set precedence for the withholding and withdrawing of life support systems.<sup>5</sup>

The intent of the Patient Self Determination act is to improve communication between the patient and physician and to ensure that the patient's wishes are being followed. There has been very little research on evidence that patient's wishes regarding life support are being followed. Consequently, this study explores a basic research question:

*Are physicians following patient's wishes, as specified in an advance directive, regarding the withholding or withdrawing of life support?. For the purposes of this study, life support includes cardiopulmonary resuscitation, mechanical ventilation, and artificially supplied nutrition and hydration.*

## LITERATURE REVIEW

### The Need For Communication

In a report published in the Journal of the American Board of Family Practice, Doukas and Brody contend that the Supreme Courts's ruling in the Nancy Cruzan case has changed the Physician/Patient relationship regarding medical decision making.<sup>6</sup> The "clear and convincing" standard set by the Supreme Court makes it important for primary care physicians to discuss advance directives with their patients. Several studies have shown this discussion is not taking place.

Goold, et al., reported in their 1992 survey that only 10% of patients questioned had discussions with their physicians about life-sustaining treatment.<sup>7</sup> The authors found that these 10% were older and had a very poor prognosis. The authors concluded that physicians were more likely to discuss advance directives when their patients were older or had a poor prognosis. However, statistical analysis of the data indicated that age, poor prognosis, and poor quality of life did not consistently prompt physicians to discuss life support decisions with their patients. The study indicated that other factors that may affect physician/patient communication needed exploration.

In a survey of 43 chronic hemodialysis patients, Holley, et. al., found that although 77% of their subjects discussed their wishes regarding life support with someone

close to them, only 17% had the same discussions with their physicians and 51% thought that such discussion may interfere with the physician's judgment.<sup>8</sup>

Another survey of 200 outpatients by Broadwell et al., showed that only 18% had completed an advance directive. Of those 18% who completed an advance directive, only 5% had received information about advance directives from their physician.<sup>9</sup>

S.K. Madson, in a 1993 article on the Patient Self Determination Act and its implications for long term care, determined that patients entering a nursing facility:

Most patients expect family members to make key decisions, or believe it is the physicians's responsibility. Even with advance care directives in place, such end-of-life desires are often not carried out.<sup>10</sup>

In a 1992 study of 300 adult patients visiting a family practice office, Edinger and Smucker reported that 68% of the patients who responded wanted the physician to initiate discussion with them about advance directives.<sup>11</sup> The authors concluded that to avoid problems later, it would be expedient for the physician to take an active role in discussing advance directives with their patients. This discussion would be especially helpful for the older patient.

Lurie and Phely found in their 1992 study of 150 nursing home residents that older individuals, 14.5%, were not likely to have spoken with their physician about their wishes concerning health care should they become incapable of making their own decisions.<sup>12</sup> They found, on average, residents with advance directives were 8.4 years younger than those without them.

It is apparent from this literature review that physicians are not likely to discuss advance directive issues with their patients. Likewise, patients are just as unlikely to discuss life support issues with their physicians. It can be concluded from these studies that if communication about life sustaining treatment is not taking place, then the chances of physicians complying with patient's wishes are greatly decreased. The use of advance directives is new and very few studies on their effects have been done. It is not possible to know if a broader review would confirm these conclusions until more studies are conducted.

### Physician Attitudes Towards Advance Directives

In 1992, Solomon et al, sent questionnaires to 687 physicians and 759 acute care nurses. Of the 61% who responded, 47% said they continued to provide unwanted treatments to patients though they agreed that patients ought to have the right to refuse treatments that were burdensome.<sup>13</sup> An accompanying comment by Vladeck blames hospital structure. No one is apparently in charge of treatment decisions. The most logical and necessary changes in policy and procedures for treatment decisions somehow fail to get implemented.

Hughes reported in 1992 that of the 643 physicians he surveyed, family physicians favor advance directives but use them rarely. Most family physicians support offering advance directives to terminally ill or chronically ill patients, but not to everyone.<sup>14</sup> Somewhat in the same vein, T.R. Fried found that of the 62% of the physicians who responded to his survey, 41% would not remove a mechanical ventilator from a patient who specifically requested it. The reasons most often cited for this behavior was that it would not be "ethically acceptable" and "it would not be accepted by the courts."<sup>15</sup> The conclusions of both studies were that many physicians, almost half, are unaware of current ethical and legal opinions on the withholding and withdrawing of life support systems. Fried found when they are aware of them, some physicians continue to practice contrary to patient's

advance wishes.

