

## **Sigma's 30th International Nursing Research Congress**

### **Improving Advanced Directive Completion Rates: Utilizing Technology With a Virtual Platform**

**Megan E. Gibbons, DNP, FNP-BC, NP-C**

*School of Nursing, University of Missouri Kansas City, Kansas City, MO, USA*

*Background:* Advance care planning and advance directives guide patients in remaining autonomous when considering and planning for future healthcare. Improving the regularity of advance care planning as a preventative measure and increasing the number of individuals who have completed advanced directives contributes to robust palliative care resources for patients.

Nurse practitioners (NPs) account for more than 600 million medical office visits per year in the United States. NPs are in a crucial position to educate, advocate, and support the completion of advance directives (Hinders, 2012). Low completion rates of advanced directives directly result in a higher level of Medicare spending, higher likelihood of in-hospital deaths, lower utilization of hospice care, and decreased quality of life (Splendore & Grant, 2017). As a whole, Americans are living longer and healthcare costs increase with age. Investigation of Medicare data conducted by the Kaiser Family Foundation found that Medicare spending rises with age and peaks at age 96. Out of pocket cost for patients at age 96 is \$16,145, and this figure is more than double the per capita spending at age 70 (\$7,566) (Morrison, 2015). Care in the last year of life has been estimated to be approximately \$71,517 (Teno & Gozalo, 2014). Data supports that utilization of hospice drastically reduces healthcare costs, and could offer a savings of \$9,000 per patient (Teno & Gonzalo, 2014). Advanced directives increases prevalence of patients choosing less invasive and intense treatments in the end of life. Education facilitates patients' understanding hospice and end of life care, ensuring informed decisions regarding care they desire to receive.

*Significance:* The purpose of this quasi-experimental, pretest- posttest design project was to determine if the virtual webpage based advanced directive intervention increased legal documentation and completion rates in healthy adults. The inquiry was, in healthy adults without terminal diagnosis, did an interactive webpage based advanced directive counseling and education program compared to current practice, improve legal documentation and completion rates during a 3-month period in Missouri residents? United States completion rates for advance directives are low at about 18-36% of all adults (Hinderer & Lee, 2014). Community education specifically lacks an abundance of studies, but the studies that do exist support the efforts as successful. Multiple studies discussed the need for additional studies to compare existing resources, multi modal methods, and the most appropriate setting. Virtual settings can allow for more patients to participate in the education efforts that often require extended time, that appears unreasonable for the outpatient office setting. The data suggests that a group setting is evidenced to be successful, but it is also crucial to allow each participant time to ask questions and have one on one counseling if desired.

*Methods:* An interactive webpage was developed to guide patients through education on the topic, including important points in the decision making process. Participants included adults over the age of 18, without a terminal illness diagnosis and with or without current advanced directives. The goal was to obtain at least 110 participants through convenience sampling. The intervention was accessed by participants from home or other convenient location and was based on materials from the PREPARE for your Care program (Sudore, 2017). The Advanced Directive Engagement Survey was utilized as a measure of readiness for advance care planning. The 34-item version of the survey has Behavior Change Process measures. The Behavior Change Process score was reported as an overall 5-point Likert score. The Behavior Change Process measure has validated sub-scales of knowledge, self-efficacy, and readiness reported. Advanced directive paperwork was downloadable at the conclusion of the educational intervention. A follow up survey was collected at three months' post intervention. Outcomes included improved advanced directive completion, which was measured by self-report. Completion needed to include legal notarization of the documents.

*Results:* This presentation will discuss the projects outcomes, including advanced directive completion status, and data from the Advanced Directive Engagement survey. The anticipated results support that providing education about advanced directives assists patients to recognize the need for documents and to legally complete the paperwork.

*Discussion:* Increasing the prevalence and number of individuals who have advanced care planning conversations and documentation can improve care provided to patients and client satisfaction. Improving completion rates of advanced directives has been acknowledged as a national priority and continues to be the subject of several healthcare practice, policy, and research initiatives (Enguidanos & Ailshire, 2016). Nurse practitioners are positioned to educate patients and continue to improve these rates, in turn improving patient centered care and increasing satisfaction.

