Family Presence During Resuscitation: An Evaluation of Attitudes and Beliefs

Alysia Adams  
*University of Kentucky, adpowe2@uky.edu*

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The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Assistant Dean for MSN and DNP Studies, on behalf of the program; we verify that this is the final, approved version of the student's DNP Project including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Alysia Adams, Student
Dr. Carol Thompson, Advisor
Final DNP Project Report

Family Presence During Resuscitation: An Evaluation of Attitudes and Beliefs

Alysia Adams, BSN, RN, CCRN

University of Kentucky

College of Nursing

Fall 2016

Carol Thompson, DNP, PHD, APRN, FNP, ACNP- Committee Chair

Paul Netzel, DNP, APRN, ACNP- Committee Member

Patti K. Howard, PHD, RN, FAAN, CEN – Clinical Mentor
Dedication

To my late Grandmother Barnhill, I hope that I have become everything you always told me I could. Thank you for always standing in my corner, providing the words I always needed and the hugs only a grandmother could give. “I love you muchy muchy.”

To my wonderful husband, without your support and daily encouragement I would not have made it through nursing school, much less have come this far. Thank you for enduring, sacrificing, and supporting.

To my mom, how could I ever say thank you enough? The pride you instilled in me and the constant belief you have always had in me have helped me to set and fulfill goals. It is amazing what a girl can accomplish when she believes that she can. Thank you.

To my Aunt Tammy, how could I have survived without someone to complain to? Thank you for always teaching me to edit and to use proper English.

To my Aunt Julie, thank you for giving me a love for nursing. Thank you for always providing financial advice and keeping me on the right path.

Finally, to my four siblings, thank you for the words of encouragement and understanding when I was not always able to be everywhere. I am better because of you.

I love you all very much, and I am so grateful that I have had such wonderful people to guide, support, and love me. I hope I continue to make you all very proud.
Acknowledgements

Thank you to all of the healthcare providers who have bestowed their wealth of knowledge on me. To my manager Judy Niblett, thank you for encouraging me to further my education and helping me to grow as a critical care provider.

**Dr. Carol Thompson,** thank you for your patience throughout the DNP program as well as the expertise you have provided along my journey and growth to becoming a critical care provider.

**Dr. Paul Netzel,** thank you for guiding my clinical experience and ensuring that I am a safe and accurate advanced practice provider.

**Dr. Patti K Howard,** I do not think there are enough thank you’s in this world for the amount of education you have provided me. First, thank you for taking a chance and letting me assist on your project my freshman year. Second, thank you for answering my countless questions, being patient, and leading me in the right direction. Lastly, thank you for always being available. I hope to further our professional relationship and become a national leader in critical care as you have done with emergency care.

**Dr. Amanda Wiggins,** thank you for assisting in the statistical analysis of this project, as well as educating and providing me with the knowledge needed to further evaluate study results.
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Abstract

**Background:** Family presence during cardiopulmonary resuscitation has been provided for more than 20 years (Hanson & Strawser, 1992). The American Association of Critical Care Nurses, The Emergency Nurses Association, The American College of Emergency Physicians, The American Heart Association, and The American Academy of Pediatrics have all endorsed family presence during resuscitation (AACN, 2004; AHA, 2000; Dingeman, Mitchell, Meyer, & Curley, 2007; ENA, 1994; Lowry, 2012). Despite validation by distinguished professional organizations, the option of family presence remains inconsistent. **Objectives:** 1.) To explore the attitudes and barriers to family presence during resuscitation. 2.) To examine the relationship between pre, midpoint and final data points to assess for a sustained practice change in family presence during resuscitation following policy implementation; 3.) To explore the relationship of attitudes and beliefs to evaluate domains for future education. **Methods:** Faculty and staff, including nurses, pharmacists, physicians, residents and fellows, chaplains, respiratory therapists and paramedics at a large academic medical center were surveyed via convenience sampling. **Results:** Does UK healthcare have a written policy, 57 percent of respondents were unsure if a policy existed in the 2016 survey. Statistical significance existed between 2012 and 2014 surveys (p= 0.013), as well as the 2014 and 2016 surveys (p= 0.003). Does family presence interfere with resuscitation, 59 percent of respondents answered no. Statistical significance existed between the 2014 and 2016 surveys (p= 0.004). Does family presence increase stress on staff, 49 percent of respondents answered yes. Statistical significance existed between 2014 and 2016 surveys (p=<0.001). Does family presence increase fear of medico-legal litigation, 41 percent of respondents answered no. Statistical significance existed between 2012 and 2014 surveys (p= 0.005). Consistently across all 3 surveys, greater than 70 percent of staff identified that an increased understanding of family presence was needed. No statistical significance was found between surveys. Data points 2014 and 2016 highlighted statistical significance among consensus needed to have successful family presence (p= <0.001). Support for family presence revealed statistical significance between the 2014 and 2016 data points (p= <0.001). Does family presence assist with end of life decision making revealed statistical significance between 2014 and 2016 surveys (p= <0.001). Roles revealed nurses responded more in 2012 and 2014 surveys. More pharmacists and paramedics (EMT-P) responded to the 2016 survey than to the 2012 and
2014 surveys combined. **Conclusions:** Attitudes and beliefs about family presence during cardiopulmonary resuscitation have improved post policy implementation. However, policy implementation is unlikely the exact reason for change as only a small number of respondents expressed knowledge of a policy.
Introduction