The case of a three month old infant with massive liver disease, whose prognosis was considered extremely poor, was reported by Meyers. During grand rounds, Meyer was impressed with the attending physician's description of the technical difficulties and the futility of further treatment. In spite of this, however, the attending physician insisted that everything be done.<sup>16</sup> Meyers concluded that:

This physician was exhibiting denial, and could not face the dissonance between the dominant sanctity-of-life ethic and logical conclusions of this infant's prognosis; that led him to accept all the technical facts about the infant's status but to avoid drawing any logical conclusions from those facts.<sup>16</sup>

Meyers felt that this denial was quite common among physicians and that it often interfered with patient's autonomous decision making. J. Andre argues that this attitude is acquired during a physician's medical training.<sup>17</sup> She argues that:

Medical training can bring with it a progressive moral blindness, as students learn to see patients as bodies and come to see the world of medical care as virtually the entire world.<sup>17</sup>

Andre recommends that medical schools teach more social science and better communications skills. She also feels that the demand on students' time does not allow them time for reflection and thinking.

Another factor which affects physician's behavior towards life sustaining treatment is the type of advance directive. To explore this issue, Mower and Baraff questioned 444 physicians at a teaching institution. They found that 84% of the physicians surveyed would discontinue therapy if it was specifically requested in an advance directive. This compared to 73% who would discontinue therapy that was not specifically stated when the patient had signed a generally stated advance directive.<sup>18</sup> If the treatment specific advance directive was accompanied with family support and prior patient-physician discussion, 100% of the physicians said they would remove requested therapy. It was also found that physicians would not act on all treatments equally. Nearly all would remove mechanical ventilation, 82% intravenous fluids, 80% antibiotics, 70% simple tests, and 13% said they would remove pain medications upon request. The authors concluded that physicians were willing to remove high tech and burdensome treatment, but were less willing to remove low tech or "ordinary" care.

Current literature has offered many theories and reasons why physicians are reluctant to follow patient's

wishes regarding life sustaining treatment. These theories include the physician's medical training and "learned" attitudes toward patient care. There also appears to be inadequate ethical and legal education which perpetuates an ignorance toward current ethical and legal opinions.

Of all the literature reviewed, no comprehensive studies were found that tried to link physician's practice specialty, length of medical service, and cultural background to their attitudes towards withholding and withdrawing life sustaining treatment.

## HYPOTHESES

The review of the literature has introduced studies focusing on proof that advance directives do not have a profound effect on the physician/patient relationship regarding withholding and withdrawing life support. A computer search of the Medline database, however, has not uncovered any studies that attempt to show a correlation between physician's behaviors towards advance directives and specific physician or patient traits.

It is generally accepted that a person's morals and social behaviors are molded by her or his environment. Each culture in different parts of the world has specific behaviors, laws, and social mores that greatly influence a person's social and behavioral development. The time period in which a person grew up also influences his or her behavioral development. Each generation has definable work ethics and attitudes that are different from other generations.<sup>19</sup>

Cultures also have different attitudes regarding care of the elderly. Americans, for example, put great emphasis on quality of life and facing death with dignity. Other cultures have more nurturing attitudes toward the elderly and put less emphasis on the quality of one's life. Some cultures feel it is their duty to sustain life for as long as possible even if it means the person must endure pain and suffering. American attitudes make it easier for physicians

and families to make decisions to withdraw life sustaining treatment from family members who have lived a " long and fruitful life " than for someone younger, even if their prognosis is extremely poor.<sup>19</sup> These factors may be important in physician's behaviors regarding advance directives. It is reasonable to speculate that there may be a relationship between physicians' cultural background, their professional experience, and their behaviors toward communication with patients and the patient's families regarding end of life and life support decisions.<sup>20</sup>

To test this relationship, four hypotheses were explored.

1. Physicians with a Western cultural background are more likely to follow patient's wishes than are physicians from other cultural backgrounds.
2. Physicians whose length of practice is greater than 20 years are less likely to follow patient's wishes than are physicians who have been practicing for less than 20 years.
3. Physicians are more likely to follow the wishes of those patients who are older than age 70 and whose medical condition has been documented as terminal or critical.
4. Family practice and general medicine physicians are more likely than specialists to follow patient's wishes.

## METHODOLOGY

### Subjects

A retrospective study of 192 medical records was performed. The records were randomly selected from a list of 323 patients who had been admitted between September 1991 and December 1992 to a medium sized (423 beds) hospital in eastern Michigan. Each patient had indicated a DNR (Do Not Resuscitate) status upon admission. Patient records indicating a DNR status were chosen for study for the following reasons:

1. They would be the patients that would most likely be candidates for life support including artificially supplied nutrition and hydration, and mechanical ventilation.
2. They would be patients of the type who would be most likely to have a poor prognosis and would most likely require decisions regarding withholding or withdrawing life support.
3. They would be the patients who would have the most to gain from the use of advance directives.

### Procedure

Each medical record was reviewed and information extracted from the following categories:

#### *Physician's Name*

The attending Physician was chosen for this study. He

or she would be the physician most likely involved in making medical care decisions for the patient. If the attending physician was not involved in the decision making process, the admitting or consulting physician's name was used. The physician's name was only used to extract information regarding their type of practice, years in practice and their natural origins. Their name was kept confidential and was replaced by a 2 digit code. Only the code was used for analytical purposes.

