

**The Texas Advance Directives Act of 1999:
Implications for Public Health**

By

Laura Tison

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Cheryll Lesneski, DrPH

Diane Davis, PA-C, MPH

Date

Abstract

The rising cost of healthcare has long been a focus of political, healthcare, and public health leadership in the United States. The current global economic crisis and recent passage of the Healthcare Reform Act have served to draw further attention and controversy to this issue. Futile care, defined as medical interventions that have are deemed useless or ineffective by established standards of practice and cannot improve the prognosis, comfort, or general state of health of the patient, provided in United States constitutes an overwhelming economic burden to an already cash strapped healthcare delivery system. The Texas Advance Directives Act of 1999, passed under then governor George W. Bush, has attempted to limit unnecessary medical interventions that do not meet the goals of the patient through the provision of a due process for discontinuing care deemed to be futile while providing legal immunity to healthcare providers. While not immediately obvious, this legislation does have implications for public health as the preservation of funding for unnecessary expenditures can be diverted towards public health prevention activities that can do more good for a greater number. Brett and McCullough (2012) assert that the failure of our society to provide beneficial care to all through prevention and universal access to care makes the provision of unnecessary, futile medical interventions unacceptable. Though strong legal and ethical controversies surround the topic, this discussion focuses primarily on the economic aspects of futility of care and seeks to investigate this aspect of the legislation through a review of the literature and recommendations for future improvements. This review reveals many publications on both the direct and indirect economic costs of futile care, and how TADA has been employed effectively in cases of medical futility in the state of Texas. However, the literature review indicates a lack of research examining the relationship

between utilization of TADA and cost containment for those healthcare systems. Furthermore, no literature on the implications of such savings for the field of public health was revealed through the literature review. Implications of these results and recommendations for further actions are also discussed.

Introduction

The rising cost of healthcare in the United States has long been a focus of quality improvement efforts and cost containment strategies. The Dartmouth Atlas of Health Care research team (2012) acknowledges the attention research on healthcare spending and efficiency of care has garnered from politicians, policy makers, and stakeholders in health care reform. Improvements in healthcare have enhanced our ability to save lives and improve patient outcomes; however, biomedical technology has also resulted in sky rocketing financial costs. Despite our numerous advancements, these medical costs do not always translate to enhanced quality of life for each patient (Fine, 2000). According to the Centers for Medicaid and Medicare, health expenditures for 2010 totaled 2.6 trillion dollars, which translates to 8,402 dollars per person or 17.9 percent of the nation's Gross Domestic Product (Centers for Medicaid and Medicare Services [CMS], 2011). Of this total, hospital care constitutes the overwhelming majority of expenditures. Centers for Medicaid and Medicare found that hospital spending increased 4.9 percent to 814.0 billion dollars in 2010 compared to 6.4-percent growth in 2009, with an average annual growth in hospital spending between 2007 and 2010 of 5.5 percent (CMS, 2011). These figures stand in stark contrast to federal public health spending through the U.S. Centers

for Disease Control and Prevention (CDC), which averaged out to only 20 dollars per person in fiscal year 2010 (Healthy Americans, 2011). As the American population ages and chronic disease rates continue to rise, new efforts at prevention are critical to the longevity of the American healthcare system. Prevention of disease and injury is the most effective way to improve health in the United States and should be the priority for political leadership in the US (Trust for American's Health [TFAH], 2012). Despite the apparent need for population-based interventions to promote preventive efforts that stem the rising costs of healthcare, funding continues to be directed towards healthcare and away from public health services. A study by TFAH (2009) found that an investment of 10 dollars per person per year in community-based programs to increase physical activity, improve nutrition, and prevent tobacco use could yield savings of 16 billion dollars annually within five years. However, the same report finds a funding deficit of 20 billion dollars annually for public health activities in the United States (TFAH, 2009).

A trend that has accompanied the rising costs of healthcare is spending on what many healthcare providers have identified as “futile” care that is seen as having no therapeutic or palliative purpose and is medically unnecessary and inappropriate. Such aggressive measures, often occurring at the end of life, translate to prolonged intensive care unit stays, aggressive, expensive technologies and medications that all result in enormous hospital bills. For example, Tovino and Winslade (2005) identify an annual cost savings of between 2 million and 5 million dollars per hospital that could be obtained by identifying and terminating futile care. As the United States moves through the economic recession and government spending in all capacities is hotly debated, it is important to consider that healthcare may become a limited resource. Hoffman (2011),

for example, identifies the considerable concern over futile medical care as a matter of health policy and national health expenditure. It is crucial for leadership to examine spending strategies to most effectively utilize this precious resource in order to guarantee the health and well being of the American people.