This project entitled “Family Presence During Resuscitation: An Evaluation of Attitudes and Beliefs” is a purposive survey. The purpose of this survey was to assess a final data point and determine if a sustained practice change was present following policy implementation. Further use of this study is to evaluate the individual survey questions and determine future educational needs of staff. This study illustrates the evolution of family presence during resuscitation, a review of relevant literature, the survey results, and the conclusions of the study.

Background and Significance

Family presence during resuscitation has been used for over 20 years (Hanson & Strawser, 1992). Literature has long supported the incorporation of family presence during resuscitation into practice. Organizations such as the American Association of Critical Care Nurses, the Emergency Nurses Association, the American College of Emergency Physicians, the American Heart Association, and the American Academy of Pediatrics have all endorsed family presence during resuscitation (AACN, 2004; AHA, 2000; Dingeman, et al., 2007; ENA, 1994; Lowry, 2012).

According to the American Association of Critical–Care Nurses, 50-96 percent of healthcare consumers within the acute care setting believe that family should be allowed to be present during emergency procedures and resuscitation, including at the time of a loved one’s death (Martin, 2010). Regarding resuscitation, studies reveal that family presence during resuscitation removes doubt about the patient’s condition (Jabre, 2014; Meyers, 2000). In addition, the ability of the family to witness all lifesaving measures firsthand can help decrease anxiety and fear concerning their family member, facilitate their need to be together, and allow them to support
and help their loved one (Hanson, 1992; Jabre, 2014; Meyers, 2000). In the instance of an unsuccessful resuscitation, the family experienced a sense of closure and their presence aided the grief process (Hanson, 1992; Jabre, 2014).

Review of the Literature

Search Description

A review of Pub Med, CINAH, Web of Science, and MEDLINE was performed using the following keyword combinations: family, family presence, family witnessed, cardiopulmonary resuscitation, cardiac arrest, CPR, policy, outcome(s), impact, and effect(s). References in the studies obtained from key word searches were further examined to broaden the search to potentially relevant articles. The search was limited to English language articles, published from 2005-2015. Classic studies from 1992 to 2003 were included as well. Inclusion criteria were journal articles; adults age 18 and older; studies focused on benefits, attitudes, barriers, and support of family presence; and discussions regarding policy implementation, outcomes, or impact of family presence on families and/or staff. The total number of articles retrieved from all databases was 369. After the removal of duplicate articles, 221 were screened. Of those 221 articles, 19 articles met the inclusion criteria. The studies included two randomized controlled trials, two position statements, two face-to-face interviews, 11 convenience sample survey studies, and two comprehensive reviews (Appendix A).

Benefits

The landmark study by Hanson and Strawser (1992) sheds light on the importance of family presence during resuscitation. The authors discussed the development of the first family presence program at Foote Hospital. This nine-year study of family presence during resuscitation
demonstrated that keeping the family together was beneficial to all parties involved (Hanson & Strawser, 1992). This investigation outlined benefits that have remained consistent throughout the subsequent studies. The most notable benefits realized through the Foote Hospital study included 64 percent of families reporting a better understanding of their loved ones’ illnesses, the facilitation of the family unit from birth through death, and finally, 76 percent of families reporting closure and the knowledge that everything possible was done to save their loved one as a benefit to the grieving process (Hanson & Strawser, 1992).