#### *Physician's Number Of Years In Practice*

Each physician's number of years in practice was obtained from Medical Staff records kept in the medical staff office of the hospital. The physician was considered to be in active practice at the end of the year he or she finished residency training. The end year used for the count was 1992, the year that the patients studied were admitted to the hospital.

#### *Physician's Natural origins*

Each physician's natural origin was determined from the Medical Staff records. Origins were considered the country or geographical location in which the physician lived during his or her pre-adult years. It was assumed that any culture specific behaviors and knowledge would be learned during this period.

### *Physician's Type of Medical Practice*

The physician's type of medical practice was determined from the Medical Staff records. The type of practice was defined as the specialty or subspecialty that the physician practiced routinely during the majority of his or her years in practice. The physician must have been practicing their specialty or subspecialty while attending the patient in the study.

### *Patient's Age*

The patient's age at the time of admission was obtained from the admission information record located at the front of the patient's medical record.

### *Patient's Gender*

The patient's gender was determined from the admission information record.

### *Patient's Discharge Disposition*

The patients disposition at discharge was obtained from the discharge summary. Disposition was designated as discharged or expired.

### *Patient's Medical Condition*

The patient's medical condition was defined as the primary diagnoses or condition recorded by the physician in

the patient's discharge summary.

*Type of Advance Directive*

The type of advance directive utilized by each patient was determined from four sources: the admission record, admission summary, progress notes, and the advance directive section in the medical record. The type of advance directives included verbal do not resuscitate (DNR), written do not resuscitate, Living Wills, Durable Power of Attorney for health care, and verbal directives were recorded by the physician or nurse in the medical record.

*Documentation of Communication with the Patient by the Physician.*

The discharge summary and physician's progress notes were reviewed for evidence that the physician communicated with the patient or patient's family regarding withholding or withdrawing life support technology. The chart was also reviewed for evidence of communication between the physician and patient regarding the patient's advance directive for health care. Acceptable documentation included a discussion of prognosis, a discussion of treatment options, and the discussion or note about the patient's or family's request regarding medical care including the decision to withhold or withdraw life support technology.

*Documentation that an order was written to withhold or withdraw life support or medical care as directed by the advance directive.*

The physician's order sheets were reviewed for evidence that an order was written to carry out the wishes of the patient as stated in the advance directive. Acceptable documentation included the date, time, the specific physician's order, and reference to documentation that communication with the patient and/or family had taken place. ie. "DNR per patient".

*Evidence of Prognosis*

The discharge summary and progress notes were reviewed for evidence that the physician had documented the patient's prognosis. Acceptable documentation included the patient's diagnosis, course of treatment, and expected outcomes.

*Evidence that life support was withheld or withdrawn*

The discharge summary, progress notes, and order sheets were reviewed for evidence of withholding or withdrawing medical treatment as directed by the patient or advance directive. Evidence included lack of orders for standard treatment of life threatening conditions. These conditions included respiratory or cardiac failure and respiratory or cardiac arrest.

### *Comments*

Evidence of conditions or observations that were not part of the expected review was recorded in this category.

### *Coding procedure*

The results of each medical record review were abstracted onto a worksheet. The categories for physician name, natural origins, type of practice, patient's condition, type of advance directive and comments were each given a numerical code for purposes of statistical analysis. The patient's gender was given a numerical code of 1 for male and 0 for female. The patient's discharge disposition was given a numerical code of 1 for discharged and 0 for expired. The remaining categories required a yes (1) or no (0) response. The values of 0 and 1 were used to dichotomize categorical variables. In that frequency distributions of all variables were close to normal, a 0,1 coding enabled the use of both contingency coefficients and Pearson's  $r$ . The numerical codes for results in each category for each medical record was entered into Kwik-Stat<sup>21</sup>, a statistical analysis computer program.

## ANALYSIS AND RESULTS

Table 1 shows the descriptive statistics of the independent and dependent variables of the study.

The mean of 0.45 indicates that documentation of a physician's discussion with his or her patient about withholding or withdrawing life support technology occurred less than fifty percent of the time. However, life support was withheld or withdrawn ninety-seven percent of the time (mean = 0.97) and an order was written to withdraw life support eighty-one percent of the time (mean = 0.81). Thirty-five percent of the physicians had national origins other than the United States. Sixty-Two percent of the physicians were in family practice. The average number of years physicians were in practice was 20.2. The average age of the patients studied was 78.2 years. Thirty-three percent of the patients studied had a diagnosis of cancer, chronic obstructive pulmonary disease, coronary artery disease or congestive heart failure.

TABLE 1 DESCRIPTIVE STATISTICS

VARIABLE NAME	MEAN	SD	SE	MIN	MAX	SUM
DEPENDENTS:						
Documentation <sup>a</sup>	0.45	0.5	0.04	0	1	86
Life Support <sup>a</sup> Withheld	0.97	0.2	0.01	0	1	187
Order Written <sup>a</sup>	0.81	0.4	0.03	0	1	156
INDEPENDENTS:						
Natural origin <sup>b</sup>	0.35	0.5	0.04	0	1	68
Years in Practice	20.2	10.5	0.76	2	41	3,881
Patient Age	78.2	12.5	0.90	16	99	15,014
Type of Practice <sup>c</sup>	0.62	0.5	0.04	0	1	118
Patient Condition <sup>d</sup>	0.33	0.5	0.03	0	1	63
n = 192						

<sup>a</sup> 1 = yes 0 = no. Sum = # of yes responses

<sup>b</sup> 0 = U.S.A. 1 = Elsewhere Sum = # of non U.S.A. Origins

<sup>c</sup> 1 = Family Practice 0 = Other Types Sum = # of Family Practice types.