Public health plays an important role in disease prevention and health promotion in the United States. Such importance was reinforced on June 6, 2011 with the release of the National Prevention Strategy by President Barack Obama, which recognizes that good health extends beyond quality medical care and calls for nationwide efforts to weave prevention into every facet of American life (Department of Health and Human Services [DHHS], 2011). The Prevention Fund, provisioned in the Affordable Care Act, provides communities around the country with more than 16 billion dollars over the next 10 years to invest in effective, proven prevention efforts, like childhood obesity prevention and tobacco cessation (Healthy Americans, 2011). Though this legislation is one step in the right direction, it still represents a stark comparison to the 2.6 trillion in federal dollars spent on healthcare in the year 2010 alone.

Given the current economic conditions and continued rise in healthcare expenditures, public health leaders need to examine methods for effectively utilizing federal funding through preventive efforts that could simultaneously reduce healthcare spending. Unlike the costly individual care provided by clinicians, public health initiatives can affect the health of entire populations by creating an environment in which people can be healthy (IOM, 2011). For instance, the IOM (2011) report on revitalizing public health law and policy identifies the importance of public health policy in a time of scarce resources, identifying the ability of sound public health policy to prevent the need

for more costly, less effective individual interventions in the future. The same report by the IOM encourages government and private sector stakeholders to consider health in a wide range of policies and to utilize funds to evaluate the health effects and costs of major legislation (IOM, 2011). The purpose of this paper is to examine the financial implication of public health policy as it relates to futile care through a comprehensive review of the literature.

Background

Overview of Current Healthcare Spending in the US

The cost of healthcare in the United States has increased drastically over the past several years. Healthcare expenditures eclipsed 2.3 trillion dollars in 2009, a more than three fold increase from the 714 billion dollars spent in 1990 and over eight times the amount spent in 1980 (Kaiser Family Foundation, 2009). Despite efforts to slow this growth, costs have continued to increase for all parties involved in the payment system. Most pronounced growth has occurred in federal government spending; in 2009 healthcare spending increased by 17.9% while private insurers grew 1.3% that same year (California Healthcare Foundation [CHCF], 2012). Consumers remain the top payers, as households contribute 28% to the financing of healthcare, followed by the federal government at 27% (CHCF, 2012). These figures indicate that the rising costs of healthcare affect government, private, and individual stakeholders. A steady allocation of funds for community interventions to improve individual health translates to financial savings for government and private industry payers, as well as economic gains for individuals (TFAH, 2009).

Despite these enormous expenditures, the United States lags far behind other westernized countries in the health condition of its citizenry. In a report for the Common Wealth Fund that examined the health systems of seven industrialized countries, Davis, Schoen, and Stremikis (2010) found that the healthcare system of the United States ranked last or next to last on all five criteria selected to evaluate a high performing health system. The five criteria used to identify a high performing health system were healthy lives, quality, access, efficiency, and equity (Common Wealth Fund, 2010). The low ranking status of the United States health system is not a new phenomenon. In their 2008 National Scorecard on US Health System Performance report the Common Wealth Fund identified performance on measures of health system efficiency remains as especially low, with the country scoring 53 out of 100 on measures gauging inappropriate, wasteful, or fragmented care; avoidable hospitalizations; variation in quality and costs; administrative costs; and use of information technology (Commonwealth Fund, 2008).

In addition to the American healthcare system, the health of the American people lags behind that of other developed nations. The United States consistently ranks below other industrialized nations in health indicators such as cancer rates, infant mortality rates, and life expectancy (CDC, 2012). Though the US healthcare system is considered the most expensive in the world, the expense does not translate to better population health. The Commonwealth Fund effectively summarizes the issue surrounding the need for increased effectiveness of health expenditures in their assertion that “national leadership is urgently needed to yield greater value for the resources devoted to health care” (Commonwealth Fund, 2008).

Central to this need for improved population health in the United States is enhanced access to primary care and public health prevention activities. The Institute of Medicine calls for greater development and support of programs aimed at enhancing quality of life for those living with chronic disease (IOM, 2012). Current data depicts a lack of primary healthcare coverage for most Americans, with nearly one in five Americans lacking adequate access to a primary care physician (Kaiser Family Foundation [KFF], 2011). Lack of access to primary healthcare providers and public health programs focused on prevention and chronic disease management has exacerbated the poor health indicators prevalent in the American population and indicates a need for enhanced emphasis on these areas. Half of all Americans live with one or more chronic diseases such as heart disease, cancer, stroke, and diabetes (TFAH, 2009). The Centers for Disease Control (2012) assert that a large percentage of these conditions could be prevented through public health interventions targeting lifestyle and environmental changes.