---

**Title:**

Improving Advanced Directive Completion Rates: Utilizing Technology With a Virtual Platform

**Keywords:**

Virtual intervention, advance directive and education

**References:**

Enguidanos, S., & Ailshire, J. (2017). Timing of advance directive completion and relationship to care preferences. *Journal of Pain and Symptom Management*, 53(1), 49–56. doi:10.1016/j.jpainsymman.2016.08.008

Hinderer, K. A., & Lee, M. C. (2014). Assessing a nurse-led advance directive and advance Care planning seminar. *Applied Nursing Research*, 27(1), 84–86. doi:10.1016/j.apnr.2013.10.004

Hinders, D. (2012). Advance directives: limitations to completion. *American Journal of Hospice and Palliative Medicine*, 29(4), 286–289. doi: 10.1177/1049909111419293

Morrison, I. (2015, March 3). Health care costs and choices in the last years of life. Retrieved from <http://www.hhnmag.com/articles/3656-health-care-costs-and-choices-in-the-last-years-of-life>

Splendore, E., & Grant, C. (2017). A nurse practitioner-led community workshop: Increasing adult participation in advance care planning: ACP workshop in community settings. *Journal of the American Association of Nurse Practitioners*, 29(9), 535–542. doi:10.1002/2327-6924.12467

Sudore, R. L., Boscardin, J., Feuz, M. A., McMahan, R. D., Katen, M. T., & Barnes, D. E. (2017). Effect of the PREPARE website vs an easy-to-read advance directive on advance care planning documentation and engagement among veterans: A randomized clinical trial. *JAMA Internal Medicine*, 177(8), 1102. doi:10.1001/jamainternmed.2017.1607

Teno, J. M., & Gozalo, P. L. (2014). Quality and costs of end-of-life care: the need for transparency and accountability. *The Journal of the American Medical Association*, 312(18), 1868–1869.

**Abstract Summary:**

Improving the regularity of advance care planning and increasing the number of individuals with active advanced directives contributes to robust palliative care. Virtual settings can allow for more patients to participate in the education efforts that often require extended time, that appears unreasonable for the outpatient office setting.

## Content Outline:

1. Background/Significance:
  1. Advanced directives embrace the promise of increasing the possibility that diagnostic, preventative, therapeutic, and palliative interventions will be provided to patients as desired
  2. United States completion rates for advance directives are very low at about 18-36% of all adults (Hinderer & Lee, 2014)
  3. Improving completion rates of advanced directives has been acknowledged as a national priority, and continues to be the focus of several healthcare practice, policy, and research initiatives
2. Problem statement:
  1. Advanced directives completion rates are very low in the United States, Nurse practitioners are perfectly positioned to help educate patients and help to improve these rates, in turn improving patient centered care and increasing satisfaction.
3. Inquiry:
  1. In healthy adults without terminal diagnosis, does an interactive webpage advanced directive counseling and education program compared to current practice improve legal documentation and completion rates during a 3-month period in Missouri residents
4. Purpose:
  1. The purpose of this quasi-experimental, pretest- posttest design project was to determine if the virtual webpage based advanced directive intervention increased legal documentation and completion rates in healthy adults.
  2. Community education specifically lacks an abundance of studies, but the studies that do exist support the efforts as successful. Multiple studies discussed the need for additional studies to compare existing resources, multi modal methods, and the most appropriate setting.
  3. Virtual settings can allow for more patients to participate in the education efforts that often require extended time, that appears unreasonable for the outpatient office setting. The data suggests that a group setting is evidenced to be successful, but it is also crucial to allow each participant time to ask questions and have one on one counseling if desired.
5. Methods, intervention
  1. An interactive webpage was developed to guide patients through education on the topic, including important points in the decision making process. The study recruited 110 participants through convenience sampling. The intervention was accessed by participants from home or other convenient location and was based on materials from the PREPARE for your Care program. A follow up survey was collected at three months' post intervention. Outcomes included improved advanced directive completion, which was measured by self-report. Completion needed to include legal notarization of the documents.
6. Results
  1. To be discussed, unavailable at this time
7. Conclusion, impact
  1. Advance care planning and advance directives facilitate personal end of life care wishes to be recognized prior to a life-altering accident or debilitating disease. Increasing the prevalence and number of individuals that have advanced directive documents can improve the quality of care provided to patients at the end of life.
  2. Impact to be determined upon final data available in May 2019.

First Primary Presenting Author

**Primary Presenting Author**

Megan E. Gibbons, DNP, FNP-BC, NP-C

University of Missouri Kansas City

School of Nursing

Professor  
Kansas City MO  
USA

**Author Summary:** Megan Gibbons is a Family Nurse Practitioner in St. Louis, Missouri. She is passionate about providing comprehensive care to all patients, and believe that Advanced Directives are an important part of preventative care all patients should receive. Megan has been a nurse practitioner for 5 years and received her DNP from University of Missouri Kansas City in May 2019.