<sup>d</sup> 1 = Cancer, Chronic Obstructive Pulmonary disease, Coronary Artery disease and Congestive Heart Failure.  
0 = Other diseases (See Appendix A for full detail)

**TABLE 2 CHI SQUARE ANALYSIS OF DOCUMENTATION BY PHYSICIAN**

INDEPENDENT VARIABLE WITH TOTAL AND COMPARATIVE RESPONSES	CHI-SQR	CRITICAL VALUE <sup>e</sup>	p-Value
Natural origin USA=124 Yes=52 No=72	1.16	3.841	0.283
DR.'S YRS. IN PRACTICE >20=88 Yes=33 No=55	3.49	3.841	0.062
PATIENT'S AGE >70=148 Yes=64 No=84	0.63	3.841	0.429
TYPE OF DR. PRACTICE Fam. Pract.=118 Yes=52 No=66	0.06	3.841	0.799
PATIENT'S CONDITION CA/COPD/CAD=63 <sup>f</sup> Yes=28 No=35	0.00	3.841	0.946
n = 192			

The results in table 2 uphold the null hypothesis and shows there is no relationship between the independent variables and whether or not the physician documents communication with the family regarding the withholding or withdrawing of life support technology. The p-Values for each independent variable were greater than the 0.05 level of significance, substantiating the null hypothesis.

The CHI-SQUARE value of 3.49, and p-Value of 0.062 for physician's cultural origin indicated a greater degree of relationship with whether or not the physician documented in the chart than the other independent variables.

---

<sup>e</sup> 0.05 Level of Significance with 1 degree of freedom

<sup>f</sup> CA = Terminal Cancer, COPD = Chronic Obstructive Pulmonary Disease, CAD = Coronary Artery Disease.

**TABLE 3 CHI SQUARE ANALYSIS OF WHETHER SUPPORT WAS  
WITHHELD/WITHDRAWN**

INDEPENDENT VARIABLE WITH TOTAL AND COMPARATIVE RESPONSES	CHI-SQR	CRIT. VALUE <sup>9</sup>	p-VALUE
Natural origin USA=124 Yes=121 No=3	0.05	3.841	0.828
DR.'S YRS. IN PRACTICE >20=88 Yes=85 No=3	0.42	3.841	0.520
PATIENT'S AGE >70=148 Yes=145 No=3	0.85	3.841	0.358
TYPE OF DR.'S PRACTICE Family Pract.=118 Yes=115 No=3	0.00	3.841	0.946
PATIENT'S CONDITION CA/COPD/CAD=63 Yes=62 No=1	0.38	3.841	0.537
n = 192			

The results in table 3 uphold the null hypothesis and shows there is no relationship between the independent variables and whether or not life support technology was withheld/withdrawn from the patient. The p-Values for each independent variable were greater than the 0.05 level of significance, substantiating the null hypothesis.

---

<sup>9</sup> 0.05 Level of Significance with 1 degree of freedom

**TABLE 4 CHI SQUARE ANALYSIS OF ORDER WRITTEN TO  
WITHHOLD/WITHDRAW SUPPORT**

INDEPENDENT VARIABLE WITH TOTAL AND COMPARATIVE RESPONSES	CHI-SQR	CRIT. VALUE <sup>a</sup>	p- VALUE
Natural origin USA=68 Yes=53 No=15	0.76	3.841	0.385
DR.'S YRS. IN PRACTICE <20=104 Yes=84 No=20	0.03	3.841	0.853
PATIENT'S AGE <70=44 Yes=34 No=10	0.59	3.841	0.442
DR.'S PRACTICE TYPE Family Pract.=118 Yes=93 No=25	1.19	3.841	0.275
PATIENT'S CONDITION CA/COPD/CAD=63 Yes=50 No=13	0.22	3.841	0.640
n = 192			

The results in table 4 uphold the null hypothesis and shows there is no relationship between the independent variables and whether or not the physician writes an order to withhold or withdraw life support technology. The p-Values for each independent variable were greater than the 0.05 level of significance. This also substantiated the null hypothesis.