Lack of access to preventive services and its exacerbation of chronic disease issues is manifest throughout public health. In an analysis of the Global Youth Tobacco Survey, investigators found that the death toll due to tobacco use could double to 10 million by the year 2020, and cited an urgent need for all countries to adopt a comprehensive campaign for tobacco prevention and control in order to ameliorate this harm (Warren, Jones, Eriksen, & Asma, 2006). Similarly, in 2005 133 million Americans were found to be living with at least one chronic condition; this number is expected to reach 157 million by 2020 (Bodenheimer, Chen, & Bennett, 2009). Although robust public health prevention measures are able to curve the rising chronic disease

epidemic, the current public health workforce is thought to be insufficient to address the prevention of chronic disease (Bodenheimer, et al., 2009). DeRol (2009) asserts that the economic implications of lost worker productivity secondary to chronic disease cost more than treatment, and identifies the need for enhanced access to preventive and primary care services as a key recommendation. Furthermore, health systems focused on primary care and prevention, as opposed to expensive specialty care, provide more equitable, efficient, and effective care to provide better health outcomes than those in the US at a lower cost (KFF, 2011). As these examples indicate, the lack of access to primary care and public health prevention activities in the United States has exacerbated poor health indicators within the United States population.

Public Health Leadership in the US

In their Core Competency Leadership Model, the Association of Schools of Public Health (2007) defines the leadership competency as “the ability to create and communicate a shared vision for a changing future; champion solutions to organizational and community challenges; and energize commitment to goals” (p. 9). The leadership competency further delineates the need for team building, negotiation, conflict management, and collaborative methods to formulate and achieve organizational and community health goals (ASPH, 2007). This competency expresses the recognized importance of strong and effective leadership within the field of public health.

The current political and economic climate within the United States, including massive healthcare spending and recent passage of the Affordable Care Act, have implications for the necessity of effective public health leadership. Rowitz (2009)

asserts that healthcare and public health professionals need to be involved in advocacy at the political and policy development level in order to manage these changes. Public health practitioners and healthcare professionals need to create a shared vision of what personal healthcare and population-based health should be and to collaborate to achieve this vision (Rowitz, 2009). The increasing differentiation and specialization of organizations pursuing public health and healthcare translates to an increased need for integration and collaboration (Axelsson & Axelsson, 2006). Integration between organizations is difficult and requires strong leadership; however, unification in pursuit of a shared vision can be very effective in attaining common goals (Axelsson & Axelsson, 2006).

Besides the general need for integration in the field of public health, there is a particular need for inter-organizational and inter-disciplinary collaboration. Axelsson and Axelsson (2006) describe collaboration as a means of increasing the efficiency and the quality of public health by synergizing resources and expertise from different organizations. This principle of collaboration can be extended to public health and other disciplines. For example, Bulter, Cohen, Friedman, Scripp, & Watz (2002) cite the importance of developing a sound partnership between public health professionals and law enforcement officers to successfully investigate and halt the bacillus anthracis bioterrorism attacks of September and October 2001. In order to promote health through safe and sanitary housing, local health departments collaborated with other entities more directly involved in the housing sector through partnerships created under the Healthy Housing Project (Krieger & Higgins, 2002).

Medicine and public health have continued to move towards a common goal of improving health and quality of life. According to Elster & Callan (2002), medical and public health practitioners have increasingly embraced collaboration in the realization that by working together more can be accomplished than if each sector works alone. The American Medical Association asserts that collaboration between public health agencies and primary care providers is logical and effective (Sloane, Bates, Donahue, Irmiter, & Gadon, n.d.). Furthermore, both Association of Schools of Public Health and Institute of Medicine have identified leadership training as an integral skill for training of physicians and public health practitioners alike (Rowitz, 2009). This paper examines the potential for partnership between leaders in medicine and public health in addressing the issue of futility of care.

Definition of Terms

Many terms used throughout this paper are ubiquitous within the medical and public health communities, but lack consensus as to their general meanings. For this reason, several relevant terms are discussed and defined for the purpose of this discussion so as to alleviate any source of confusion. Futility of care is defined by Fine (2000) as “life sustaining treatments that no longer meet the reasonable goals of the patient” (p. 145). Similarly, Okhuysen et al (2007) describe the term “medically inappropriate care” as “life-sustaining interventions provided to [patients] with immediately life-threatening, terminal, and irreversible conditions not amenable to correction with state-of-the-art pediatric care, especially if discomfort is evident” (p. 226). Clark (2007) identifies medically futile treatment as

an action, intervention, or procedure that might be physiologically effective in a given case, but cannot benefit the patient, no matter how often it is repeated. A futile treatment is not necessarily ineffective, but it is worthless, either because the medical action itself is futile (no matter what the patient's condition) or the condition of the patient makes it futile. (p. 381)

