Advance Directive Advocacy: Empowering Homeless Clients to Express Their End-of-Life Wishes

Melissa Morrison, RN, CNRN, DNP-student

Arizona State University
Abstract

The homeless population is aging. Homeless individuals have distinct barriers to equitable end-of-life care. Completion of an advance directive would address many of these barriers. A review of the literature indicates that homeless individuals, once educated on the purpose and significance of advance directives, complete them at a higher rate than non-homeless people. One such educational intervention was performed in the setting of a medical respite center and a day resource center, both of which serve the homeless. The goal of the intervention was to increase advance-directive completion by clients via improving knowledge and attitudes about the documents, and to establish an agency protocol for future clients. Twenty-eight clients and 12 staff members completed a pre- and post-test measuring attitudes and knowledge relating to advance directives, their responses measured on a Likert scale. A McNemar’s test discerned an increase in knowledge about a living will ($p = .013$), while a Wilcoxon’s signed rank test determined that attitudes were improved but not significantly. Two clients completed directives following the intervention. A self-selected participant pool and a one-on-one educational session resulted in more document completion versus a convenience sample. Implications for practice include an inexpensive intervention that does not require a medically trained facilitator, enabling a broad application to a variety of settings, with the goal of empowering a traditionally disenfranchised population to make health decisions related to end-of-life care. Future undertakings should look at creating a validated instrument for measuring knowledge and attitudes about directives among disadvantaged populations.

Keywords: homeless, advance directive, end of life
Advance Directive Advocacy: Empowering Homeless Clients to Express Their End-of-Life Wishes

Homeless individuals suffer the same chronic diseases as their domiciled counterparts, but they have higher mortality rates and less access to care. While homeless people die younger on average, the aging of the Baby Boomer generation means the aging of the homeless population. However, as a disadvantaged population and a distinct culture, they have unique needs at end of life. Barriers to addressing these needs have resulted in a disparity in care.

Reduced access to care is a result of lack of health insurance among the homeless, and a culture of mistrust of the medical establishment, as well as pragmatic factors such as no fixed address and limited access to transportation (Song et al., 2006). Health equity not only means equal access to life-extending and life-enhancing care, but to quality end-of-life (EOL) care, as well. For most, that means care that fulfills the wishes of the dying patient as reasonably as is possible including the relief of suffering, both physical and spiritual.

The purpose of this paper is to discuss the results of an evidence-based applied research project aimed at improving homeless patients’ access to and participation in quality treatment with the formalization of EOL wishes in an advanced directive (AD).

**Background and Significance**

*Homelessness* is defined as a person (or family) who spends most nights in a place not designed for regular accommodation, such as a car, campground or abandoned building; lives in an emergency shelter; or is leaving a place where he or she lived for less than 90 days after being in one of the prior situations (United States Interagency Council on Homelessness [USICH], n.d.). Nationally, 564,708 people were homeless in America on a given night in January 2015, 68% of whom were over the age of 24 (U.S. Department of Housing and Urban Development
Nearly 48,000 were veterans. As the general population ages, the percentage of elderly homeless (defined as older than 65) is expected to do likewise, increasing 33% by 2020, to 58,770 (National Health Care for the Homeless Council [NHCHC], 2013).

In Arizona, an estimated 29,170 people experienced homelessness in 2014 – 1 for every 227 residents (Department of Economic Security [DES], 2014). Of them, 36% were over the age of 45. From 2011 to 2014, homelessness among people over the age of 62 in Maricopa County increased 53% (Esperanza, 2015). The majority of Arizona’s homeless in 2014, 79%, were single men, who as a demographic experienced a higher rate of addiction and physical or mental comorbidities – 23 percent and 56 percent, respectively (DES, 2014). This signifies additional challenges at end of life.

Just over one-fourth of the American homeless population is estimated to suffer severe mental illness (SMI), defined as a prolonged or recurrent mental illness that impairs activities of daily living and requires long-term treatment (Substance Abuse and Mental Health Services Administration [SAMHSA], 2011; Blatt & Crawford, 2015). As many as 49% of older homeless individuals have SMI (SAMHSA, 2011). Half of individuals with SMI also suffer at least two chronic medical illnesses and are at higher risk of death from cancer, cardiovascular disease, respiratory and gastrointestinal illness (Blatt & Crawford, 2015). SMI is also associated with concurrent drug addiction. For example, 21 to 61 percent of people with bipolar disorder are addicted to substances, compared with 3 to 13 percent of the general population (Blatt & Crawford, 2015). Approximately half of all homeless individuals (and 70% of homeless veterans) are estimated to be substance abusers (USICH, 2013).

Heart disease is the leading cause of death among older homeless adults, as it is for all Americans (NHCHC, 2011; Jones et al., 2009; Centers for Disease Control [CDC], 2015).
However, homeless men ages 45 to 64 are 40% to 50% more likely to die from heart disease than the general population (NHCHC, 2011). Lower respiratory diseases are the fourth leading cause of death in the general population and affect homeless individuals at twice the rate (NHCHC, 2011). Most chronic diseases, such as congestive heart failure (CHF) and chronic pulmonary obstructive disease (COPD), progress in stages, allowing – theoretically, at least – time for sufferers to determine their goals of care and discuss them with future surrogate decision-makers and medical providers should they reach a stage where they are unable to express them personally (Hemani & Letizia, 2008). The CDC recommends completing an AD in order to do so (CDC, 2015).

An AD is typically defined as comprising two documents: a living will and/or a durable healthcare power of attorney, also known as a medical power of attorney (MPOA) or healthcare proxy (American Cancer Society [ACA], 2015). A living will describes the type of medical treatment a person would want in the event of a terminal illness or vegetative state (ACA, 2015). It addresses the patient’s desire for such interventions as feeding-tube placement, dialysis, and ventilators, as well as whether he or she would want cardiopulmonary resuscitation (CPR) in the case of heart or breath cessation. It also describes whether the patient would want aggressive or palliative care in such circumstances. An MPOA names a person the patient would want to make healthcare decisions on his or her behalf (ACA, 2015). Both are legal documents that typically require a witness or notary to validate.

In terms of their attitudes about the dying process, homeless individuals express many of the same fears as their domiciled counterparts, such as inadequate pain control and being kept alive futilely on life support. However, some concerns specific to the homeless include fear of their bodies not being found or identifiable, improper body disposal, and of dying anonymously.
“My fear is being found on the street, but no one knowing how to help me or who I am,” one person said (Song et al., 2006, p. 437). Homeless patients are also less likely to desire foregoing life-sustaining treatment if comatose or dying – 37% and 31%, compared to 78% to 94% in the general population (Song et al., 2010; Cagle, 2009).

A clearly stated and accessible AD would be a significant first step in addressing many of the above concerns. As written statements of a person’s medical wishes, ADs are meant to speak for the person when he or she is no longer capable of doing so. In the case of homeless individuals, who typically are socially isolated and are less likely to have readily available legal proxies, ADs are arguably of greater significance (Song et al., 2010). Eighty-six percent of hospitalized patients over 80 years old with ADs had their EOL wishes respected compared to 30% without them (Detering, Hancock, Reade, and Silvester, 2010). Of patients alive six months after hospital discharge, 94% percent were “very satisfied” with being listened to in the hospital compared to 52% who did not have ADs (Detering et al., 2010).

However, only 26% of all Americans have actually completed an AD (National Hospice and Palliative Care Organization [NHPCO], 2013). The Patient Self Determination Act (PSDA), passed by Congress in 1990 and enacted in 1991, mandates that healthcare institutions that receive Medicare and Medicaid funding provide written information to patients about their rights under state law to make decisions about their medical care, including their right to complete an AD. The act also requires organizations to document in the medical record whether the patient has an AD, as well as educate staff and community about them (American Bar Association, n.d.). In addition to a legal obligation, nurses are ethically bound to advocate on behalf of EOL patients for a death that is “congruent with the values and desires of the dying person” (American Nurses Association, 2010, p. 31).
Significant fiscal costs are attributed to underuse of ADs. Care of chronic illness in the last two years of life accounts for 32% of Medicare spending (Dartmouth Atlas of Healthcare, 2015). In 2011, an estimated $205 billion, or 13%, of total health spending was spent in the last year of life (Aldridge and Kelley, 2015). The Dartmouth Atlas of Healthcare (2015) attributed much of the cost burden to repeat hospitalizations and drew a connection to the incongruence of patients’ stated preferences (a majority wish to die at home) and actual outcomes (55% die in a hospital).

Politically, EOL discussions between providers and patients were set back when potential Medicare reimbursement under the proposed Affordable Care Act was characterized by prominent politicians as “death panels” and the provision was removed from the eventual act (Millman, 2014). However, as of January 1, 2016, in part due to stakeholder influence including the American Medical Association, the Centers for Medicare & Medicaid Services (CMS) began reimbursing for advance-care planning discussions (CMS.gov, 2015).

While individual providers are exempt from the PSDA, primary care providers (PCPs) are key loci for introducing ADs. The American Academy of Family Physicians (AAFP) recommends the patient’s PCP broach the topic early, such as when discussing preventative care at a routine check-up (Spoelhof & Elliott, 2012). Homeless individuals, however, typically lack a PCP (White & Newman, 2015). Like many Americans, they are often not given the opportunity to fill out an AD until they experience a health crisis. Other barriers originate from the provider side: Nurses, for example, often feel unprepared or resistant to educating patients about ADs (Goodwin, Kiehl & Peterson, 2002). Because SMI is more common among homeless people, providers may be uncertain about whether the patient has decision-making capacity (Massachusetts Department of Mental Health, n.d.).
Other factors influence who has an AD. An inverse relationship has been noted between completing an AD and lower levels of education, socioeconomic status, insurance status, and minority status (Song et al., 2008; NHPCO, 2013). Nursing home residents and discharged hospice patients are more likely to have an AD than the general population: 65% and 88%, respectively (Jones, Moss, & Harris-Kojetin, 2011). The older the patient, the more likely he or she is to have one; for example, 77% of nursing home residents over the age of 85 reported an AD, compared to 36% under the age of 65. Also, in general, community-dwelling residents over 65 years old are more likely to have an AD than all community-dwelling adults, 37% vs. 15% (Jones, Moss, & Harris-Kojetin, 2011).