A classic descriptive study by Meyers et al. (2000) surveyed healthcare providers and family members after presence during resuscitation and found that a family member was present at the onset of the patients’ illness/condition in one-third of emergency cases. Thus when healthcare providers required the family member to leave the treatment room, anxiety and fear of the unknown increased. Studies revealed that family presence during resuscitation provides a decrease in anxiety among family members (p = 0.03) (Jabre, 2014) (ENA, 2012, Hanson, 1992; Jabre, 2014; Meyers, 2000). Anxiety is decreased for the family members as they are able to witness the hard work of staff members and receive reassurance that everything possible was done for their loved one. Furthermore, post-traumatic stress disorder (PTSD) symptoms are lower in individuals offered family presence during resuscitation (p = 0.02) (ENA, 2012; Jabre, 2014). The randomized controlled trial conducted by Jabre (2014) randomized 570 family members into an experiment group, which offered family presence, and a control group, which followed the standard of not offering family presence. This study determined that grief-related PTSD symptoms were 36 percent higher in the control group for which family presence was not offered. After family members witnessed resuscitation efforts made by staff, 89 percent (Duran et al., 2007) reported benefits such as an increase in understanding about the patient’s condition,
as well as more effective coping and grieving processes (Duran et al., 2007; ENA, 2012; Hanson, 1992; Holzhauser, 2006; Jabre, 2014; Meyers, 2000). It is notable that 95 percent of family members who were present during resuscitation stated they would be present again if a similar situation arose (Duran et al., 2007). Families gain an increased understanding surrounding the severity of the illness and situation when they are present during emergency situations.

Sometimes this is the last opportunity they have to be with a loved one (ENA, 2012; Hanson and Strawser, 1992, Meyers et al., 2000); 80 percent of families stated the facilitation of the family unit as a benefit of family presence (Meyers et al., 2000).

To elaborate, the part of the grieving process that is notably impacted by family presence during resuscitation is acceptance (Duran, Oman, Abel, Koziel, & Szymanski, 2007; ENA, 2012; Hanson & Strawser, 1992; Holzhauser et al., 2006; Meyers et al, 2000). Being present to witness life-saving measures helps family members accept that their loved one’s life is ending (ENA, 2012; Hanson & Strawser, 1992; Meyers et al., 2000); 95 percent of family members identified this as value of family presence (Meyers et al., 2000). The ability of families to be present during resuscitation further allows family members the opportunity to say goodbye (Duran et al., 2007; ENA, 2012; Hanson & Strawser, 1992; Holzhauser et al, 2006; Meyers et al., 2000).

Attitudes and Barriers

All patients and family members surveyed in included studies reported positive attitudes toward family presence during resuscitation. Family presence during resuscitation has been referred to as a right by patients and families (Duran et al., 2007). Most healthcare providers have a positive attitude with respect to family presence (p = <.001) (Duran et al., 2007); 82 percent of staff members identified support for family presence (Tomlinson, 2010), although
many barriers exist to the incorporation of it into practice (Basol, 2006; Duran, 2007; Doolin, 2011; ENA, 2010; Hung, 2010; Redley, 1996; MacLean, 2003; Martin, 2010; Tomlinson, 2010).

Barriers to family presence included perceived interference during the resuscitative process, potential inappropriateness, inconvenience, and increased stress to staff (Basol, 2009; ENA, 2010; Hung, 2010; Tomlinson, 2010). Staff also expressed performance anxiety as a concern to allowing family presence during resuscitation (Basol, 2009; Duran, 2007; ENA, 2012), with 41 percent of staff identifying this as a barrier (Basol, 2009). Performance anxiety refers to the healthcare providers’ ability to perform chest compressions, give medications, and discuss the patient situation while family members are present (Basol, 2009; Duran, 2007; ENA, 2012). The perceived notion of an increase in malpractice lawsuits in the instance of patient demise is another common barrier disclosed by physicians (Basol, 2009; Dingeman et al., 2007; Mangurten et al., 2005), with one quarter of physicians surveyed identifying this as a barrier (Dingeman et al., 2007; Mangurten et al., 2005). Though sufficient numbers are not available, Jabre (2014) illustrated that family presence during resuscitation did not produce any medico-legal repercussions when evaluated three months and one year post resuscitation regardless of survival status.

A classic study by Redley and Hood (1996) discusses healthcare providers’ concern for the safety of the care providers, patient, and family members as a barrier to family presence during resuscitation (Redley & Hood, 1996). Nursing staff revealed apprehension about family presence during resuscitation out of concern for the emotional well-being of the family members (Basol, 2009; Tomlinson, 2010). Another perceived barrier identified in multiple studies is the lack of formal training on handling family presence, as well as the lack of an official hospital policy on providing family presence during resuscitation (Basol, 2009; Doolin, 2011; ENA,
A final barrier identified by healthcare providers in the literature is that the unknown emotional response of family members creates reluctance to allow family presence during resuscitation (Meyers et al., 2000; Tomlinson et al., 2010). Despite these identified barriers, in 196 cases where family were present no family interference was reported (ENA, 2010). Multiple studies have concluded that family members did not disrupt care, were not traumatized, and had better long-term emotional outcomes after the loss of a loved one when able to witness resuscitative efforts (Basol, 2009; Duran, 2007; ENA, 2012; Jabre, 2014). Examining both the benefits and barriers illustrates that a gap exists between current research and the healthcare delivery system. Bridging the gap between evidence and practice is imperative.