Standley and Liang (2011) utilize several adjectives to characterize futile care including “useless or ineffective”, medical interventions that have “an unacceptably low chance of achieving a therapeutic benefit” and “that cannot improve the patient’s prognosis, comfort or well-being, or general state of health” and “that cannot end dependence on intensive medical care” (p. 8). For the purpose of this discussion, the futile and medically inappropriate care will share the common definition as follows: medical interventions that have are deemed useless or ineffective by established standards of practice and cannot improve the prognosis, comfort, or general state of health of the patient (Fine, 2000; Standley & Liang, 2011; Clark, 2007). Futile care does not prolong the quality of life of the patient and does not increase the quality of life of the individual. Furthermore, many aggressive medical interventions seen by healthcare professionals as futile actually serve to prolong the suffering and discomfort of the patient and serve to prolong inevitable death. It is important to note that the term “futile care” remains hotly contested within our current pluralistic society, and that the operating definition utilized in this paper seeks to uphold the current standards of practice upheld by licensed medical professionals that have been established through scientific processes and that form the basis of modern medicine. This definition of futile care is seen as

appropriate for the context of this paper, since the ethical and legal principles of TADA are not the focus of this work. The terms used throughout academic literature to describe futile care are commonly defined throughout the paper according to the aforementioned definition.

In addition to discussing the definition for futile care, it is also useful to provide a meaning for “end of life” as it relates to this discussion. The National Institutes of Health (2004) relate the following components to their definition of end of life:

(1) the presence of a chronic disease(s) or symptoms or functional impairments that persist but may also fluctuate; and (2) the symptoms or impairments resulting from the underlying irreversible disease require formal (paid, professional) or informal (unpaid) care and can lead to death.

(Components of End of Life section, para 1)

In this discussion, end of life is characterized as a state of disease or disability that persists despite medical intervention and will ultimately result in death or severe disability requiring intensive medical intervention to prolong viability. End of life care refers to medical procedures and interventions performed in the presence of such disease or disability. The subject matter for this discussion focuses primarily on aggressive end of life care, which serves only to prolong the inevitability of death, does not work towards the restoration of the health or function of the patient, and does little or nothing to preserve the comfort of the patient. Aggressive end of life care does not include palliative measures which are designed to ensure comfort and combat pain in the dying

patient. The goal of palliative care is not to prolong the quantity of life in the dying patient, but to enhance the quality of life in the end of life.

Past Legislative Efforts to Limit Futile Care

Numerous legal cases have been brought to the forefront of public attention in the past several decades regarding futility of care (Clark, 2007; Duke & Pang, 2009; Fine, 2000). Some of these cases involve a patient's right to die, while others center on the right to prolong life contrary to medical recommendations or standards of practice (Fine, 2000). Though the purpose of this paper is not to analyze legal proceedings that have shaped federal and state legislation that seek to limit futile care, a brief overview of the development of these legalities is useful.

In 1990 Congress passed the Patient Self Determination Act (PSDA) in order to encourage reliance on advance directives. Fry-Revere, Reher, and Ray (2010) summarize the legislation specifications:

- 1) at the time of admission, patients be given a written summary of healthcare decision-making rights specific to the state and the facility's policy regarding end of life care decision making:
- 2) patients be asked if they have an advance directive and that their response be documented:
- 3) hospitals make an effort to educate staff and the community about advance directives:
- 4) no discrimination based on whether or not a patient has an advance directive and
- 5) providers educate themselves, their staff, and the community on issues concerning advance directives. (p. 20)

Though the legislation serves to protect the wishes of the individual patient during the end of life, cost containment is another goal of the legislation. According to Duke, Yarborough, and Pang (2009), the PSDA did intend to reduce end of life care costs through reduction in unwanted and unnecessary interventions and the perceived need to practice defensive medicine by providers. The same authors also found little research directly addressing the issue of lowering costs for end of life care, indicating the need for further work in this area.

Background on the Texas Advance Directives Act

The Texas Advance Directive Act of 1999 (TADA) synthesizes several prior laws concerning end of life decisions into a single statute. Although the legislation contains numerous important changes, in keeping with its topic this paper will focus on the provisions that affect the issue of futility of care. It is important to note that advance directive legislation in Texas clearly recognizes the right of the patient or legal guardian to request or reject medical treatment in the face of terminal or irreversible illness. The novelty of TADA, however, is in its concept that not all of these requests may be granted. Under the law, if a request for treatment is made that is deemed to be medically futile by the healthcare provider team, then an ethics consultation may be made. All relevant stakeholders, including the patient (or legal guardians of the patient) are given the option to attend the ethics review process. If the patient or patient guardian requests further life-sustaining treatment that is in opposition to the recommendations of the ethics committee, the party has a ten-day period to locate a facility willing to accept transfer of the patient. The patient or party responsible for the care of the patient may petition for additional time beyond this ten-day period through the appropriate district or county court. A list

depicting providers willing to consider transfer of the patient is provided by the hospital to the patient or legal guardian. (See Appendix A)