A medical respite center (MRC) in Maricopa County is currently seeking a policy and tool for AD completion. Other than asking new admissions for code status, the center acknowledges it does not have a means of introducing and addressing ADs. A recently opened sister clinic to provide continued healthcare to discharged respite patients also presents opportunities to include AD discussions as part of comprehensive care.

Similarly, a Maricopa County day resource center (DRC) for homeless individuals 55 years or older expressed interest in providing information on the topic. The director cited a recent incident when a patient suffered a heart attack and died on the premises as an example of the fragile health many clients exhibit. Social work, pastoral counseling, and nursing care is provided at the center, allowing varied opportunities to introduce the topic of ADs to clients.

**Problem Statement**

Elderly and chronically ill homeless stand to benefit significantly from completing an AD and have been shown amenable to doing so, but barriers to completion are significant. To explore how best to do so led to the PICOT question:
In homeless patients (P), how does an educational session explaining the purposes of an AD (I) compared to no education (C) affect rates of completion (O) within eight weeks of the intervention (T)?

**Search Strategy**

An exhaustive search of the literature was conducted, comprising four databases: CINAHL, PsychInfo, JSTOR, and PubMed, as well as the National Guidelines Clearing House and the Cochrane Library. In addition, grey literature was searched. The search terms were: “homeless,” “advance directive(s),” “mentally ill,” “schizophrenia,” “addiction,” “poverty,” “low-income,” and “advance care planning,” alone and in combination. Yields generally gleaned less than 10 studies, with the exception of “advance directives” alone, which resulted in over 4,400 results in CINAHL. When that search was limited to results available in full text, English, post-2009 publication, and randomized control trials (RCTs) with adults only, studies were winnowed to two. In addition, ancestry searches of relevant articles harvested several additional studies.

Of the four databases combed, ten studies were selected for inclusion, addressing each element of the PICOT (Appendix A). The studies comprise two systematic reviews, three RCTs, two cohort studies, and three cross-sectional studies. All studies were in English and published between 2008 and 2015.

**Appraisal and Conclusions**

Each study appears to be of reasonable quality and potentially contributory towards increasing AD completion among homeless patients in Arizona. Two are of Level I evidence, three of Level II, and five of Level III. Internal validity was based on generally few confounding variables, with the exception of race, despite the complexity of homeless culture and the myriad
demographic factors that could or have been shown to influence AD completion (Appendix B). The populations studied supported external validity: in half of the studies, they were homeless or recently homeless. In the majority, participants were ethnically mixed. Instrument reliability was consistent, primarily measuring nominal demographic data and ordinal data such as Likert scale responses (Appendix A). Likert scales were employed by several studies to measure attitudes. No bias was noted across the studies (Appendix A).

Independent and dependent variables were generally homogenous across the studies. One exception was the Payne, Prentice-Dunn & Allen study (2010), whose hypothesis was not supported by the evidence. The study was included because it shed light on how the method of delivering the educational content can affect participant response. Another was the Ganzini, Socherman, Duckart, and Shores (2010) study, which found veterans with schizophrenia and cancer received comparable or better EOL care than their counterparts with cancer but no schizophrenia. It was included because it addressed mental illness’s prominence in homeless culture. However, in terms of resources, veterans have a well-placed infrastructure for medical care and, more recently, for housing (Arizona Veterans Standdown Alliance [AVSA], n.d.). Therefore, it is reasonable to assume they will not be as prominent as non-veterans in the MRC’s or DRC’s patient base. Independent variables primarily comprised demographic characteristics, and the quality of the educational intervention. As the main dependent variable, completion of ADs was straightforward. Outcomes were also homogeneous – AD completion or willingness to do so, which allowed for synthesis.

Conclusions/Discussion

Generally, while homeless older adults recognize the importance of EOL planning, they do not regard it as a priority, in part because they are focused on fulfilling the needs of their
immediate future (Ko & Nelson-Becker, 2014). However, when offered the opportunity to complete an AD, they do so at the same or higher rates as the general population. The number of homeless individuals who opt to complete one ranges from 27% to 59%. (Song et al., 2008; Song et al., 2010; Leung, Nayyar, Sachdeva, Song, and Hwang, 2015). One study speculated that homeless persons are more responsive than their domiciled counterparts to interventions aimed at promoting ADs, possibly because those who are both chronically ill and homeless are doubly motivated to make known their EOL wishes (Leung et al., 2015). Low-income elderly patients, many of whom were recently homeless, are more willing to complete an AD when they rate their health as “poor” or “fair” (versus “good” or “better” health) and if they have an available healthcare proxy (Ko, Lee & Hong, 2015).

Conclusions about ethnicity and AD completion were difficult to draw. Whites were more likely to have an AD: 28%, compared to 21.4% of African-Americans and 10% of Hispanics (Ko & Lee, 2014). However, when knowledge was controlled for, race/ethnicity became nonsignificant. Two later studies, including one by the same lead researchers, found no significance in race/ethnicity among its White, Hispanic and Black participants (Ko, Lee & Hong, 2015; Leung et al., 2015).

Other factors noted to result in higher incidence of AD completion were prior ICU admission and higher income levels, as well as an association between filling out an AD and knowing what kind of EOL care the person desired but had not informed anyone of (Ko & Lee, 2013, Leung et al., 2015).

A counselor-guided intervention was more effective than a self-guided intervention at a rate of 37.9% compared to 12.8% (Song et al., 2010). The former intervention consisted of an appointment with a hospice social worker offered at the same location as initial recruitment.
Counselors were specially trained in the EOL concerns specific to homeless persons. Each encounter averaged 45 minutes. An earlier, smaller study by the same lead researchers noted results of 59% AD completion in the counselor-guided group compared to 30% in the self-guided group (Song et al., 2008).

The content of the educational intervention may influence outcomes. Payne, Prentice-Dunn and Allen (2010) posited that a 90-minute presentation that explicitly outlined the threats of not having an AD on EOL care would result in more completed ADs compared to a 90-minute presentation that discussed healthy aging but did not mention ADs. However, the opposite was the case. The authors attributed this unexpected result to the possibility that overwhelmingly threatening information may cause recipients to deny the content of the message and retreat into “fatalistic thinking” (p. 57).

Song et al.’s 2008 study used an AD adapted to the homeless population called HELP (Honoring End of Life Preferences) and included an educational session, either written or in person, about how to fill it out. Clients who completed it were more likely to report carrying contact information in case of emergency and a decrease in worry about receiving appropriate care if sick or dying (Song et al., 2008). They also reported a decrease in pessimism about the worth of ADs, which the authors interpreted as an enhancement of clients’ autonomy in a healthcare setting. Participants who completed an AD said their doing so made them feel at peace (75%) and think more about their health (65%), according to one study (Leung et al., 2015).

Initiatives tailored to a specific culture have proved successful. A 6-month pilot test to reduce disparities among completion of living wills and MPOAs for healthcare among African Americans and black immigrants in Minnesota improved results when the intervention was
adapted to the target population based upon their feedback. For example, rather than requiring only one individual be named as MPOA, the care coordinators allowed clients to name multiple family members (Agency for Healthcare Research and Quality, 2013). At the end of the pilot test, AD completion rate improved to 32% from 24.8% and narrowed the completion-rate gap between Blacks and Whites to 19.9% from 25.7%.

Available studies drew differing conclusions about whom homeless people chose as surrogate decision-makers. Some favored unrelated contacts such as service providers, friends, and romantic partners (Song et al., 2006). Many expressed a preference for their physicians over family members, because the former had more expertise about the patient’s situation (Ko & Nelson-Becker, 2014). However, a later and larger study found that 52% of homeless participants who opted to fill out an AD named a sibling as a surrogate decision-maker, 32% a child, and 22% a parent (Leung et al., 2015).

When homeless patients were asked if they would want CPR if they were in a permanent coma, over one-third said that they would; non-white participants were less likely than whites to specify no CPR (Leung et al., 2015; Song et al., 2010). Though it did not provide comparative numbers with non-homeless, one study concluded that homeless persons are more likely to want life-sustaining interventions such as CPR (Leung et al., 2015).

The homeless culture is a complex one whose elements cannot be easily parsed. Ethnicity, religiosity, comfort with discussing death, and past experiences with healthcare are among the many factors that influence a homeless person’s EOL wishes, just as they are for a non-homeless individual. A study of EOL attitudes among older low-income residents of supportive housing, one-third of whom had been homeless, found that greater religiosity resulted in higher likelihood of desiring treatment at end of life compared to less religious counterparts.
Likewise, residents who were less comfortable discussing death were more desirous of aggressive treatment at end of life. Alternatively, the Ko & Lee (2014) study found no difference in EOL preferences based on ethnicity.

Although the AAFP recommends the primary care setting for EOL discussions (Spoelhof and Elliott, 2012), homeless patients are less likely to access regular non-emergent care than domiciled patients. As an alternative, the NHCHC’s Respite Care Providers Network (RCPN) recommends medical respite centers as ideal places to introduce ADs. Such centers often have social workers who can assist patients in identifying appropriate individuals, including help locating relatives, to be surrogate decision-makers, and to assist the patient in notarizing and filing the documents (NHCHC, 2011).