Support

The literature provides significant support for family presence. All of the articles included within this review illustrated a desire for family presence during resuscitation. Basol et al. (2009) surveyed healthcare providers and found that 90.3 percent of those surveyed would want family present if they themselves had to be resuscitated. Further research has shown that 97.5 percent of family members felt they had the right to be present when asked face to face (Doolin et al., 2011). In the randomized controlled trial by Holzhauser et al. (2006), 100 percent of family members present during resuscitation reported being glad that they were present.

Support of family presence, as well as the success of this practice, was heavily dependent on the concept of a family facilitator being available (Basol, 2009; Doolin, 2011; ENA, 2010; Hung, 2010; MacLean, 2003; Mangurten, 2005; Martin, 2010; Tudor, 2014). It was further found
that 93 percent of emergency departments who offered family presence tried to ensure that a family chaperone or facilitator was present (Dingeman et al., 2007). A family facilitator is an individual who supports family members throughout the resuscitative process. This person ensures that the family is comforted, aware of what is happening, does not disrupt care, and receives proper follow-up after the resuscitation (Doolin et al., 2011). Findings such as the ones mentioned here are reasons that large organizations provide the option for family presence during resuscitation.

The Emergency Nursing Association (ENA) and the American Association of Critical Care Nurses (AACN) have both issued practice alerts in support of family presence during resuscitation (AACN, 2016; ENA, 2010; Martin, 2010). The practice alerts illustrate what is necessary in order to have successful family presence within the healthcare setting, including policy implementation and staff education (AACN, 2016; Martin, 2010). The ENA offers a family presence implementation guide and clinical practice guideline (ENA, 2010; ENA, 2012).

**Objectives**

The goal of this project was to identify if a sustained practice change after implementation of the Family Presence during Resuscitation policy was enacted at a large academic medical center. Specific aims include the following:

1.) To explore the attitudes and barriers to family presence during resuscitation.

2.) To examine the relationship between the pre, midpoint, and final data point to identify sustained practice change.

3.) To explore the relationship of attitudes and beliefs to evaluate domains for future education.
Methods

Study Design

This purposive survey design was a post-survey sent to physicians (faculty and residents), nurses, pharmacists, chaplains, respiratory therapists (RT), and paramedics (EMT-P), using a cover letter with a Survey Monkey link sent through departmental Listservs. The study design was a convenience sample. This survey was post implementation of the family presence policy (18-24 months after baseline survey). This survey is a replica of the survey distributed at previous data collection points and was distributed via email Listserv to assess for any changes in attitudes or practices. The study was to assess if a practice change has sustained post policy implementation.

Study Population

Current faculty and staff physicians, nurses, pharmacists, chaplains, respiratory therapists and paramedics at both UK HealthCare hospitals were all potential subjects. All staff who met the criteria in the first statement were included without regard for age, gender, or ethnicity.

Study Recruitment

Faculty and staff as identified above received a cover letter with the survey link through departmental Listservs. The primary investigator provided the cover letter and survey link to the office of the Enterprise Chief Nurse and Chief Medical Officer’s Chief of Staff, who distributed the cover letter to physician and nursing staff. The cover letter was emailed by the primary investigator to the directors of pastoral care, pharmacy, respiratory care, and paramedics for distribution to their staff. The survey was anonymous and no identifying information was obtained.
Survey

The survey including questions and answers presented to participants is located in Appendix B.

Statistical Analysis

The assessment of the pre, midpoint and post policy implementation data was completed utilizing the Kruskal Wallis test. Any questions determined to have a p value < 0.05 were accepted as statistically significant. Any question determined to be statistically significant had a post hoc accompanying the question. The post hoc was completed comparing time periods. The descriptive analysis was completed utilizing the percentages from pre, midpoint and post data in order to determine future educational needs of staff.

Results

Statistical analysis for this study was conducted using SAS software to determine if key question responses changed from baseline data to midpoint data and from midpoint data to the final collection data point. Not all questions on the survey were evaluated as only certain questions pertained to a practice change and/or education requirement.

Descriptive and Statistical Analysis

This study determined that in the 2016 survey 34.6 percent of the respondents stated that yes, a policy existed versus the 22 percent that identified yes in 2014 and the 16.6 percent that identified yes in 2012 (Figure 1). Furthermore, statistical significance existed between the baseline survey and midpoint survey (p= 0.013). Statistical significance was also found between the midpoint data and final data (p= 0.003) (Table 1).
In 2016, 59 percent of the respondents identified that family presence did not interfere with the resuscitation (figure 2), compared to the 48 percent that stated family presence did not interfere in 2014 and the 42 percent in 2012 that stated family presence did not interfere with resuscitation (figure 2). The post hoc analysis revealed no statistical significance between the baseline and midpoint data but demonstrated statistical significance in the midpoint and final data collection survey (p = 0.004) (Table 2).