---

<sup>a</sup> 0.05 Level of Significance with 1 degree of freedom

TABLE 5 MATRIX OF CORRELATION COEFFICIENTS

	CULT. ORIG.	YRS. PRACT	PTS. AGE	FAMILY PRACT.	INTERN MED.	PTS. COND.	DRS. DOCUM.	ORDER WRIT.	SUPP. HELD
CULT. ORIG.		0.40	0.24	-0.62	0.45	0.13	-0.08	0.06	0.02
YRS. PRACT			0.15	-0.34	0.38	0.15	-0.14	0.013	-0.05
PTS. AGE				-0.13	0.07	0.33	-0.06	0.06	0.07
FAM. PRACT					-0.75	-0.20	0.02	0.08	0.01
INT. MED.						0.09	-0.06	-0.10	-0.02
PTS. COND.							0.01	0.03	-0.05
DRS. DOCUM								0.27	-0.05
ORDER WRIT.									-0.08
SUPP. HELD									

n=192

All but two correlation coefficient values, in table 5, showed a weak relationship between the variables. Moderate inverse relationships were indicated between the variables of family practice and cultural origins (-0.62) and internal medicine and family practice (-0.75). These results indicated there was a stronger relationship between family practice physicians whose national origins were other than from the United States than family practice residents whose national origins were from the United States.

## DISCUSSION

The results of the statistical analysis rejects all four hypothesis resulting in the following conclusions:

1. Physicians with a Western cultural background are not more likely to follow patient's wishes than are physicians from other cultural backgrounds.
2. Physicians whose length of practice is greater than 20 years are not less likely to follow patient's wishes than are physicians who have been practicing for less than 20 years.
3. Physicians are not more likely to follow the wishes of those patients who are older than age 70 and whose medical condition has been documented as terminal or critical, than of other patients.
4. Family practice and general medicine physicians are not more likely than specialists to follow patient's wishes.

As table 1 illustrated, 97% of the physicians followed the patient's wishes. This rate is much better than the 50% reported by Solomon (1993). The low rate of non compliance invalidates any conclusions that could be made about whether or not the physician's cultural background, years in practice, type of practice, or the patient's age and condition made any affect on the decision. It may be concluded that physicians do follow the patient's wishes the

majority of the time.

Several factors may have contributed to the finding that most physicians follow patient's wishes. These factors include the following:

1. As part of the requirements for the Patient Self Determination Act, the hospital at which this study took place conducted a number of educational sessions with the medical staff. These educational sessions included the requirements of the PSDA and ethical, moral and legal principles of withdrawing and withholding life support systems.
2. The hospital has an active Bioethics committee that includes consultation services. These consultations were designed to help physicians, patients and their families to discuss the issues of removing or withholding life support. These services were educational and consultive in nature leading to a better understanding by the physician of the ethical principles involved.
3. Most medical specialties and societies such as the American Thoracic Society and others have published position statements supporting the patient self determination act (PSDA) and the right of individuals to make their own decisions regarding health care.

The study did find an unexpected variable worth analysis and discussion. Table 1 shows that fifty five percent of the physicians did not document in the patient's medical record that they had communicated with the patient regarding their advance directive and treatment options. Nineteen percent of the Physicians did not write orders in the patient's medical record to withhold or withdraw life support when directed to do so by the patient's advance directive. It can not be concluded that the physicians in this study did not communicate with their patients regarding life support based solely on the lack of documentation. However, since documentation in the medical record is considered as a legal document concerning what was done to the patient, omission of documentation could have serious legal and ethical ramifications regarding the patient's care.

Table 2 shows there is no statistical correlation between the physician's natural origins, years in practice, type of practice, or patient's age and condition, and the physicians practice in documenting evidence of communication with the patient. The closest statistical correlation would be the physician's number of years in practice. The analysis of table 5 shows an inverse relationship, but the correlation is very weak (a correlation coefficient of -0.135).

Table 4 shows there is no statistical correlation of the physician's natural origins, years in practice, type of practice, or the patient's age and conditions with whether or not orders to withhold or withdraw life support technology were written.

The treatment decision guideline established by the Medical Staff states:

The decision to initiate, continue, withhold or withdraw a medical treatment must be in writing and contained in the medical record. The attending physician shall, at minimum, describe the reason for the decision in terms of its relative burdens and benefits. The physician must document the communication that he/she has had with the patient and/or patient's family, guardian or advocate; including the names and relationship.

The results of this study clearly shows that the medical staff policy is not followed by fifty five percent of the physicians. This could have a definite impact on this and other health care institutions who have similar guidelines. The Joint Commission on the Accreditation of Health Care Organizations (JCAHCO) and the Medicare conditions of participation require that medical staff policies and procedures be followed. Non compliance could result in disciplinary action up to and including the withdrawal of the institution's Medicare and Medicaid status by the Health Care Finance Administration (HCFA). This action could put the institution in financial jeopardy.

The fact that physicians follow patient's wishes but fail to document the actions in the medical record seem

contradictory. Possible factors for this behavior may include the following:

1. Litigation in the courts is a dynamic process. Current law does not prevent individuals from filing a law suit against a physician for any reason they may perceive as malpractice. Although many of these law suits regarding withholding and withdrawing life support are considered frivolous and thrown out of court, most physicians may not wish to go through the process regardless of the validity of the suit. This may make most physicians extremely cautious in what they record in the medical record which is considered a legal record.
2. Physicians may not be fully aware of the hospital's requirement for documentation.
3. Some physicians may not discuss advance directives with their patients fearing they may become upset resulting in a worsening of their condition.