Most studies did not specify the type of AD used, with a few notable exceptions. Song et al. (2008) utilized an AD called HELP (Honoring End of Life Preferences), designed specifically for marginalized groups and adapted for the purposes of the study to the homeless. A systematic review of 16 studies about the effectiveness of educational interventions on AD completion noted the Physician Orders for Life Sustaining Treatment (POLST) as a successful EOL plan that is an adjunct to an AD (Durbin, Fish, Bachman & Smith, 2010). It is for patients with serious illness to delineate their wishes for current treatment. Its video component is useful for patients with limited literacy (POLST, 2015). The review also referenced Five Wishes, which is reasonably priced and is also available in Spanish (Aging With Dignity, n.d.). Leung et al. (2015) used “My Living Will, An Ontario Advance Directive,” adapted from the Study of End-of-Life Preferences among Homeless People (SELPH) Advance Directive (2015). Both HELP and SELPH are based on Chochinov’s dignity-conserving care model (Song et al., 2008; Leung et al., 2015). Finally, the NHCHC (2011) includes in its clinical recommendations for respite care a
living will that appears designed for its population, with a section listing features for identification of the signee’s body (such as tattoos or scars) and a section called “Maintaining My Dignity,” which includes statements such as “I would want to be remembered as a person who:” (p. 47) and “These are my concerns about a relationship I have:” (p. 48).

**Potential Application to Practice**

ADs are meaningful tools for delivering desired care at end of life. Medical providers such as nurse practitioners (NPs), as well as non-medical providers, such as social workers, can increase the likelihood of homeless patients completing one by educating such patients on their purpose and offering the opportunity to fill one out at each encounter. Several studies have found that a simple one-time intervention – an educational session on the purpose and meaning of an AD – has been effective. It is something that can be done in a nonhospital setting by a variety of staff members who have received training on the subject. NPs can effect a practice change by training team members to deliver the education to clients. On the recipient end, studies show that homeless patients are amenable to filling out ADs.

Establishing trust is imperative to overcoming the experience-based biases this population may have against healthcare providers. Providers of care to homeless clients must examine their own biases as well and approach homeless patients with suspended judgment. At least one study demonstrated that, once trust is established, homeless individuals expressed a preference for physicians, rather than family members, to make EOL decisions for them (Leung et al., 2015). This is another impetus for providers who have regular contact with homeless patients to introduce the topic early in their relationship so wishes can be formalized by the time they are needed. The Affordable Care Act has increased access of previously uninsured Americans to healthcare, primarily through the expansion of Medicaid, in which the state of
Arizona is participating. Homeless individuals now have the potential to begin receiving primary care before their medical issues evolve to late stages requiring hospitalization.

The practical aspect of accessing ADs when they are needed is a hurdle that remains largely unaddressed in current research. One study, however, noted that all participants agreed to let the authors file their completed ADs at the two hospitals in its region most likely to provide care to homeless patients: a VA hospital and a county hospital (Song et al., 2010). This represents a potential means of storing and accessing completed ADs.

While some studies included specific AD examples adapted to the homeless population, none made explicit recommendations about which AD was most effective, by what means the ADs were adapted to the homeless, and what in particular (i.e., literacy, health literacy, language barriers) needed to be adapted. This too remains an area for further study.

**Summary**

Homeless individuals face significant barriers in accessing EOL care. Providing such care to this population will only gain in importance as homeless people age and are diagnosed with the same diseases as the general population, but without the same level of social and economic support. ADs have been shown to be an effective way of conveying EOL wishes when the patient is unable to express them. Among the homeless, ADs may also serve to empower a population saddled disproportionately with both greater disease burden and less access to healthcare.
Applied Clinical Project Methods and Results

The applied clinical project to increase AD completion among homeless clients was prepared and delivered to staff and clients of the two participating agencies within a two-week period, in accordance with approved ethical guidelines. The two agencies consisted of a medical respite center (MRC) and a day resource center (DRC) for individuals 55 years or older; both agencies exclusively serve people experiencing homelessness. Project execution of the evidence-based intervention varied somewhat according to each site’s environmental and organizational culture, but comprised essentially the same content.

EBP Model and Theoretical Model

Rosswurm and Larrabee’s (1999) evidenced-based model (Appendix C) is applicable to a primary-care setting and has been used to effectively establish practice changes that result in measurable outcomes. Step 1, assess the need for a change in practice, was accomplished by the MRC, which cited the need for a tool and policy for both the existing center and the planned outpatient primary-care clinic. The DRC likewise expressed a need to formalize clients’ EOL wishes given their age and relative health status. Step 2, linking the problems, interventions and outcomes, involved identifying educational sessions as a viable means of encouraging AD-completion among this population. Step 3, synthesizing the best evidence, included an exhaustive search of the literature, the identification of studies comparing the effects of an educational session to usual care, and the determination that the former is feasible, beneficial and minimally risky. Step 4, designing a practice change, is in progress, as each site has begun to informally incorporate AD education into its respective client interactions. Step 5, implementing and evaluating the change, began with conducting the educational intervention separately for staff and clients at each site, a total of four presentations. Pre- and post-surveys were completed
to measure changes in attitude and knowledge about ADs, and completed ADs eight weeks post-intervention were tallied. Step 6, integrating and maintaining the change, is in progress. It will likely involve working with major stakeholders to formally adapt the practice of educating clients for institutional use, including, in the case of the MRC, creation of a printed policy.

King’s Theory of Goal Attainment (King, 2007) provided an appropriate foundation on which an educational intervention to encourage AD completion among homeless patients could be built. The Theory of Goal Attainment is drawn from King’s (2007) conceptual framework of individuals existing and interacting amid three strata: personal, interpersonal, and social systems (Appendix D). Within this framework, the nurse-client relationship is key. “[Individuals] have a right to accept or reject health care. … Health professionals have a responsibility to share information that helps individuals make informed decisions about their health” (King, 2007, p. 109). Perception is a mutual concept drawn from the personal realm: The nurse must perceive when health education is appropriate for the client, while the client must perceive whether or not to make a decision (Goodwin et al., 2002). Interaction, a concept from the interpersonal stratum, is reflected in the nurse-patient education process early on and, later, in the nurse’s advocacy of the EOL wishes the patient has expressed (Goodwin et al., 2002). From the social stratum, power is reflected in that which the newly informed patient exercises when he or she decides whether to complete an AD and, if so, what is contained therein (Goodwin et al., 2002). On a macro level, King’s theory as it applies to AD completion rests on the ethical linchpin of patient self-determination.

**Project Methods**

**Ethics**
Arizona State University’s Institutional Review Board approval was sought and granted (Appendix E). A consent was provided both to staff and to clients, describing the project, its purpose, and what would be asked of those who chose to participate (Appendix F). Pre- and post-surveys were anonymous; participants provided a unique identification number to protect their identity. Risk to participants was defined as potential discomfort with the topic of EOL decision-making and status of relationships when asked to consider potential MPOAs. Participants were excluded if they did not speak or read English. Snacks were provided, but no financial remuneration was provided for participation.

**Setting**

The intervention was performed at two sites, the MRC and the DRC. Both are located in the state’s urban capital within four miles of each other; project participants could potentially qualify for services at both sites. While by definition the MRC’s clients have recently suffered a health crisis, clients of the DRC also experience frequent health needs, necessitating the presence of a nurse with a dedicated exam room who is available during week days. The DRC is open daily during daytime hours. It features a common room of tables and chairs where clients gather and converse or use the communal computers. Lunch is served daily. Clients are free to come and go at will.

By contrast, the MRC is a more structured environment. Its primary purpose is healing and so residents are expected to visit the on-site medical clinic at appointed times for daily medications, wound care, or to see the physician or physician assistant. Ancillary services are also provided, such as those designed to find clients secure housing upon discharge. Clients live on the premises, in gender-segregated dorms, with two private rooms reserved for isolation or hospice patients. All meals are provided in a communal dining area, and elective activities, such
as art classes, are offered, as are occasional field trips for clients healthy enough to make them. A chapel and common room with a television and several computers are also on site, as well as a shaded smoking patio in the parking lot, which is a popular gathering place. Clients must earn the privilege of leaving the facility, such as to walk next door to the convenience store. The nurses’ station is located on the same floor as patient dorms and medical clinic; glassed in, it is referred to as “the bubble.” Management’s and case workers’ offices are located on the ground floor. Staff-only sites are generally accessible only by badge. A security guard is always present on the campus.

**Organizational Culture**

Both sites’ leadership expressed enthusiasm for the evidence-based project and both had key individuals who articulated a need for it. The organizational culture of each site differed in significant ways, however. The DRC is the smaller of the two, with a staff of approximately 10 individuals. It had experienced a leadership change within the year, and staff were acclimating to a new executive director whose background was in fundraising, in contrast to the prior director, whose background was church-based. Furthermore, in the weeks prior to and during the execution of the intervention, the staff had experienced some emotional disequilibrium, including the terminal medical diagnosis of one employee and the expected departure of others in response to leadership changes. Physically, staff frequently encounter clients, who occupy a great room around which staff offices are clustered. When not engaged in private client consultations, the pastor and the case managers frequently leave their doors open, facilitating access. The executive staff occupies a front office with a view of the great room.

The MRC, by contrast, is a larger organization, occupying a former two-story office complex. Staff and client areas are kept separated by various means, including locking the door
of the medical clinic during posted closing times and badge entry required to access
administrative areas. Clients also require permission to leave the premises. As a result, client-
staff interaction is more structured, facilitated by appointment more so than chance encounters.
Also, in contrast to most of the DRC, the MRC’s staff either wears uniforms (scrubs, lab coats)
or business-casual dress, making them visually distinctive from clients.