In 2016, 49.63 percent of respondents said that yes, family presence increased stress on staff (figure 3) compared to the 26 percent that stated yes, family presence increased stress on staff in 2014 and the 66 percent in 2012, that responded yes, family presence increased stress on staff (figure 3). No statistical significance was highlighted between the baseline and midpoint data but statistical significance was illustrated between the midpoint and final data point (p = <0.001) (Table 3).

In 2016, 36 percent of respondents selected yes, that family presence during resuscitation created a fear of medico-legal litigation (figure 4). In 2014, 42 percent of respondents stated yes and in 2012, 51 percent of respondents stated yes (figure 4). Statistical significance was identified between the 2012 or baseline survey and the 2014 or midpoint survey (p = 0.005) (Table 4). The comparison of midpoint and final or 2016 survey provided no statistical significance (Table 4).

An increased understanding among healthcare providers resulted in 75 percent of respondents stating yes an increased understanding among healthcare providers regarding family presence is needed (figure 5). Similar results were found in 2012 and 2014 with, the 2012 survey yielding 71 percent of respondents selecting yes and 2014 providing 75 percent of respondents
selecting yes (figure 5). No statistical significance was found between any of the data points (Table 5).

No statistical significance found between any data points during the evaluation of whether a written policy was warranted (Table 6).

An examination of whether consensus among the team was indeed needed to have successful family presence illustrated no statistical significance between the 2012 and 2014 surveys (Table 7). However, statistical significance was highlighted between the 2014 and 2016 surveys (p= <0.001) (Table 7).

An evaluation of support for family presence provided no statistical significance between the 2012 and 2014 data points (Table 9). Statistical significance was illustrated between the 2014 and 2016 data points (p=<0.001) (Table 8).

The question evaluating if respondents felt family presence helped with end of life decision making resulted in no statistical significance between the baseline and midpoint surveys (Table 9). Statistical significance was found between the midpoint and final data points (p= <0.001) (Table 9).

The final question evaluated relates to the roles of the participants in the survey. The individual roles are broken down so that a comparison can be made across the data-collection continuum. Specifically, it is important to point out that in the first two surveys the majority of respondents were registered nurses (Table 10). In the first two data collections there were few pharmacists and paramedics who participated (Table 10). The final survey encompassed 86 percent of the total respondents who were pharmacists for all three surveys (Table 10). The final survey also included 77 percent of the total paramedic participation for all three data collection
points (Table 10). The last survey had fewer respondents overall than did the first two data points (Table 10). As the results have been synthesized, it is important that compilation of these results be completed. The next section will interpret the use of the survey results.

**Discussion**

This quality improvement project provided the opportunity to assess for a sustained practice change following implementation of a family presence during resuscitation policy. Evaluation of individual questions assisted in determining staff educational needs to foster improvement in offering the option for family presence. The AACN and ENA have set a precedent that hospital units should meet 90 percent compliance with family presence (AACN, 2016; ENA, 2012). The analysis of the three data points allowed the primary investigator to identify areas of education to target in order to increase family presence compliance throughout the enterprise.

Throughout the survey five questions overlapped in identifying practice change sustainment and educational improvement for staff. The questions that examined both aspects of the study include the following: Did a policy exist? Does family presence interfere with the resuscitation process? Does family presence increase stress on staff? Does family presence create fear of medico-legal litigation? Does an increased understanding among healthcare providers of the benefits of family presence increase family presence practice?

Overall, the analyses of the first four questions were statistically significant when comparing surveys over time. The first question addressed whether a policy exists. The question essentially allowed an evaluation of whether employees who impact family presence were aware that a policy for family presence during resuscitation existed.
The descriptive analysis illustrated that more individuals were aware of family presence policy existence, which was consistent with the results (Table 1) illustrating statistical significance between all data collection points. The small sample size of employees that identified knowledge of a policy reduced the belief that the policy has had a large impact on family presence practice up to this point. Although a small number of respondents acknowledged awareness of a current policy, employees consistently identified a policy as a needed entity (Table 6). This finding is consistent with the literature which states that healthcare providers identify a lack of hospital policy as a barrier to family presence during resuscitation practice (Basol, 2009; Doolin, 2011; ENA, 2010; MacLean, 2003; Martin, 2010).

The second analysis provides a clear representation of staff feelings regarding whether family presence interfered with the resuscitation process. Overall, more staff determined that family presence does not interfere with the resuscitation process, but 40 percent of staff still felt that families could interrupt the resuscitation process (figure 2). In the 2016 survey, the 60 percent of staff who did not perceive that families would interfere in the resuscitation process is an improvement from the baseline data obtained in 2012 that revealed approximately 60 percent who did perceive families would interfere (figure 2). Family interference is consistently identified as a barrier to family presence implementation; seeing fewer employees identify this as a concern indicates a positive impact on practice as this will be one less excuse for prohibiting family presence during resuscitation.