Although these factors are speculative, they are questions that justify future research on the subject.

In designing educational programs, health care organizations may want to consider targeting all physicians who have medical staff privileges at the institution. Program content should include requirements of the Patient self Determination Act, Treatment Decision Guidelines and the legal issues considering documentation in the patient's medical record.

## POLICY IMPLICATIONS

The Patient Self Determination Act is very specific in expectations for health care institutions. The institution's Medicare status is affected by its compliance with the elements of the act. It is imperative that the institution be able to predict and correct possible problems in compliance. Regulatory agencies including the Michigan Department of Public Health and the Joint Commission on the Accreditation of Health Care Organizations will be reviewing medical records for evidence that advance directives are being utilized appropriately. They will be looking especially for evidence that physicians are not following patient's wishes regarding specific treatment decisions or are not documenting communication with the patient and his or her family. Health care organizations that do not monitor and show corrective actions for non-compliance may be subjected to lengthy and costly corrective action by regulatory agencies.

The results of this study will help bioethics committees and administrators target those physicians and patients who require consultation or education on advance directives. The trade off for these educational interventions is a reduction in the liability risk to the organization.

**APPENDIX A - LIST OF PATIENT CONDITIONS**

<u>PATIENTS CONDITION</u>	<u># IN STUDY</u>
Terminal Cancer (CA)	33
Chronic Obstructive Pulmonary Disease (COPD)	30
Cerebral Vascular Accident (CVA)	24
Coma	1
Cirrosis of the Liver	1
Pneumonia	9
Post Trauma	1
Coronary Artery Disease/Congestive Heart Failure (CAD/CHF)	51
Dementia/Organic Brain Syndrome/Alzeimers	11
Miocardio Infarction (MI)	3
Renal Failure	9
Gastro Intestinal Bleeding (GI Bleed)	3
Parkinsons Disease	2
Acquired Immune Deficiency Syndrome	2
Respiratory Failure	1
Diabetes	7
Bowel Obstruction	1
Amyotrophic Lateral Sclerosis (ALS)	1
Vascular Occlusive Disease	1
Brain Injury	1
n = 192	

## REFERENCES

1. OBRA 1990 Obligations On Medicare Certified Institutional Providers., Bettye S. Elkins., Dykema Gossett (unpublished)
2. These organizations include hospitals, nursing facilities, home health agencies, hospice programs, and certain health maintenance organizations.  
Paridy, Nancy E. JD., " *New Act Makes Directives Part of Hospital Policy* "., Health Care Strategic Management, May 1991. pp. 13-15.
3. Paridy, Nancy E. JD., " *New Act Makes Directives Part of Hospital Policy* "., Health Care Strategic Management, May 1991. pp. 13-15.
4. Based on the Supreme Court ruling on the Nancy Cruzan Case in June of 1990.
5. Goldman, Edward B., JD., " *Legal Issues In Termination of Life Support* "., Unpublished.
6. Doukas DJ. Brody H., *After the Cruzan case: the primary care physician and the use of advance directives.*, Journal of the American Board of Family Practice. [JC:127] 5(2):201-5, 1992 Mar-Apr.
7. Goold SD. Arnold RM. Siminoff LA., *Discussions about limiting treatment in a geriatric clinic.*, Journal of the American Geriatrics Society. [JC:h6v] 41(3):277-81, 1993 Mar.
8. Holley JL. Nespor S. Rault R., *Chronic in-center hemodialysis patients' attitudes, knowledge, and behavior towards advance directives.*, Journal of the American Society of Nephrology. [JC:a6h] 3(7):1405-8, 1993 Jan.
9. Broadwell AW. Boisaubin EV. Dunn JK. Engelhardt HT Jr. *Advance directives on hospital admission: a survey of patient attitudes.*, Southern Medical Journal. [JC:uvh] 86(2):165-8, 1993 Feb.
10. Madson SK., *Patient self-determination act. Implications for long-term care.*, Journal of Gerontological Nursing. [JC:iax] 19(2):15-8, 1993 Feb.
11. Edinger W. Smucker DR., *Outpatients' attitudes regarding advance directives.*, Journal of Family Practice. [JC:i41] 5(6):650-3, 1992 Dec.