Participants

Intervention participants comprised staff and selected clients at each facility. At the DRC,
the intervention was presented at a weekly staff meeting, which included the executive director,
two case workers, and the pastor (who is also the housing coordinator). The presentation was
followed by one in the center’s great room for the clients who happened to be gathered there, a
circumstance arranged primarily by a key stakeholder who had helped to coordinate the project
at the site. Although the event was advertised approximately one week prior with a posted flyer,
any participant who may have been deliberately present for the session was not identified.

The MRC presentation was conducted at the monthly nurses’ meeting. As with the DRC,
the staff presentation was followed by one for clients, this one in an unoccupied community
room. Unlike the DRC, however, participants were pre-screened to gauge interest in attending by
a key stakeholder who helped coordinate the project at the site.

Intervention

The educational intervention, an approximately 15-minute explanation of ADs and their
applicability to the needs of homeless clients, was performed separately for staff and clients at
each site, a total of four presentations. Each presentation proceeded similarly, with the
distribution of photocopied releases (one for staff, one for clients) and pre-survey (the same for
both staff and clients). The presentation was delivered using an easel and large note pad. Upon
conclusion of the presentation, the post-survey was distributed. The post-survey contained the same seven questions as the pre-survey, minus the demographic information.

**Outcome measures**

The pre- and post-survey was drawn from Murphy et al.’s (1996) study, “Ethnicity and advance care directives,” which developed an instrument titled “Ethnicity and attitudes toward advance care directives questionnaire.” Questions measuring knowledge of, attitude toward, and possession of an advance directive were excerpted for the intervention’s pre- and post-survey (Appendix G). They totaled seven questions, plus four demographic questions (gender, age, race, and marital status). The knowledge questions were definition-based: “What is a living will?” and “What is a medical power of attorney?” Responses were scored on a nominal scale: either correct or incorrect. The attitude questions’ responses were measured on a four-point Likert scale (i.e., 1 = agree strongly, to 4 = disagree strongly). For the purposes of the intervention, the wording of one question was adapted from “Doctors should …” to “Medical providers such as doctors, nurse practitioners, and physician assistants should ….” The questionnaire also asked if the respondent was already in possession of an AD. The Murphy et al. (1996) study noted the scale was derived from previously validated scales as well as new scales, which underwent testing for internal and external validity, including extensive pilot testing. Lead author Sheila T. Murphy did not respond to a personal email communication about specific coefficients relating to reliability and validity.

**Data collection and analysis plan**

Data was collected on site at the conclusion of each presentation. Eight client pre-surveys were distributed at the MRC, and eight post-surveys were collected, plus a ninth following a one-on-one presentation to a client who had later expressed interest. Six pre-surveys were distributed to MRC staff and six post-surveys collected. At the DRC, 31 pre-surveys were distributed to
clients and 19 returned. At the DRC, seven pre-surveys were distributed to staff and six post-surveys collected. Data was first entered into an Excel spreadsheet to preserve it and to provide a basic idea of demographics and survey responses. The Excel spreadsheet was subsequently imported into SPSS 22, where data were analyzed for errors and for case summaries. Thirteen cases were thrown out because they could not be matched, leaving 40 matched pairs: 24 from the DRC and 16 from the MRC. A McNemar’s test was used to analyze improvements in knowledge about a living will and medical power of attorney. A Wilcoxon signed-rank test was used to analyze changes in attitudes about advance directives.

**Proposed budget**

Cost outlays for the intervention itself totaled approximately $200 for office supplies, snacks and photocopies (Appendix H). This included compiling and binding booklets containing examples of collected ADs for focus groups from each agency to peruse and rate. An additional $120 was spent by the project’s author on an online training course in facilitating AD discussions in order to better inform the presentation.

The agencies’ budget for sustaining the delivery of AD facilitation is virtually free for materials. The directives themselves are downloadable at no cost from various World Wide Web sites, as are wallet cards and access to sites that provide supplementary information for staff and clients who seek it. Photocopying downloaded documents and completed documents for inclusion in patient files incur a minor cost, though one that is unlikely to be prohibitive, even given each agencies’ presumed frugal budgets. Staff time required to deliver education to current and future clients is less easily monetized, though perhaps more significant.
Project Results

A total of 92 surveys were collected: 51 pre-surveys were distributed and 41 were returned. A total of 14 staff members were surveyed, and 37 clients. Twenty-seven respondents were female; the remaining 23 were male. Average age was 57.5 years (SD 10.0). Thirty-two, or 65.3%, of respondents were Caucasian; 10, or 20.4%, were Hispanic; the remainder, or 14.3%, were African-American (Appendix I).

Staff members were divided equally between agencies (seven participants at each site). Women comprised slightly over two-thirds of surveyed staff. All staff were Caucasian with the exception of one African-American member. Average age was 47.8 years (SD 13.1). More participants were married versus single. Approximately two-thirds stated they already had ADs.

Among clients, nearly three-quarters, 72.3%, were DRC clients. Respondents were nearly equally divided in terms of gender (19 males versus 18 females). Average age was 60.9 years (SD 5.7). Over half, 56%, were Caucasian, with Hispanics comprising 28% and African-Americans 17%. The vast majority, 89%, were unmarried. Likewise, most – 85% -- did not currently have an AD.

A McNemar’s test determined that the intervention significantly improved knowledge of a living will \( (p = .013, N = 40) \), but not of the MPOA.

A Wilcoxon signed-rank test revealed no statistically significant improvement in attitudes about AD completion following the educational intervention. The result was the same when run for clients only, as well as for total participants (clients and staff) (Appendix J). While attitudes did not change significantly, they did more positively favor ADs in two of the four areas explored post-intervention (Appendix K). Following the intervention, increased disagreement registered with the statements “It is best to wait until the situation arises to make decisions about
treated very serious illness, rather than writing them down in advance,” \( z = -0.666, p = 0.506 \), and

“It is not necessary for people to write down their wishes about medical care because their family
will know what to do when the time comes,” \( z = -1.137, p = 0.256 \).

Two clients, both at the MRC, completed documents. One of the two completed an AD at the conclusion of the presentation. A second client, who received a one-on-one educational
session later that same day, completed an MPOA eight weeks later.

**Discussion**

The literature indicates that, when given the opportunity, homeless individuals are as likely or more likely than the general population to complete an AD (Song et al., 2008; Song et
al., 2010; Leung et al., 2015). Two of nine clients, 22%, completed the document at the MRC;
one did at the DRC. Results thus fell short of 26%, the percent of the general population with ADs (NHPCO, 2013). Implicit in the studies is the idea that informing homeless individuals about the purpose of ADs increases their knowledge and reshapes attitudes, thus presumably leading to completion of the document. In this regard, the intervention was partially successful: It significantly increased knowledge about one of the two documents comprising an AD and insignificantly improved attitudes.

Project strengths include the relative simplicity and inexpensiveness of providing the intervention. Feedback from staff at both agencies was positive about the content and delivery of the intervention, which lays the groundwork for sustainability by staff in delivering future interventions to clients.

Limitations include the fact that client participation, while voluntary, was not necessarily motivated by interest at the DRC, where the presentation was given to those who happened to be present at the time. Comprehension of the survey may have been limited by poor eyesight, poor
literacy, limited comprehension of English, and physical or mental infirmities. The sample size, 40, was small. It was observed that African-American clients were less willing to participate, and so participation may not accurately reflect the racial makeup of total clients. Furthermore, while a strength of the proposed intervention is its applicability beyond strictly medical staff, only nurses received the education at the MRC, potentially limiting the types of staff capable and willing to sustain further education.

**Conclusion**

A simple and inexpensive educational intervention resulted in a significant knowledge increase among staff and clients of two agencies serving the homeless, as well as the completion of two ADs by clients. The intervention’s basis in King’s (2007) Theory of Goal Attainment guided the interaction between presenter and clients and provided the foundation for future interaction between agency staff and clients in a manner adapted to the social context in which homeless older adults and those who are chronically and/or acutely ill dwell. Based upon minimally significant results, the intervention requires further finessing in order to be truly effective in the goal of expressing and therefore facilitating EOL wishes by a marginalized segment of the population.
Organizational/Health Policy Impact and Sustainability

The project to increase AD completion by homeless clients of two agencies achieved modest statistical success and holds promise for clinical sustainability, though certain challenges must be overcome. The circumstance of performing the project at two sites, which share broad similarities but differ in key ways, allowed insight into factors that may help or hinder impact and sustainability when attempting an educational intervention to shape knowledge and attitudes about ADs with the intention of increasing their completion.

Impact of project at practice sites

The project resulted in one statistically significant result, the improvement of knowledge of a living will \((p = .013, N = 40)\). Two of nine clients \((22\%)\) at the MRC completed an AD. The intervention for both nursing staff and clients resulted in the later completion of one of those documents. “Thanks to [the intervention], we had them [the directives] on hand and the nurse could answer the patient’s initial questions,” the nurse manager stated (S. Bone, personal communication, January 13, 2016). A formal policy is being developed to make the introduction and discussion of the documents a consistent part of the new-patient intake process and subsequent encounters. The policy draft is tentatively scheduled to be completed by May 2016 for stakeholder review.