Another issue assessed through this survey is the question of whether staff felt family presence increased stress on them during the resuscitation process. Examination of the data indicates that immediately following policy implementation, staff felt that family presence did not increase stress. However, staff now feel that family presence increases stress during the
resuscitation process (figure 3, Table 3). It is unknown whether the policy directly impacted this belief because only 22 percent of staff identified knowledge of an existing policy immediately following policy implementation. It is possible that staff received other information during the policy implementation time period that may have influenced their beliefs at that time.

This quality improvement project supports that most of the barriers identified in the literature have improved throughout the family presence process. However, not enough evidence exists to say that the policy impacted this sustained improvement in attitudes and beliefs. Though attitudes regarding interference, stress on staff, and medico-legal litigation have improved, staff have consistently identified that an increased understanding of family presence would increase the practice (figure 5). This belief has been unwavering among all three surveys; 71 to 75 percent of staff have identified the need for an increased understanding of family presence. The identification of education as a necessity regarding family presence practice is recognized in the literature. (Basseler, 1999; Basol, 2009; Doolin, 2011; ENA, 2010; MacLean, 2003; Martin, 2010).

On the whole staff education is warranted as an intervention to decrease barriers and increase family presence practice. However, it is surprising that the family presence policy implementation did not have a larger impact and that so few staff members were aware of its existence. A plethora of literature identified policy implementation as an important component of family presence success (AACN, 2016; Basol, 2009; Doolin, 2011; ENA, 2012; ENA, 2010; MacLean, 2003; Martin, 2010). Although policy implementation is highly recommended, there is minimal research evaluating the effectiveness of policy implementation and expectations of adequate practice maintenance. This quality improvement project has illustrated that policy implementation supports staff but does not replace the need for staff education.
A final important point to consider is the immense differences in type and number of respondents among surveys. In the first and second surveys, most respondents were registered nurses, while the third survey had far fewer nurse respondents but much greater pharmacist and paramedic participation. The differences in the distribution of respondents could have biased the survey. The increased pharmacist and paramedic participation may have skewed the results as these individuals participate in the resuscitation team but often on a purely clinical level with very minimal family interaction. Nonetheless, their input is important and valued because if consensus among team members is required for families to be present, then their opinions would be collected if the question were prompted. The question regarding consensus among the team demonstrated statistical significance between midpoint and final data points (Table 7), illustrating the importance of staff agreement to have successful family presence.

Limitations

A major limitation of this study includes convenience sampling; utilizing this method meant that people responded based on personal desire. The third survey had a significantly smaller sample, possibly due to time frame of survey availability or distribution. Also, bias or feelings of irrelevancy to job function may have decreased the response rate. Another limitation was the use of mass communication. The survey was attached to physician and RN announcements and could have been overlooked because of the volume of information distributed. A final limitation includes the possibility of data errors due to respondents electing to skip some questions. The rate at which questions were skipped is 1.3 percent. To adjust for the missing data, the individual response was excluded in the analysis of individual questions. A few questions had only 149 respondents, while others had 151 respondents.
Principal Implications

This quality improvement project illustrates that policy implementation alone does not have a profound impact on family presence during resuscitation practice as evidenced by the consistently low identification of policy existence. Though attitudes and beliefs have improved, the exact source of improvement is difficult to ascertain. Nevertheless, staff members consistently indicate the need for a policy and the desire for education to improve practice.

Future Quality Improvement

Further quality improvement will be required to increase and enhance the practice of family presence during resuscitation within the University of Kentucky (UK) enterprise. The following Plan-Do-Study-Act (PDSA) description and illustration outline the context of the next steps required for quality improvement of family presence (Figure 6).

To begin the planning phase for continued quality improvement regarding family presence during resuscitation, a reconsideration of the survey responses is important. The survey prompted respondents with, “An increased understanding among healthcare professionals on the benefits of family presence would increase family presence during resuscitation,” to which 75 percent replied yes. This evaluation of stakeholders’ attitudes and beliefs enables the primary investigator to conclude that staff would like more education.

Additionally, identification of stakeholders who can participate on a team furthering quality improvement is vital. Stakeholders for family presence include patients, family members, staff nurses, physicians, residents and fellows, pharmacists, respiratory therapists, nursing care technicians, paramedics, nursing management, and executive leadership for both medical and nursing staff. An individual from all disciplines, as well as a patient and family representative,
should be invited to participate on the family presence quality improvement committee. This committee will partner with the resuscitation committee and have a representative at committee meetings. The resuscitation committee presents all data on resuscitations which includes family presence. The aim statement for this committee reads, “We will increase family presence compliance throughout the enterprise from its current baseline to 90 percent compliance by July 2017.”