There are certain key points to the legislation that are worth noting. Scholars and critics both note the lack of definition of futility of care in the legislation (Fine, 2000). This lack of definition illustrates one of the key ethical issues surrounding the legislation, which is the perceived subjectivity of the language. Furthermore, TADA does not outline operational rules for an ethics committee, other than requirements specifying which documentation must be provided to patients and those making their medical decisions and their right to inclusion in the committee review. It is interesting to note that the legislation addresses cost liability in the case of medical interventions deemed futile, reflecting the enormous economic costs of end of life care.

Research Methods

A comprehensive review of the literature was performed using GoogleScholar, PubMed, Lexis Nexis, and LegalTrac. These databases were selected for their comprehensive inclusion of information related to medicine, public health, and policy. Given the legislative nature of the subject matter, both LegalTrac and LexisNexis were utilized in order to explore TADA from all relevant perspectives, including both law and the mainstream media. Though the focus of this paper is not on the ethical issues associated with end of life care in TADA that are popularly addressed in the main stream media, these sources were reviewed in order to determine if they offered information regarding health care spending and the TADA. The key terms for the search were “Texas Advanced Directives Act” and “healthcare spending”, “unnecessary expenditures”, “cost

containment”, and/or “public health”. Articles were limited to those published in peer reviewed journals published in the English language from 1999 to 2011. These dates were selected based on the year the legislation was passed in the state of Texas to the present day. Articles that made no reference to the economic ramifications of the TADA were excluded from the review. It is of note that some articles found searching under the broader terms “Texas Advanced Directives Act” focused exclusively on the legal and/or ethical aspects of the legislation, and were subsequently not included. It is also important to mention that several articles queried in both LegalTrac and Lexis Nexis under the single search phrase “Texas Advanced Directives Act” contained relevant financial information. The remaining articles were sorted according to the following criteria:

- Category 1- No specific information related to the economic aspects of the TADA or its implications for public health prevention. These articles were originally thought to contain information related to the topic, but on closer review did not have information specific to financial aspects of TADA and its implications for public health.
- Category 2- Information concerning healthcare costs associated with the TADA and aggressive end of life care but little to no mention of the relationship between these two subjects and how these savings could be utilized for public health activities to benefit the broader populace.
- Category 3- Information concerning the healthcare costs associated with aggressive end of life care and how these expenditures have been affected by the TADA.

- Category 4- Information concerning the healthcare costs associated with aggressive end of life care, how these expenditures have been affected by the TADA, in addition to mention of implications for this cost saving with regards to public health activities.

The original intent of this paper is to examine the linkages that exist between cost containment in the healthcare setting and public health prevention activities. Therefore, the articles in categories three and four would provide the most information regarding this topic. It was anticipated that many articles would not fit these categories, and thus it was important to consider development of categories one and two that could include broader mention of financial implications of end of life care.

Literature Review Results

The GoogleScholar query utilizing the previously described search terms yielded the highest amount of articles, 231. A search of the other three databases, Pub Med, Lexis Nexis, and Legal Trac, resulted in 52 articles. After reviewing the material to identify repeated and excluded articles, a total of 11 articles were identified from 1999-2011 that focused on the economic aspects of TADA. The majority of articles returned in each search query were found using the phrase “Texas Advanced Directives Act”. When the search was narrowed to include the other search terms, results were drastically reduced. Many of these articles focused on the legal and ethical implications for advanced directives such as TADA, and only mentioned the economic costs of futile care in passing or not at all. Although some of these articles provided useful background information on TADA, they were not found to have material relevant to the topic of this paper.

The resultant articles were organized into the following categories, based on their content:

Category	Number of Articles
Category 1	5
Category 2	8
Category 3	0
Category 4	0

Table 1. Number of Articles Grouped According to Literature Review Category

Category 1- These articles contained no specific information related to the economic aspects of TADA and end of life care spending. These articles were originally thought to contain pertinent information to the topic, but on closer review did not contain information regarding the economic aspects of futility of care legislation such as TADA. Several of these articles focused exclusively on the ethical debate over end of life care legislation, which is not the focus of this paper. Some of these works did address the economic costs of futile end of life care, but this was not framed within the context of legislative efforts at limiting such. For instance, Luce and White (2007) identify the economic ramifications of delaying death with aggressive therapy in the intensive care unit setting, but examine this phenomenon within the social context of patient-family dynamics. Other articles in this category indirectly identified economic consequences of futile care, including lengthy legal processes inflicted upon the healthcare system by families of patients (Hoffman and Tarzian, 2008) and high staff turnover rates in the intensive care unit (Crippen, 2008). Although staff turnover and legal battles do present

costly side effects of futile care, the focus of this paper is limited to direct healthcare expenditures.