At the DRC, no documents were completed. Clinically, discussion of the project (before its actual execution) had an immediate influence on institutional process, with intake staff preemptively asking new clients about ADs and referring them to social workers to complete, if appropriate. By that method, the DRC reported the completion of approximately 10 to 12 documents (O. Munoz, personal communication, November 23, 2015). However, this informal process appeared to lapse over time, in part due to staff changes, discussed in more detail below.
Financial implications of project

Cost outlays for the intervention itself totaled approximately $200, with an additional $120 spend by the project’s author on an optional online training module in order to better inform the presentation. Cost to the agencies of incorporating AD education into their policies is minimal, as the documents, wallet cards, and supplementary information are all available free of charge via the Internet.

Staff time required to deliver education to current and future clients, however, incurs a cost in terms of lost opportunities to perform other client-related tasks. As the DRC situation illustrates, advance-care planning has less priority than other tasks: Staff losses have required remaining staff to take on more duties, with a result that AD discussions with clients have been tabled. One reason is certainly that the documents are prepared for use at an unknown future time, while more pressing matters, such as putting clients in stable housing, demand immediate attention. Another reason may be that the financial benefit to implementing the project is not remunerative to the participating agencies; any financial boon is likely to be seen diffusely, in the reduction of healthcare costs associated with EOL care. However, given the minimal cost outlays, the cost-to-benefit ratio would not be expected to be prohibitively negative.

Impact of current policy

As of January 1, 2016, the Centers for Medicare and Medicaid Services (CMS) began reimbursing providers for advance-care planning discussions with patients. It is too early to tell whether such discussions have increased as a result, but some experts expect that they will (AHC Media, 2016). The American Academy of Family Physicians (AAFP), for example, officially encourages its members to discuss advance-care planning in a non-emergent setting (AAFP, 2015). Because many previously uninsured individuals in Arizona now qualify for Medicaid
coverage since its expansion in 2014 as part of the implementation of the Affordable Care Act, more clients can be expected to seek non-emergent medical care, providing more opportunities for advance-care planning discussions, including the completion of ADs.

**Leader and innovator role**

Both agencies were approached about performing an educational intervention for staff and clients on the subject of ADs. Both responded with enthusiasm. The MRC additionally requested that the intervention culminate in a written policy for addressing the subject with clients.

Barriers to implementation included arranging time with staff; agency upheaval; and variable client interest. Arranging staff time was most challenging at the MRC. While the nursing staff was readily available and allotted time at a monthly meeting for the intervention, scheduling time with other disciplines proved more difficult. Because advance-care planning can be done by non-medical staff – indeed, that is one of its strengths – it was important that social workers, the intake coordinator, and the volunteer coordinator receive the education and be included in the drafting of the policy. Perhaps due to the agency’s small size and high patient census at the time of the intervention, scheduling time with the intake and volunteer coordinators took several weeks of attempts via email and text. Because stakeholder buy-in is key to sustaining any eventual policy (Porter-O’Grady & Malloch, 2015), assiduous continued efforts to schedule time with the remaining employees will be attempted, even if it means delaying the drafting of a policy past the self-determined deadline of May 2016.

As mentioned above, the DRC experienced significant staff changes, beginning with new leadership and continuing with the loss, both expected and unexpected, of key staff, including the intake coordinator and the chaplain, the latter of whom served a dual role as the housing
coordinator. Regular updates will continue to be sought from remaining key stakeholders in order to assess a time that is more opportune for revisiting formal implementation of a sustainable process and policy.

One measure of successful project implementation was the number of directives completed by clients, post-intervention. Clients did so solely at the MRC, where the client intervention group was self-selected. (A nurse there also changed her MPOA as a result of the intervention [personal communication, S. Bone, December 7, 2015].) One of the lessons learned from the opportunity to present at two sites is that the self-selected audience was more amenable to receiving information about advance-care planning than the convenience sample, which was the case at the DRC, where no directives were completed as a result of the intervention. This knowledge will inform future project implementation at other sites.

**Sustainability plan**

At the DRC, an initial push to discuss ADs with new clients and route those interested to social workers for completion lapsed over time. The organization, whose employees originally numbered approximately 10 at the time of the intervention subsequently lost at least four staff members, including one to death. Those remaining have had to temporarily take on additional duties, challenging their ability to discuss ADs with clients (personal communication, O. Munoz, February 8, 2016). Although remaining staff have expressed a commitment to restoring regular discussion of ADs with clients, there is currently no formal process in place to do so. As stated above, key stakeholders will be queried intermittently to identify a time and willingness to attempt establishment of a consistent policy for AD discussion.

At the MRC, a formal policy is in development that will likely entail introducing the topic with the initial intake interview and revisiting it in successive client-staff encounters, such
as medical and social-work appointments. The agency recently converted its electronic medical record (EMR) to the Athena system, whose charting is configured to ask new clients about the presence of a directive. At a new client interview, the intake coordinator was observed asking the client whether she had such a document. Later, the intake coordinator stated that he formerly did not routinely ask when using the agency’s old EMR system, which was not similarly designed. So structurally, the agency now has technology in place that is conducive to sustainability. As noted above, nursing staff have begun to implement the as-yet-determined policy informally, while stakeholder buy-in from other key agency employees will continue to be sought.

**Implications for further application, study and research**

The presentation has since been delivered to interdisciplinary staff at a third agency that provides medical services to homeless patients. The clinic’s medical director had requested the presentation with the stated intention of instituting a more consistent approach to advance-care planning. A potential future site for implementation is the interscholastic, interprofessional clinic that operates at the same facility, but on Saturdays, and with different providers. A 90-minute variation of the intervention was also presented prior to formal implementation at a state conference about homelessness.

Nationally, conferences directed at healthcare providers and the underserved are opportunities to present the project. Examples include the annual National Healthcare for the Homeless Conference; the Southwest Regional Nurse Practitioner Symposium; the American Nursing Association annual conference; and the National Hospice and Palliative Care Association conference.

The somewhat lackluster results of the intervention’s initial iteration suggest that further honing is in order, with the goal of determining more effective means of increasing AD
completion via such methods as improving knowledge of and attitudes about the documents. Developing a pre- and post-survey instrument specific to the population is an area for further research. Collaborators potentially include the two agencies that participated in the project implementation, as well as the interscholastic clinic, which has a notable research emphasis.

**Gaps identified during project**

No instrument measuring homeless clients’ attitudes and knowledge of ADs was identified during the initial and subsequent literature searches. The instrument used in the intervention was adapted from a tool derived for ethnic minorities. The culture specific to the homeless population – for example, a higher likelihood of an SMI diagnosis and/or substance abuse – may require a tool that takes such conditions into account. Additionally, the population targeted by the intervention was older, which may have meant the possibility of sensory deficits such as impaired eyesight, that could have negatively affected comprehension of the instrument.

The results of the applied project did not reflect those promised by the literature. One potential factor has been described above: existing client interest versus a convenience sample. Other potential gaps include language limitations and staff resources. The intervention and pre- and post-survey were conducted in English, which automatically excluded participants for whom English is not their primary language. According to the literature, a one-on-one counseling session is more successful than a self-directed one (Leung et al., 2015; Song et al, 2010). Other than the single one-on-one session with the MRC client described above, agencies may not have the resources to dedicate to similar encounters.

Finally, the project does not include homeless individuals who do not receive social services and who therefore do not have ties to an agency whose staff could provide the education
and opportunity to complete an AD. To truly address health equity, all homeless individuals should be given the opportunity to complete a directive.

**Conclusion: Project summary and significance**

Executed within the structure described by Rosswurm and Larrabee (1999), the applied clinical project resulted in an increase in knowledge of a living will; the completion of ADs by two clients and one staff member as a direct result, and as many as 12 clients, as an indirect result; and the development of a formal policy at one of the two participating agencies. The results, while concrete, suggest the intervention can be improved. Two potential ways identified from both the literature and the project are assessing client interest before delivering the education and one-on-one counseling, if feasible. King’s Theory of Goal Attainment (Goodwin et al., 2002) supports the former method with its tenet that the nurse must perceive that the client is ready for the education and subsequent decision-making.

Institutional culture will influence the project’s sustainability. Within the more structured environment of the MRC, the development of a formal policy promises more consistent adherence; while at the DRC, where staff upheaval has challenged new practices from taking root, maintaining the commitment of key stakeholders until the turbulence resolves may be a more effective strategy. Academically, the design of an instrument measuring attitudes and knowledge of ADs that is specific to the homeless culture may elicit more useful data and remains an area ripe for further research.

The aging of the homeless population, expanded Medicare coverage for Arizona residents, and CMS reimbursement for advance-planning discussions create conditions favorable to increased completion by homeless patients of ADs. However, the small size and budget of
many agencies that cater to the homeless mean such agencies tend to be buffeted more by destabilizing forces including staff changes, which is a challenge for sustainability.

In summary, educating homeless individuals and the social-services staff who interact with them is a proven way to address health inequities in EOL care. The intervention must be delivered, however, in a way that is tailored to accommodate the exigencies of the population, as well as of the agencies that serve them. There are compelling reasons such strategies should be honed: Completing an AD empowers a medically and socially vulnerable section of the population to voice their preferences, assuage their fears, and reduce expensive and undesired medical care at the end of life. The act of writing down one’s EOL wishes is simple, inexpensive, and, when utilized effectively, empowering.
References


American Nurses Association. (2010). Registered nurses roles and responsibilities in providing


Department of Health and Human Services.