Current practice regarding family presence documentation has changed. Previously, family presence was not consistently documented, and code documentation was completed via paper. Now electronic reporting with the American Heart Association (AHA) is a new standard of care (AHA, 2015). The process flow chart outlines current practice (Figure 7) to assist in the evaluation of the state of family presence during resuscitation. A strengths-weaknesses-opportunities-threats (SWOT) analysis determined that the current organization supports family presence because a formal healthcare policy was implemented in 2013. Currently, documentation of resuscitations are completed thoroughly and consistently by the rapid response team. Improvement can be made in staff attitudes and beliefs regarding family presence as outlined with this final data point. Compliance measures regarding family presence are now able to be assessed and should be followed to ensure compliance.

The state of the problem begins with only 32 percent staff awareness of policy existence. The 2016 survey showed that multiple staff members perceived barriers that prevent family presence as concluded in the results of that survey. Additionally, 75 percent of staff in the 2016 survey identified that advanced knowledge would be beneficial to them. Historically, a resource to measure family presence compliance has not been available, but recently the AHA instituted electronic documentation of family presence. This new technology allows measurements of
compliance regarding family presence, pre and post education. Currently, the University of Kentucky enterprise has a hospital policy of which only 32 percent of staff are aware. The policy has not eliminated the barriers to family presence, and staff still express desire for increased knowledge. While most staff desire the policy, lack of education hinders family presence.

The AHA recommendation to document family presence is new. In the study organization this documentation is completed by only one set of nurses who are members of the rapid response team. Using one team helps to increase the reliability of accurate documentation. Utilizing a single team could be an obstacle to obtaining information as only the specific individuals have access and familiarity with the system. The rapid response team has uploaded code data into the AHA database for years, and this documentation is merely an added check box to the previous document. It is important to know that this documentation is not connected to the electronic health record.

As identified in the process flow chart, family presence is consistently offered following resuscitation efforts or at time of death (Figure 7). The survey revealed that staff identify medico-legal litigation and interference and stress on staff as barriers to family presence within the enterprise. Educating staff will likely improve attitudes and decrease barriers. These improvements will in turn increase compliance of family presence, moving the enterprise toward the 90 percent benchmark.

The current available data from AHA is reported in aggregate at monthly enterprise resuscitation committee meetings. This team has postulated that while family presence continues to trend upwards it is not consistent with their expectations. One potential cause that has been explored by this team is that many families live too far away to arrive during the resuscitation event. With the addition of the AHA documentation, baseline compliance for the future quality
improvement should be assessed on January 1, 2017. Then family presence education should be added to annual competency. On July 1, 2017, reassessment of family presence compliance should be completed via the AHA database. The incorporation of the education to annual competency provides a mandatory time period for education to be completed. The web-based training will incorporate a pre and posttest so that data can be collected on family presence throughout the education continuum. The family presence committee chair or primary investigator should follow up on AHA family presence data every two months throughout the mandatory education time period to evaluate intervention and assess for necessary changes.

Once the aforementioned is completed, the family presence committee should evaluate all data obtained. All of the data collected for analysis should include pre-intervention compliance measurement, pre- and post-test education, 2-month evaluations via AHA, and post-education compliance measurement. The information obtained from analysis should be used to inform the committee whether the aim of the quality improvement project was met. The committee should further evaluate whether the investment to educated staff provided adequate benefit to all stakeholders. An evaluation of other surveys, such as patient and employee satisfactions surveys, would help the committee in establishing benefits and unintended outcomes that the family presence initiative may have created.

The final action of the committee may require a new plan either to increase outcomes to the 90 percent benchmark or sustain outcomes at the 90 percent benchmark. The team may need to develop a new approach to family presence and or evaluate data collection techniques. If improvements occur, the committee should recommend that education be incorporated into annual competency, thus requiring a plan for the long-term institution of annual education. To further enhance efforts, staff recognition should be provided and results explained.
Conclusions

The AACN (2016) recommends a family presence unit compliance rate of 90 percent. In order to move toward meeting this standard, more staff need to be aware of policy existence and family facilitator support. Staff education on how to handle family presence is required in order to decrease barriers to practice implementation. The AHA family presence reported data for the UK enterprise should be audited regularly to measure compliance and enact modifications as needed to maintain adequate practice and recommended compliance rate (Figure 6: PDSA).