Category 2- Works in this category contained information regarding end of life care spending, but lacked specifics as to economic aspects of legislation aimed at reducing futile care. This information included specific estimates (Duke, Yarbrough, & Pang, 2009) related to end of life care spending, as well as broader generalizations concerning such expenditures (Jacobs, 2007). Neuberger (2009) performed a comprehensive review of evolving provider efficiency measures and incentives as they relate to futile care in the healthcare setting, citing the need for additional support from various cultural and legal fronts to effectively reduce such spending. However, the review focused on institutional policy and professional standards of care, and did not include a review of legislation aimed at limiting futile care. Duke et al. (2009) identify reduction in end-of-life treatment costs by preventing unwanted and unnecessary care as primary motivation for passage of the federal Patient Self-Determination Act of 1991, which preceded TADA by eight years. However, the authors do not correlate the legislation with significant healthcare spending reduction, nor they investigate the role of the TADA with regards to spending reduction.

Category 3- This category include articles with information concerning the healthcare costs associated with aggressive end of life care and how these expenditures have been affected by the TADA. No articles in the review of the literature met these criteria. As has been previously stated, the majority of articles focused on the legal and ethical implications of TADA and other legislative efforts to end futile care. Furthermore, articles within this category were to focus on the economic implications for TADA as a

mechanism for cost control, not to simply mention cost containment as a motivation for such legislative efforts. The literature review did demonstrate that unnecessary expenditures in healthcare resulting from futile care are a reality; however, no articles quantified savings resulting from futility of care legislation.

Category 4- The articles were to have information concerning the healthcare costs associated with aggressive end of life care, how these expenditures have been affected by the TADA, in addition to mention of implications for this cost saving with regards to public health activities. The purpose of this category was to assess the extent to which elimination of unnecessary healthcare expenditures can be utilized in public health preventive measures, as identified in the literature. The literature review demonstrated that very little published work focusing on this concept has been documented in academic literature following passage of the TADA. As with quantitative figures demonstrating economic results specific to TADA, there exists very little to show how such results can be utilized to benefit the broader good.

Discussion of Literature Review

The review of the literature makes apparent several trends concerning the financial costs of end of life care. First, the literature review reveals that financial costs constitute an important aspect of end of life care and should be considered in legislation targeting this subject. Several sources established the great economic costs of futile care and many examined how this contributes to the overall rising costs of healthcare. Indirect financial costs, such as high staff turnover rates and lengthy legal processes, were also identified in several sources. However, the literature review revealed that

academic writing on futile care as it relates to unnecessary healthcare spending has not extended beyond this basic investigation. Numerous articles mentioned unnecessary spending as a consequence of futile care; however, as seen in the lack of articles for categories three and four of the literature review, none have explored this topic further.

As stated earlier, the vast majority of literature published about TADA focuses exclusively on the ethical and legal aspects of the legislation. While many of these works mention unnecessary healthcare expenditures as a consequence of futile care, no research specifically investigating cost savings resulting from enforcement of TADA or similar legislation has been published in the United States. Since many articles cited the need to curb the rising costs of healthcare through elimination of futile care, further work should be done to analyze the savings resulting from this legislation. Given the overwhelming amount of legal and ethical literature on the subject, TADA could be receiving less attention for its potential cost containment and its possible relationship to public health. The need to bring focus to the economic aspects of TADA present a potential area for further research from public health and healthcare professionals alike.

The literature review revealed no information regarding the implications of cost savings on end of life care for public health. Though some articles cited specific estimates of money saved from elimination of futile care in the health care setting, none suggested ways in which these savings could be utilized to improve the overall health of the population. This lack of information does not mean that savings in healthcare cannot translate to much-needed funding for public health activities. Rather, this shows a gap in academic literature and a need for this to be addressed through further research and publication. Unlike healthcare, which focuses on the health of the individual, public

health activities extend benefit to an entire target population, often times meaning that public health interventions provide greater good to a greater number. The elimination of costly, futile healthcare interventions could translate to public health activity that provides benefit to a larger group of people. Academic literature provides a prime vehicle for the development and dissemination of this concept.

The literature review on TADA as it relates to cost containment showed that research on this subject is greatly limited. Though the financial costs of futile care and need to limit these costs is established, little work has been conducted to investigate this relationship on a deeper level. Given the current economic context and recent political push for healthcare reform, this area of healthcare should be addressed. Furthermore, additional questions should be raised about the role these savings can play in enhanced funding for public health activities. Further study is needed to bring attention to this aspect of TADA and associated legislation.