U.S. Department of Housing and Urban Development. (November 2015). The 2015 annual
homeless assessment report (AHAR) to Congress. Retrieved from

synthesis of the literature using the equity of access to medical care framework. *Journal of Primary Care & Community Health* 6(22), 77-87. doi: 10.1177/2150131914556122
### Table 1

**Evaluation Table**

<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency for Healthcare Research and Quality (2014)</td>
<td>King’s Theory of Goal Attainment</td>
<td>SR (RCTs; controlled trials, no randomization; observational studies; expert opinion)</td>
<td>N = ns</td>
<td>Recommendations:</td>
<td>multiple</td>
<td>Review</td>
<td>NS</td>
<td>Level 1</td>
</tr>
<tr>
<td>Advance care planning, Michigan Quality Improvement Consortium USA</td>
<td>Purpose: To improve advance care planning through EB clinical practice guidelines</td>
<td>Target population: Patients whose death in 12 mo would not be surprising; with chronic, life-limiting illness experiencing worsening symptoms; &gt;55 yo in any stage of health</td>
<td>Age: ns</td>
<td>IV1: Help pt. ID a surrogate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gender: ns</td>
<td></td>
<td>IV2: Incorporate pt.’s goals, preferences, and choices into the AD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Race: ns</td>
<td></td>
<td>IV3: Encourage pt. to complete an AD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Setting: ns</td>
<td></td>
<td>IV4: Encourage pt. to discuss preferences w/surrogate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detering, Hancock, Reade, &amp; Silvester (2010)</td>
<td>Roy’s Adaptation Model</td>
<td>RCT</td>
<td>N=309 (n=154 intervention: ACP, n=154 control)</td>
<td>IV1: Formal ACP using Respecting Patient Choices model</td>
<td>T tests</td>
<td>DV1: 85% EOL wishes known and followed c/t 30% control (p&lt;0.001)</td>
<td>DV1: 85% EOL wishes known and followed c/t 30% control (p&lt;0.001)</td>
<td>Level II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Age: 84 (84 control) Gender: 54% M (41% control) Race: NS Setting: Melbourne university hospital Inclusion criteria: ≥ 80 yo, legally competent, English-speaking, expected hospitalization &gt;24 hours</td>
<td>IV2: UC</td>
<td>Mann-Whitney U tests</td>
<td>83% satisfaction w/quality of death vs. 48% control (p=0.02)</td>
<td>&lt; stress (p&lt;0.001), &lt;anxiety (p=0.02), &lt; depression (p=0.002)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>DV: Proportion of pts. who died and whose EOL wishes were respected</td>
<td>X² tests</td>
<td>Fisher exact tests</td>
<td>Harm: None noted</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Pro’s: intervention by trained, nonmedical staff, Respecting Patient Choices has been implemented in US</td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Durbin, et al (2010)</td>
<td>King's Theory of Goal Attainment</td>
<td>SR</td>
<td>16 studies (12 RCTs, 4 non-randomized)</td>
<td>IV1: RCTs re: Single educational (written, verbal, video, computer)</td>
<td># of completed AD’s</td>
<td>NS</td>
<td>Combo written/verbal educational intervention &gt; single written intervention in adult clinic outpatients and hospitalized elderly (p &lt; .05)</td>
<td>Level I</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Age: 26-93 yo Gender: F&gt;M Race: Wh, Bl Setting: US, Canada outpt. hospitals, inpt. hospitals, community-based</td>
<td>IV2: Combo educational (written + video, verbal + video, verbal + computer, written + verbal + video)</td>
<td></td>
<td></td>
<td>Pro's: Highest LOE, Con’s: Tepid conclusions about effectiveness of interventions</td>
<td>Harm: None noted</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Inclusion criteria: described educational interventions, provided info to calculate % of completed AD’s, publication 1991-2009</td>
<td>Combo written + verbal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>DV: No. of completed AD’s</td>
<td>Combo written + computer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ganzini et al. (2010)</td>
<td>Roy’s Adaptation Model</td>
<td>Cross-sectional Purpose: compare EOL care between veterans w/ and w/out schizophrenia who died of cancer</td>
<td>N = 256 n = 60 Age: 64 ave. Gender: M Race: NS Setting: VA data from 7 medical centers in Oregon, Wash., Alaska Inclusion criteria: Vet’s who died of cancer betw. 2003 – 2008, schizophrenia or schizoaffective dx, attendance at min. 1 mental health OP appt., prescribed antipsychotic</td>
<td>IV1: SMI dx DV: No. of completed AD’s or POLST’s</td>
<td>Percentage of AD’s and POLST’s</td>
<td>Student’s t test, chi square test (2-tailed)</td>
<td>DV1: 58% vet’s w/SMI &gt; had AD, more likely to have POLST (No significant difference from non-SMI vet’s.)</td>
<td>Level III Pro’s: Addresses SMI’s influence on AD completion Con’s: May not be generalizable beyond veterans Harm: None noted</td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion of advance directives among low-income older adults: does race/ethnicity matter?</td>
<td></td>
<td></td>
<td>Age: 71 ave. Gender: M/F Race: Wh, H, Bl</td>
<td>IV2: Knowledge of AD’s</td>
<td>Chi-square test</td>
<td>DV2: Wh &gt; AD knowledge than other races; those w/knowledge 15x &gt; complete AD’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td></td>
<td>Setting: 2 Calif. supportive housing facilities and a senior center</td>
<td>IV3: Attitudes towards AD’s</td>
<td>Behaviors in AD completion</td>
<td>Hierarchical logistic regression</td>
<td>DV3: Wh &gt; (+) attitudes towards AD than other races</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Funding: John A. Hartford Foundation</td>
<td></td>
<td></td>
<td>IV4: Health-related variables (having a PCP, recent ICU admission, chronic health conditions)</td>
<td>AD knowledge (questionnaire)</td>
<td>Monte Carlo Markov Chain multiple imputation techniques</td>
<td>DV4: Previous ICU admission 4.3x &gt; complete AD’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bias: none noted</td>
<td></td>
<td></td>
<td>IV5: Sociodemographic variables (age, gender, education, religion, income, recent homelessness)</td>
<td>attitudes toward AD’s and distrust toward local h/c (Health Care System Distrust Scale)</td>
<td></td>
<td>DV5: Wh (27.6%) AD completion c/t Bl (21.4%) and</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
Higher income 2.4x > complete AD

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/ Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ko, Lee &amp; Hong (2015)</td>
<td>King’s Theory of Goal Attainment</td>
<td>Cross-sectional</td>
<td>N = 204 Age: 70.8 ave Gender: M/F Race: Wh, H, Bl Setting: 2 San Diego HUD public housing programs for low-income adults, incl. previously homeless, 1 sr. ctr.</td>
<td>IV1: self-rated health IV2: Availability of h/c proxy IV3: attitudes re: AD’s IV4: social support s</td>
<td>Willingness to complete an AD</td>
<td>t-test chi-square test hierarchical logistic regression Markow chain Monte Carlo multiple imputation</td>
<td>DV1: Fair to poor health= 53.7% willingness to complete AD’s (OR=1.43, 95% CI=1.07-1.90) c/t good to better health (46.2%) DV2: Availability potential h/c proxy 73% willingness to complete AD c/t 57% DV3: + attitude towards AD &gt; AD willingness (t[202]=2.26, p=0.02) DV4: &gt;social</td>
<td>Level III Pro’s: Hispanic and Black participants equal voice as Whites, Spanish-language participants included, provides insight into willingness to fill out AD Con’s: Lower LOE Harm: None noted</td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
street, 25% in shelters, 14.6% in transitional housing, 47% w/friends or family because of housing issues  

|街 | 25%在庇护所, 14.6%在过渡性住房, 47%与朋友或家人因为住房问题 |

support = > AD willingness (t[202]=2.11, p=0.04)DV1: 72% willing to complete AD  

|支持 = > AD意愿 (t[202]=2.11, p=0.04) DV1: 72%愿意完成AD |

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White  

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/ Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leung, et al (2015)</td>
<td>King’s Theory of Goal Attainment</td>
<td>Cohort Study</td>
<td>N = 205</td>
<td>IV1: socio-demographic characteristics, health status, use of home care services on completion rates</td>
<td>No. of completed AD’s</td>
<td>Chi-square tests, T tests, Mann-Whitney U tests, Wilcoxon signed-rank test</td>
<td>50.2% completed AD (p &gt; .05)</td>
<td>Level III</td>
</tr>
<tr>
<td></td>
<td>Chronicly homeless persons’ participation in an advance directive intervention: a cohort study in Canada</td>
<td>Purpose: To determine rate of AD completion w/CG intervention, identify characteristics assoc. w/AD completion, and describe EOL preferences among chronically homeless</td>
<td>Age: 55 ave. Gender: M Race: 70% Wh, 8.8% Bl, 11.2% Asian, 6.8% NA Setting: Toronto homeless shelter Inclusion criteria: English, shelter resident, decisional capacity</td>
<td>IV2: Knowledge of EOL wishes but haven’t told anyone</td>
<td>DV: No. of completed AD’s</td>
<td>DV1: Socio-demographic characteristics, health status, home care use not associated w/completion (p &gt; .05)</td>
<td>Pro’s: Inexpensive intervention, limned HP’s attitudes towards EOL, non-specialist utilization broadens generalizability</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gender: M Race: 80% Wh, 10% Bl, 10% NA Setting: Toronto homeless shelter Inclusion criteria: English, shelter resident, decisional capacity</td>
<td>DV2 &gt; complete AD (p=0.001)</td>
<td>Additional findings: 61.2% named proxy (p &gt; .05)</td>
<td>DV4: 94.1% want CPR (p &gt; .05)</td>
<td>Con’s: lower LOE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Race: 70% Wh, 15% Bl, 15% NA Setting: Toronto homeless shelter Inclusion criteria: English, shelter resident, decisional capacity</td>
<td>DV3 &gt; complete AD (p=0.001)</td>
<td>Additional findings: 61.2% named proxy (p &gt; .05)</td>
<td>DV4: 94.1% want CPR (p &gt; .05)</td>
<td>Harm: None noted</td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payne, Prentice-Dunn &amp; Allen (2010)</td>
<td>Protection Motivation Theory, Socioemotional Selectivity Theory</td>
<td>Non-randomized cohort study</td>
<td>N = 42 (n = 19 PMT, n = 23 health aging)</td>
<td>IV1: Protection Motivation Theory Intervention, IV2: health aging intervention</td>
<td>Health measure (SF-20 physical functioning subscale), AD questionnaire, Demographic questionnaire, Mental Status Questionnaire</td>
<td>ANCOVA Chi-square test, DV: PMT intervention &lt; health aging intervention in AD completion</td>
<td>Level III Pro’s: Con’s: Small sample size, tepid results Harm: None noted</td>
<td></td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Song, et al (2010)</td>
<td>King’s Theory of Goal Attainment</td>
<td>RCT</td>
<td>N = 262 HP (n = 145 counselor-guided group; n = 117 self-guided group)</td>
<td>IV1: Counselor-guided IV2: Self-guided DV: No. of completed AD’s, attendance at counseling session</td>
<td>Rate of AD completion measured by completed doc’s</td>
<td>2-sided Fisher exact tests Breslow-Day test for homogeneity Mantel-Haenszel odds ratio</td>
<td>26.7% completion rate (total) (95% CI) DV1: 37.9% completion rate (counselor-guided group) DV2: 12.8% self-guided group (p &lt; .001)</td>
<td>Level II Pro’s: inexpensive intervention, similar population, Large sample size, social service agency sites similar to mine Con’s: SELPH AD apparently no longer available (unable to find further info) Harm: None noted</td>
</tr>
</tbody>
</table>