12. Lurie N. Pheley AM. Miles SH. Bannick-Mohrland S. *Attitudes toward discussing life-sustaining treatments in extended care facility patients.*, Journal of the American Geriatrics Society. [JC:h6v] 40(12):1205-8, 1992 Dec.
13. M.Z. Solomon et al., *Decisions Near the End of Life: Professional Views on Life-Sustaining Treatments*, American Journal of Public Health, 83:14, January 1993
14. Hughes DL. Singer PA., *Family physicians' attitudes toward advance directives.*, Canadian Medical Association Journal. [JC:ckw] 146(11):1937-44, 1992 Jun 1.
15. T.R. Fried et al., *Limits of Patient Autonomy: Physician Attitudes and Practices Regarding Life-Sustaining Treatments and Euthanasia*, Archives of Internal Medicine 153:722, March 22, 1993
16. C. Meyers, *The impact of Physician Denial Upon Patient Autonomy and Well-Being*, Journal of Medical Ethics 18:135, 1992
17. J. Andre, *Learning to See: Moral Growth During Medical Training*, Journal of Medical Ethics 18:148, 1992
18. Mower WR. Baraff LJ., *Advance directives. Effect of type of directive on physicians' therapeutic decisions.*, Archives of Internal Medicine. [JC:7fs] 153(3):375-81, 1993 Feb 8.
19. Raymond Edge, School of Allied Health, Ferris State University; *A lecture on Value Development and Ethical Decision Making*. Sept. 1990. Unpublished.
20. The cutoff of 20 years was arbitrarily assigned for testing purposes only.
21. A shareware program. @ TexaSoft, P.O. Box 1169, Cedar Hill, Tx. 75104

## SELECTED BIBLIOGRAPHY

Adams JG. Derse AR. Gotthold WE. Mitchell JM. Moskop JC. Sanders AB., *Ethical aspects of resuscitation.*, *Annals of Emergency Medicine.* [JC:4z7] 21(10):1273-6, 1992 Oct.

Anonymous., *Ethical issues of resuscitation.* American College of Emergency Physicians. *Annals of Emergency Medicine.* [JC:4z7] 21(10):1277, 1992 Oct.

Anonymous., *Guidelines for cardiopulmonary resuscitation and emergency cardiac care.*, Emergency Cardiac Care Committee and Subcommittees, American Heart Association. Part VIII. Ethical considerations in resuscitation [see comments]., *Jama.* [JC:kfr] 268(16):2282-8, 1992 Oct 28.

Barnett TJ., *Limiting specific interventions in advanced directives* [letter; comment]., *Jama.* [JC:kfr] 267(1):51-2, 1992 Jan 1.

Batchelor AJ. Winsemius D. O'Connor PJ. Wetle T., *Predictors of advance directive restrictiveness and compliance with institutional policy in a long-term-care facility.*, *Journal of the American Geriatrics Society.* [JC:h6v] 40(7):679-84, 1992 Jul.

Caralis PV. Hammond JS., *Attitudes of medical students, housestaff, and faculty physicians toward euthanasia and termination of life-sustaining treatment.*, *Critical Care Medicine.* [JC:dtf] 20(5):683-90, 1992 May.

Courvoisier B., *Autonomy of the patient and the physician in resuscitation situations and in terminal care. The value of advance directives by the patient.* [French], *Schweizerische Rundschau Fur Medizin Praxis.* [JC:srm] 82(2):50-1, 1993 Jan 12.

Damato AN. Reddy TK. Rusche P. Ramakrishna S. Christoffersen G. Getsos J. Feinsod R. Reisner M. Costa D. McCreath J., *Advance directives for the elderly: a survey.*, *New Jersey Medicine.* [JC:n9r] 90(3):215-20, 1993 Mar.

Dimond EP., *The oncology nurse's role in patient advance directives.*, *Oncology Nursing Forum.* [JC:pad] 19(6):891-6, 1992 Jul.

Doukas DJ., *Competency and the routine discussion of advance directives* [editorial; comment]., *American Family Physician.*

[JC:3bt] 45(2):473-4, 1992 Feb.

Edinger W. Smucker DR., *Outpatients' attitudes regarding advance directives.*, Journal of Family Practice. [JC:i41] 5(6):650-3, 1992 Dec.

Elder NC. Schneider FD. Zweig SC. Peters PG Jr. Ely JW., *Community attitudes and knowledge about advance care directives.*, Journal of the American Board of Family Practice. [JC:127] 5(6):565-72, 1992 Nov-Dec.

Elpern E. Yellen S. Burton LA., *Patient self-determination: sharing the power.*, Hospitals. [JC:gdl] 66(6):96, 1992 Mar 20.

Fins JJ., *The Patient Self-Determination Act and patient-physician collaboration in New York State.*, New York State Journal of Medicine. [JC:oba] 92(11):489-93, 1992 Nov.

Grant KD., *The Patient Self-Determination Act: implications for physicians.*, Hospital Practice (office Edition). [JC:hpo] 27(1):38, 41, 44-8, 1992 Jan 15.

Hare J. Pratt C. Nelson C., *Agreement between patients and their self-selected surrogates on difficult medical decisions.* Archives of Internal Medicine. [JC:7fs] 152(5):1049-54, 1992 May.

Hogan L., *Family perspective on the necessity for advance medical directives.*, Nurse Practitioner Forum. [JC:bmc] 3(1):23-4, 1992 Mar.

Kellogg FR. Crain M. Corwin J. Brickner PW., *Life-sustaining interventions in frail elderly persons. Talking about choices.*, Archives of Internal Medicine. [JC:7fs] 152(11):2317-20, 1992 Nov.