Recommendations for Further Action

The comprehensive literature review has revealed an apparent lack of academic literature addressing elimination of futile care as an effective mechanism for cost containment within healthcare. Though the immense costs of aggressive, unnecessary medical interventions are well documented and published, the literature does not extend beyond these figures. No established linkage exists between healthcare cost containment and TADA. The plethora of published works addressing both the legal and ethical aspects and implications of TADA illustrate the controversial, sensitive nature of the legislation. Though these are not the focus of this discussion, the divisive nature of these

issues amongst stakeholders could be a possible reason for a lack of published study regarding the economic aspects of TADA. The public is inundated with information regarding the high costs of healthcare, and much information regarding controversial end of life issues is readily available. However, steps need to be taken to integrate these two concepts, demonstrating to stakeholders their inextricable link. Effective communication of this message and recruitment for its support will require awareness and cooperation between professionals in public health and medicine.

Implications for Research

The existing gap in research expressed in the review of literature points to the need for further study of the economic aspects of TADA. Hospital administration in Texas should conduct financial analyses in cases where TADA has been utilized to demonstrate cost savings to the institution and/or the individual patient. This research should be conducted in every case where TADA was employed to prevent further futile care to a patient. The research should be published and disseminated to all relevant stakeholders, which will also serve to initiate continued dialogue regarding this legislation and extension of the concepts in embraces beyond the confines of the state of Texas.

In addition to research conducted at the health systems level, more insight is needed to demonstrate how cost containment mechanisms in healthcare can be used to benefit the greater populace through public health activity. As was echoed in the literature review, no publications exist to demonstrate how healthcare savings can be translated into beneficial public health programs. Given the current health indicators of

the American people, there is an established need for greater prevention and chronic disease management. However, effective leadership to build support for change is imperative to ensure resources are devoted to this needed research.

Implications for Public Health Leadership

Leaders within the field of public health regularly seek to promote health and wellness through preventive measures. One of the key roles for a leader is to identify and create needed change for the future of an organization, particularly during times when an industry is in a period of transition (Cocowitch, 2001). Successfully leading efforts for change requires cooperation and motivation from many individual stakeholders in the process (Kotter, 1995). Building partnerships can foster collaboration, producing unity and strength for a single cause from various groups of stakeholders. According to leadership experts Heifetz and Linsky (2002), creating partnerships builds political power and can improve the content of ideas, which is especially critical when attempting to advance a controversial issue. The ASPH (2007) calls for “use of collaborative methods for achieving organizational and community health goals” as a leadership sub competency in public health (competency H7). Community health interventions can complement healthcare recommendations from a provider. For instance, a physician may prescribe exercise for a patient suffering from chronic disease, and the safe, local environment for physical activity provides the means for which that patient is able to exercise (TFAH, 2009). It is important for public health leaders to build partnerships with other stakeholders in the issue of futile care in order to institute improvements.

Sound leadership is necessary in order for any lasting change to take hold. An important first step in achieving change is to identify and select current change opportunities (Cocowitch, 2001). This paper has established the need for further research in the financial aspects of TADA, and for collaboration across disciplines for this to occur. Public health leaders need to select the most promising area of action for this research. As part of this short term step, public health leaders need to discuss current problems, potential and future crises, and major opportunities (Kotter, 1995). Another critical short-term recommendation for public health leadership is to understand the change effort through creation of a compelling vision for change (Cocowitch, 2001). Many well-intentioned change efforts never come into fruition for lack of a strong vision to guide effort (Kotter, 1995).

A long-term recommendation to achieve change is to build collaboration through establishment of a partnership with other stakeholders. Cocowitch (2001) and Kotter (1995) both cite the need for synthesis of a strong guiding coalition to successfully lead change efforts. In the case of futility of care, medical and public health practitioners need to embrace collaboration in the realization that by working together more can be accomplished than if each sector works alone (Elster & Callan, 2002; Axellson & Axellson, 2006). Leaders within both disciplines can capitalize on the growing support for inter-disciplinary collaboration to build a partnership for the cause based on a shared vision (Sloane, Bates, Donahue, Irmiter, & Gadon, n.d.). Partnership building can be a lengthy process that requires resources; however, it is an important long-term step for public health and medical leadership in addressing futility of care.