ACP = Advance Care Planning, AD = Advance Directive, BI = Black, CG = Counselor Guided, EOL = End of Life, H = Hispanic, HP = Homeless Population, NA = Native American, ns = not stated, OP = outpatient, PCP = Primary Care Physician, PMT = Protection Motivation Theory, POLST = Physician’s Orders for Life-Sustaining Treatment, RCT = Randomized Control Trial, SG = Self Guided, SR = Systematic Review, UC = Usual Care, Wh = White
<table>
<thead>
<tr>
<th>Title/Author Citation</th>
<th>Theoretical Framework</th>
<th>Study Design</th>
<th>Sample/Setting</th>
<th>Variables</th>
<th>Measurement</th>
<th>Data Analysis</th>
<th>Findings</th>
<th>Application to Practice/Decision for Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Song, Wall, et al (2008)</td>
<td>King’s Theory of Goal Attainment</td>
<td>RCT</td>
<td>Purpose: To determine whether HP will complete an AD</td>
<td>N = 59 n = 29 CG group n = 30 SG group</td>
<td>Rate of AD completion 3-mo f/u EOL-related knowledge, attitude, behaviors</td>
<td>Fisher’s exact tests Cochran-Armitage trend tests</td>
<td>44% AD completion (p = .02) DV1: 59% AD completion CG group 30% AD completion SG only group</td>
<td>Level II Pro’s: Similar setting, AD geared specifically to HP, provides AD example Con’s: Convenience sample, small sample, limited to English-speakers, minimal Hispanics in sample Harm: None noted</td>
</tr>
</tbody>
</table>

**Note:**
- AD = Advance Directive
- B = Black
- CS = Cross Sectional
- EOL = End of Life
- H = Hispanic
- HC = Health Care
- NA = Native American
- RCT = Randomized Control Trial
- SR = Systematic Review
- UC = Usual Care
- W = White
| AD = Advance Directive, B = Black, CS = Cross Sectional, EOL = End of Life, H = Hispanic, HC = Health Care, NA = Native American, RCT = Randomized Control Trial, SR = Systematic Review, UC = Usual Care, W = White | previous 6 mo’s |
## Synthesis Table

<table>
<thead>
<tr>
<th>Study Design</th>
<th>AHRQ</th>
<th>Detering</th>
<th>Durbin</th>
<th>Ganzini</th>
<th>Ko/Lee</th>
<th>Ko/Lee/Hong</th>
<th>Leung</th>
<th>Payne</th>
<th>Song1</th>
<th>Song2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RCT</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Cohort       |        |          |        |        |        |             |       |       |       |       |
| Theoretical Framework | Roy’s Adaptation Model | X | X | | | | | | | |
| King’s Th. Of Goal Attainment | X | X | | X | X | X | | | | |
| Transtheoretical Model | | | | | X | | | | | |
| Protection Motivation Th. | | | | | | | | | X | |
| Socioemotional selectivity Th. | | | | | | | | | X | |

| Country | USA | Canada | Australia | |
|---------|-----|--------|-----------|
|         | X   | X      | X         | X |
|         |     |        |           |   |

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Age**</th>
<th>Gender</th>
<th>Race</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ns</td>
<td>M/F</td>
<td>B, W</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>M/F</td>
<td>B, W</td>
</tr>
<tr>
<td></td>
<td>29-93</td>
<td>F&gt;M</td>
<td>B, W, H</td>
</tr>
<tr>
<td></td>
<td>64</td>
<td>F&gt;M</td>
<td>B, W, H</td>
</tr>
<tr>
<td></td>
<td>71</td>
<td>M/F</td>
<td>B, W, A</td>
</tr>
<tr>
<td></td>
<td>71</td>
<td>M/F</td>
<td>W&gt;B</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>M&gt;F</td>
<td>B, W, NA</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>M&gt;F</td>
<td>B, W, NA, H</td>
</tr>
<tr>
<td></td>
<td>18-74</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AD = Advance Directive, B = Black, CS = Cross Sectional, EOL = End of Life, H = Hispanic, HC = Health Care, NA = Native American, RCT = Randomized Control Trial, SR = Systematic Review, UC = Usual Care, W = White
<table>
<thead>
<tr>
<th>Homeless</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UC</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formal ACP</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single edu.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combo edu.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schizophrenia dx</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitudes towards AD</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-rated health</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability hc proxy</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socioemotional selectivity theory intervention</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD completion</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>EOL wishes respected</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pt./family satisfaction w/hospital</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willingness to</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

AD = Advance Directive, B = Black, CS = Cross Sectional, EOL = End of Life, H = Hispanic, HC = Health Care, NA = Native American, RCT = Randomized Control Trial, SR = Systematic Review, UC = Usual Care, W = White
<table>
<thead>
<tr>
<th>complete AD</th>
<th>Worry about death</th>
<th>Outcomes</th>
<th>&gt;AD completion</th>
<th>&gt;EOL wishes respected</th>
<th>&gt;pt./family hospital satisfaction</th>
<th>HC proxy named</th>
<th>&gt;willingness to complete AD</th>
<th>&lt;worry about death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&lt;X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

AD = Advance Directive, B = Black, CS = Cross Sectional, EOL = End of Life, H = Hispanic, HC = Health Care, NA = Native American, RCT = Randomized Control Trial, SR = Systematic Review, UC = Usual Care, W = White
Appendix C

Rosswurm & Larrabee's Evidence Based Model

1. Assess need for change in practice
   - Include stakeholders
   - Collect internal data about current practice
   - Compare internal data with external data
   - Identify problem

2. Link problem and outcomes
   - Use standardized classification systems and language
   - Identify potential interventions and activities
   - Select outcomes indicators

3. Synthesize best evidence
   - Search research literature related to major variables
   - Critique and weigh evidence
   - Synthesize best evidence
   - Assess feasibility, benefits, and risk

4. Design practice change
   - Define proposed change
   - Identify needed resources
   - Plan implementation process
   - Define outcomes

5. Implement and evaluate change in practice
   - Pilot study demonstration
   - Evaluate process and outcome
   - Decide to adopt, adopt, or reject practice change

6. Integrate and maintain change in practice
   - Communicate recommended change to stakeholders
   - Present staff inservice education on change in practice
   - Integrate into standards of practice
   - Monitor process and outcomes

Source: Urol Nurs © 2005 Society of Urologic Nurses and Associates
Appendix D

King’s Theory of Goal Attainment

Figure 1
King’s Dynamic Interacting Systems (King, 1980, p. 20)
Appendix E

IRB Approval

APPROVAL: EXPEDITED REVIEW

Laurie Baker
CONHI - DNP
-Laurie.A.Baker@asu.edu

Dear Laurie Baker:

On 9/1/2015 the ASU IRB reviewed the following protocol:

<table>
<thead>
<tr>
<th>Type of Review:</th>
<th>Initial Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>An Educational Intervention to Improve Advance Directive Completion Rates Among Homeless Clients of a Medical Respite Center and Day Resource Center</td>
</tr>
<tr>
<td>Investigator:</td>
<td>Laurie Baker</td>
</tr>
<tr>
<td>IRB ID:</td>
<td>STUDY00003045</td>
</tr>
<tr>
<td>Category of review:</td>
<td>(7)(b) Social science methods, (7)(a) Behavioral research</td>
</tr>
<tr>
<td>Funding:</td>
<td>None</td>
</tr>
<tr>
<td>Grant Title:</td>
<td>None</td>
</tr>
<tr>
<td>Grant ID:</td>
<td>None</td>
</tr>
</tbody>
</table>
| Documents Reviewed: | • AD Five Wishes, Category: Other (to reflect anything not captured above);
• Interest script, Category: Recruitment Materials;
• JustaCenter approval letter, Category: IRB Protocol;
• Demographics, Category: IRB Protocol;
• AD My Living Will, Category: Other (to reflect anything not captured above);
• AD State of AZ, Category: Other (to reflect anything not captured above);
• AD HELP, Category: Other (to reflect anything not captured above);
• AD My Voice My Choice, Category: Other (to reflect anything not captured above);
• UBACC (for assessing capacity for consent), Category: Consent Form; |
• AD Caring Conversations, Category: Other (to reflect anything not captured above);
• Client consent -- revised, Category: Consent Form;
• AD Hospice of the Valley, Category: Other (to reflect anything not captured above);
• Staff consent -- reviewed, Category: Consent Form;
• Advance Directive letter, Category: Participant materials (specific directions for them);
• Social Behavioral template -- updated, Category: IRB Protocol;
• CTC approval letter, Category: IRB Protocol;
• Educational Intervention Script, Category: Recruitment materials/advertisements/verbal scripts/phone scripts;
• Flyer, Category: Recruitment Materials;