Keyser PK., *After Cruzan: the "values base" to advance directives.*, Orthopaedic Nursing. [JC:orn] 11(5):37-40, 1992 Sep-Oct.

La Puma J. Stocking CB. Darling CM. Siegler M., *Community hospital ethics consultation: evaluation and comparison with a university hospital service [see comments].*, American Journal of Medicine. [JC:3ju] 92(4):346-51, 1992 Apr.

Malloy TR. Wigton RS. Meeske J. Tape TG., *The influence*

- of treatment descriptions on advance medical directive decisions.*,  
Journal of the American Geriatrics Society. [JC:h6v] 40(12):1255-60, 1992 Dec.
- McCrary SV. Harward MP., *Consensus on care for critically ill patients* [letter]., Journal of General Internal Medicine. [JC:jgi] 8(3):169, 1993 Mar.
- Mcintyre KM., *Shepherding the patient's right to self-determination. The physician's dawning role* [editorial; comment]., Archives of Internal Medicine. [JC:7fs] 152(2):259-61, 1992 Feb.
- Mittelberger JA. Lo B. Martin D. Uhlmann RF., *Impact of a procedure-specific do not resuscitate order form on documentation of do not resuscitate orders.*, Archives of Internal Medicine. [JC:7fs] 153(2):228-32, 1993 Jan 25.
- Neubauer R., *When to discuss advance directives* [letter]. Annals of Internal Medicine. [JC:5a6] 118(6):475-6, 1993 Mar 15.
- Orentlicher D., *The illusion of patient choice in end-of-life decisions.*, Jama. [JC:kfr] 267(15):2101-4, 1992 Apr 15.
- Ouslander JG. Tymchuk AJ. Krynski MD., *Decisions about enteral tube feeding among the elderly.*, Journal of the American Geriatrics Society. [JC:h6v] 41(1):70-7, 1993 Jan.
- Pankratz HR., *When to use advance treatment directives* [letter]., Canadian Medical Association Journal. [JC:ckw] 147(10):1421, 1992 Nov 15.
- Peterson LM., *Advance directives, proxies, and the practice of surgery.*, American Journal of Surgery. [JC:3z4] 163(3):277-81; discussion 82, 1992 Mar.
- Rushton CH., *What can a nurse do when the patient has an advanced directive and the physician disregards it?.*, Critical Care Nurse. [JC:dt8] 13(1):61-2, 1993 Feb.
- Sachs GA., *Caring for older cancer patients: practical decision-making guidelines with a focus on advance directives.*  
Oncology. [JC:avp] 6(2 Suppl):131-5, 1992 Feb.
- Sachs GA. Stocking CB. Miles SH., *Empowerment of the older patient? A randomized, controlled trial to increase*

*discussion and use of advance directives.*, Journal of the American Geriatrics Society. [JC:h6v] 40(3):269-73, 1992 Mar.

Schneider CE., *Cruzan and the constitutionalization of American life.*, Journal of Medicine & Philosophy. [JC:izd] 17(6):589-604, 1992 Dec.

Schneiderman LJ. Kronick R. Kaplan RM. Anderson JP. Langer RD., *Effects of offering advance directives on medical treatments and costs.*, Annals of Internal Medicine. [JC:5a6] 117(7):599-606, 1992 Oct 1.

Schneiderman LJ. Pearlman RA. Kaplan RM. Anderson JP. Rosenberg EM., *Relationship of general advance directive instructions to specific life-sustaining treatment preferences in patients with serious illness.*, Archives of Internal Medicine. [JC:7fs] 152(10):2114-22, 1992 Oct.

Sehgal A. Galbraith A. Chesney M. Schoenfeld P. Charles G. Lo B., *How strictly do dialysis patients want their advance directives followed?* [see comments]., Jama. [JC:kfr] 267(1):59-63, 1992 Jan 1.

Siegler M., *The external control of private medical decisions: a major change in the doctor-patient relationship.* Journal of the American Geriatrics Society. [JC:h6v] 40(4):410-2, 1992 Apr.

Silverman HJ. Vinicky JK. Gasner MR., *Advance directives: implications for critical care.*, Critical Care Medicine. [JC:dtf] 20(7):1027-31, 1992 Jul.

Singer PA., *Nephrologists' experience with and attitudes towards decisions to forego dialysis.* The End-Stage Renal Disease Network of New England., Journal of the American Society of Nephrology. [JC:a6h] 2(7):1235-40, 1992 Jan.

Stanley JM., *The Appleton International Conference: developing guidelines for decisions to forgo life-prolonging medical treatment.*, Journal of Medical Ethics. [JC:jld] 18 Suppl:1-23, 1992 Sep.

Towers J., *Advance care directives: counseling the patient and family in the primary care setting.*, Nurse Practitioner Forum. [JC:bmc] 3(1):25-7, 1992 Mar.

Ventres WB., *Communicating about resuscitation: problems and prospects* [see comments]., Journal of the American Board of Family Practice. [JC:127] 6(2):137-41, 1993 Mar-Apr.