Public health leaders are in a prime position to promote the importance of healthcare cost containment as the potential to translate to additional funding for public health. As leadership within the American government begins to recognize the importance of prevention, public health leaders must continue to promote this platform in partnership with the medical community. A reformed healthcare system is not enough to improve the health of the American population; evidence-based public health interventions are necessary to succeed in effective disease prevention (TFAH, 2009). Building partnership will also help to categorize the issue of futile care as a public health problem, as opposed to a medical one. Scholars postulate that making end of life care a public health issue will result in more resources being devoted to address the problem (Hoffman, 2011). Building support for the issue through partnership with other stakeholders is a critical step for public health leaders. An effective change process involves multiple steps, the details of which are beyond the focus of this paper. Therefore, initial short term and long term recommendations to initiate action are provided as a basis for the change process.

As was stated earlier, the lack of research on TADA as it relates to cost containment points to the need for further investigation. Public health leaders are in the position to support and promote such research. This activity will also enhance the visibility of the public health and highlight the importance of its role in disease prevention.

Conclusion

Futility of care remains a major barrier to healthcare cost containment strategy. Unfortunately, little research has been performed to correlate legislative policy aimed at reducing futility of care with health care savings and the implications of such for public health. Current data provides evidence that populations living in regions with lower intensity of care in the last six months of life did not have higher mortality rates than those living in regions with higher care intensity (Dartmouth Atlas of Health, 2012), indicating validity to legislation such as TADA that is aimed at curbing expensive, futile care. However, further research linking this legislation and this research trend is needed to engage stakeholders in expansive efforts to curb futility of care. Leadership initiatives in both public health and medicine should be undertaken to highlight the urgency of this issue in order to build support for subsequent change. Furthermore, partnerships need to be established across disciplines in order to bring stakeholders together collaboratively to create lasting change.

End of life care should be categorized as a public health issue, rather than a problem unique to the field of medicine. Partnerships between public health, medicine, and other relevant stakeholders should be a priority for leadership. Brett and McCullough (2012) encapsulate the strong link between unnecessary medical interventions and public health in their assertion that “in a society that rations even beneficial care by failing to provide universal access, provision of non-beneficial interventions is unacceptable”. As the need to curb healthcare expenditures and devote more resources to prevention is more accepted by all levels of societal leadership, the need to address this issue becomes more potent. It is critical for public health practitioners to recognize this need and respond accordingly.

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Appendix A:

Process for Texas Advance Directives Act Sec 166.046 Procedure If Not Effectuating a

Directive or Treatment Decision:

1. If an attending physician refuses to honor a patient's advance directive or a health care or treatment decision made by or on behalf of a patient, the physician's refusal shall be reviewed by an ethics or medical committee. The attending physician may not be a member of that committee. The patient shall be given life-sustaining treatment during the review.
2. The patient or legal guardian of the patient responsible for making the decision shall be given a written description of the ethics committee review process and any other policy or procedure adopted by the healthcare facility. The individual is informed of the review process not less than 48 hours before the meeting to discuss the patient's directive, unless the time period is waived by mutual agreement.
3. At the time of notification, this individual is also given a copy of the appropriate statement set forth in sec 166.052 and a copy of the registry list of health care providers and referral groups that have volunteered their readiness to consider accepting transfer or to assist in locating a provider willing to accept transfer of the patient. This list is posted on the website maintained by the Texas Health Care Information Council.
4. The aforementioned individual is entitled to attend the meeting and receive a written explanation of the decision reached during the review process. If the attending physician, the patient, or the person responsible for the health care decisions does not agree with the decision reached during the review process, the physician must make a reasonable effort to transfer the patient to the care of a physician who is willing to comply with the directive.
5. If the patient or the person responsible for the health care decisions of the patient is requesting life-sustaining treatment that the attending physician has decided and the review process has affirmed is inappropriate treatment, the patient shall be given available life-sustaining treatment pending transfer to a physician willing to accept the patient. The patient is responsible for any costs incurred in transferring the patient to another facility. The physician and the health care facility are not obligated to provide life-sustaining treatment after the 10th day after the written decision of the ethics committee is provided to the patient or the person responsible for the health care decisions of the patient unless ordered to do so under Subsection (g).

6. If during a previous admission to a facility a patient's attending physician and the review process detailed above have determined that life-sustaining treatment is inappropriate, and the patient is readmitted to the same facility within six months from the date of the decision reached during the review process conducted upon the previous admission, the entire process with the ethics committee need not be followed if the patient's attending physician and a consulting physician who is a member of the ethics or medical committee of the facility document on the patient's readmission that the patient's condition either has not improved or has deteriorated since the review process was conducted.

7. At the request of the patient or the person responsible for the health care decisions of the patient, the appropriate district or county court shall extend the time period beyond the required 10 days only if the court finds, by a preponderance of the evidence, that there is a reasonable expectation that a physician or health care facility that will honor the patient's directive will be found if the time extension is granted. (Texas Constitution and Statutes, 1999)