The IRB approved the protocol from 9/1/2015 to 8/31/2016 inclusive. Three weeks before 8/31/2016 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

If continuing review approval is not granted before the expiration date of 8/31/2016 approval of this protocol expires on that date. When consent is appropriate, you must use final, watermarked versions available under the “Documents” tab in ERA-IRB.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103). Sincerely,

IRB Administrator

cc: Melissa Morrison
    Laurie Baker Melissa Morrison
Appendix F

Client Consent

**Title of research study:** An Educational Intervention to Improve Advance Directive Completion Rates Among Homeless Clients of a Medical Respite Center and Day Resource Center

**Investigator:** Laurie Baker, DNP, ANP-BC; co-investigator Melissa Morrison, RN, CNRN

**Why am I being invited to take part in a research study?**
We invite you to take part in an applied research project because you are a homeless adult who speaks and understands English. Your participation may help improve completion of advance directives for people in similar circumstances.

**Why is this research being done?**
The purpose of the study is to examine the effect of an educational intervention on advance-directive completion rates among homeless clients of a medical respite center and a day resource center for homeless elderly. As Baby Boomers age, so do homeless individuals, who suffer the same chronic diseases as non-homeless patients but die of them at higher rates. Additionally, homeless individuals are more likely to lack close contact with family members who are typically contacted in end-of-life situations when the patient cannot speak for him- or herself. Advance directives are a way of allowing these individuals to direct their care and to designate an appropriate healthcare proxy. Advance-directive completion will aid the two participating agencies in fulfilling their clients’ end-of-life wishes in the event the clients require end-of-life care.

**How long will the project last?**
We expect that individuals will spend **15 to 45 minutes listening to the educational intervention, and up to three weeks contemplating and completing an advance directive.**

**How many people will be studied?**
We expect about 20 people will participate in this research study.

**What happens if I say yes, I want to be in this project?**
You are agreeing to participate in an educational session about advance directives lasting **15 to 45 minutes**, in which you will have the opportunity to ask questions. You will be asked to complete a 7-question questionnaire measuring attitudes towards advance directives both before the educational intervention and after (a pre- and post-test). You are free to decide whether you wish to participate in this study. Instead of being in this research study, your choices may include completing an advance directive without attending the educational session.

**What happens if I say yes, but I change my mind later?**
You can leave the project at any time. It will not be held against you.
Is there any way being in this study could be bad for me?
Participants risk discomfort with considering questions of care at end of life and with the status of relationships when/if determining a healthcare proxy.

Will being in this project help me in any way?
We cannot promise any benefits to you or others from your taking part in this research. However, possible benefits include completion of an advance directive for your future use, so that your wishes regarding end-of-life care can be made known.

What happens to the information collected for the project?
Your personal name will not be used with the data collected. Instead, an anonymous, unique identification number will be assigned to represent your responses to the questionnaire (pre- and post-test). The identification code will be determined by the location at which you participate in the project, whether you are a client or staff, the first initial of your mother’s maiden name, and the number of your birth month. The contents of your advance directive, if you choose to fill one out, will not be included in the data collection; only the fact that an advance directive was completed will be counted. The data will be entered into a secure server at ASU; all collected data will erased after one year.

What else do I need to know?
There is no cost to participating in the project or complete an advance directive.

Who can I talk to?
If you have questions, concerns, or complaints, talk to Melissa Morrison, ASU student, at 602-516-6033; Laurie Baker, ASU faculty, DNP, ANP-DC, at 602-406-3164; Oly Cowles at JustaCenter, 602-254-6524; or Kim DesPres at Circle the City, 602-776-9000. If you have questions following the conclusion of the educational session, you may also contact any of the above individuals to have them answered.

This project has been reviewed and approved by the Social Behavioral IRB. You may talk to them at (480) 965-6788 or by email at research.integrity@asu.edu if:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.
Appendix G

Pre- and Post-Survey Questions

Client or Staff? (Write “C” for client, “S” for staff): ____________
First Initial of Mother’s Maiden Name (if not known, enter “X”): _____
First Letter of City or Town In Which You Were Born: _______
Number of Your Birth Month (1=January, 2=February, 3=March, etc.) ___

Questionnaire: Advance Care Directives

1. What is your gender? MALE/FEMALE (circle one)
2. What is your age? _____________
3. What is your race? CAUCASIAN/HISPANIC/AFRICAN-AMERICAN/ NATIVE AMERICAN/ASIAN/OTHER (please circle one)
4. Are you currently married? YES/NO (please circle one)
5. What is a living will? __________________________________________________________
   __________________________________________________________
   __________________________________________________________
6. What is medical power of attorney? __________________________________________
   __________________________________________________________
   __________________________________________________________
7. It is best to wait until the situation arises to make decisions about treating very serious illness, rather than writing them down in advance (1 = agree strongly, 2 = agree somewhat, 3 = disagree somewhat, 4 = disagree strongly)
8. Medical providers such as doctors, nurse practitioners, and physician assistants should not discuss death and dying with their patients because doing so could be harmful to the patient (1 = agree strongly, 2 = agree somewhat, 3 = disagree somewhat, 4 = disagree strongly)
9. It is not necessary for people to write down their wishes about medical care because their family will know what to do when the time comes (1 = agree strongly, 2 = agree somewhat, 3 = disagree somewhat, 4 = disagree strongly)

10. It is best to avoid talking about serious illnesses or death before they occur (1 = agree strongly, 2 = agree somewhat, 3 = disagree somewhat, 4 = disagree strongly)

11. Have you made a living will or named a medical power of attorney? YES/NO (please circle one)
Appendix H

Budget

<table>
<thead>
<tr>
<th>Supply</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photocopying, binding AD booklets</td>
<td>$79.76</td>
</tr>
<tr>
<td>Photocopying pre-, post-surveys (colored paper), consents</td>
<td>$46.23</td>
</tr>
<tr>
<td>Office supplies (easel board, markers, snacks)</td>
<td>$71.63</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$197.62</strong></td>
</tr>
</tbody>
</table>
## Appendix I

### Demographics

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>STAFF</th>
<th>CLIENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td>(n = 40)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>17</td>
<td>42.5%</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>57.5%</td>
</tr>
<tr>
<td>Age</td>
<td>55.87 (SD 10.385)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>(n = 40)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>12</td>
<td>30.0%</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>70.0%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>(n = 37)</td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>28</td>
<td>75.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5</td>
<td>13.5%</td>
</tr>
<tr>
<td>African-American</td>
<td>4</td>
<td>10.8%</td>
</tr>
<tr>
<td>Has Advance Directive?</td>
<td>(n = 34)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
<td>32.4%</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>67.6%</td>
</tr>
</tbody>
</table>
Appendix J

Post-Intervention Attitudes Towards Advance Directives

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Clients &amp; Staff</th>
<th></th>
<th>Clients Only</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Z</td>
<td>Asymp. Sig. (2-tailed)</td>
<td>Z</td>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td>It is best to wait until the situation arises to make decisions about treating very serious illness, rather than writing them down in advance</td>
<td>-.666</td>
<td>.506</td>
<td>-1.121</td>
<td>.262</td>
</tr>
<tr>
<td>Medical providers such as doctors, nurse practitioners, and physician assistants should not discuss death and dying with their patients because doing so could be harmful to the patient</td>
<td>-1.375</td>
<td>.169</td>
<td>-.952</td>
<td>.341</td>
</tr>
<tr>
<td>It is not necessary for people to write down their wishes about medical care because their family will know what to do when the time comes</td>
<td>-1.137</td>
<td>.256</td>
<td>-1.211</td>
<td>.226</td>
</tr>
<tr>
<td>It is best to avoid talking about serious illnesses or death before they occur</td>
<td>-.264</td>
<td>.792</td>
<td>-1.000</td>
<td>.317</td>
</tr>
</tbody>
</table>
Appendix K

Attitudes Pre- and Post-Intervention

<table>
<thead>
<tr>
<th>Survey Item</th>
<th>Pre-Survey Mean</th>
<th>Post-Survey Mean</th>
<th>Asymp. Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is best to wait until the situation arises to make decisions about treating very serious illness, rather than writing them down in advance</td>
<td>3.36</td>
<td>3.45</td>
<td>.506</td>
</tr>
<tr>
<td>Medical providers such as doctors, nurse practitioners, and physician assistants should not discuss death and dying with their patients because doing so could be harmful to the patient</td>
<td>3.41</td>
<td>3.23</td>
<td>.169</td>
</tr>
<tr>
<td>It is not necessary for people to write down their wishes about medical care because their family will know what to do when the time comes</td>
<td>3.15</td>
<td>3.40</td>
<td>.256</td>
</tr>
<tr>
<td>It is best to avoid talking about serious illnesses or death before they occur</td>
<td>3.51</td>
<td>3.53</td>
<td>.792</td>
</tr>
</tbody>
</table>

\[ p < 0.05 \]