This study was inconclusive in terms of the impact of policy implementation on family presence during resuscitation. However, based on the results of this survey, policy implementation did not detrimentally affect staff attitudes and beliefs. Furthermore, attitudes and beliefs have improved overall. Staff education and practice follow-up are suggested as conveyed in the PDSA analysis.

Doctoral defense contribution to learning

The defense process provided a great deal of education and feedback surrounding this practice improvement project. The first thing I was able to learn from the defense process was the immense amount of editing that is required to have a worthy document suitable for a doctoral candidate. One notable thing I learned through the defense process is that all of the work you do for your project is worthwhile and beneficial to practice. From the defense day itself I was afforded the opportunity to present all of the work I had completed for my doctoral degree including the doctor of nursing practice portfolio. From this presentation my committee as well as nursing leadership from within the college were able to provide feedback and present perspectives I had not considered. My committee challenged my critical thinking and posed
opportunities for future partnerships. Some of the ideas my committee posed regarding my improvement project were to evaluate the differences in what each discipline needed regarding knowledge of family presence. My committee further challenged me to be involved in national organizations and to find my voice for our discipline of nursing. The defense process has been much more than a single day; it has been an experience that will shape my future as a practitioner.
References


Randomized controlled trial of impact of family presence. *Australasian Emergency Nursing*. 8, 139-14.7


Table 1: Does UK Healthcare currently have a written policy that either allows or prohibits family presence during resuscitation?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>498</td>
<td>260290.50</td>
<td>276888.0</td>
<td>4449.19798</td>
<td>522.671687</td>
</tr>
<tr>
<td>Feb-2014</td>
<td>463</td>
<td>261534.50</td>
<td>257428.0</td>
<td>4410.77416</td>
<td>564.869330</td>
</tr>
<tr>
<td>Sept-2016</td>
<td>150</td>
<td>95891.00</td>
<td>83400.0</td>
<td>3057.34287</td>
<td>639.273333</td>
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</tbody>
</table>

Average scores were used for ties.

Kruskal-Wallis Test

| Chi-Square | 22.6222 |
| DF         | 2      |
| Pr > Chi-Square | <.0001 |

post-hoc

2012 v 2014 p=.013
2014 vs. 2016 p=.003
Table 2: Family presence interferes with resuscitation?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>487</td>
<td>280774.0</td>
<td>267850.0</td>
<td>4771.14116</td>
<td>576.537988</td>
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<tr>
<td>Feb-2014</td>
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<td>253879.0</td>
<td>254650.0</td>
<td>4742.43216</td>
<td>548.334773</td>
</tr>
<tr>
<td>Sept-2016</td>
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<td>69797.0</td>
<td>81950.0</td>
<td>3288.03938</td>
<td>468.436242</td>
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</tbody>
</table>

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square 15.9105

DF 2

Pr > Chi-Square 0.0004

post hoc
2012 vs 2014 no difference p=.14
2014 vs. 2016 p=.004
Table 3: Family presence increase levels of stress on the medical team?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>492</td>
<td>280770.50</td>
<td>272322.00</td>
<td>4446.56272</td>
<td>570.671748</td>
</tr>
<tr>
<td>Feb-2014</td>
<td>465</td>
<td>260738.50</td>
<td>257377.50</td>
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<td>560.727957</td>
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<tr>
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<td>149</td>
<td>70662.00</td>
<td>82471.50</td>
<td>3054.96887</td>
<td>474.241611</td>
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</table>

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square    15.2699
DF            2
Pr > Chi-Square 0.0005

post hoc analysis
2012 v 2014 NS p=.56
2014 vs 2016 p<.001
Table 4: Family Presence creates fear of medico-legal litigation?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>489</td>
<td>285768.0</td>
<td>269683.50</td>
<td>4830.79913</td>
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<td>Feb-2014</td>
<td>464</td>
<td>246547.0</td>
<td>255896.00</td>
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<tr>
<td>Sept-2016</td>
<td>149</td>
<td>75438.0</td>
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<td>3324.86409</td>
<td>506.295302</td>
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</tbody>
</table>

Average scores were used for ties.

Kruskal-Wallis Test

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>DF</th>
<th>Pr &gt; Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.9114</td>
<td>2</td>
<td>0.0026</td>
</tr>
</tbody>
</table>

post hoc
2012 v 2014 p=.005
2014 vs 2016 p=.37 non-significant
Table 5: An increased understanding among healthcare professionals on the benefits of family presence would increase family presence during resuscitation?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>490</td>
<td>268528.00</td>
<td>270970.0</td>
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<td>548.016327</td>
</tr>
<tr>
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<td>465</td>
<td>257281.50</td>
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</tr>
<tr>
<td>Sept-2016</td>
<td>150</td>
<td>85255.50</td>
<td>82950.0</td>
<td>2787.28475</td>
<td>568.370000</td>
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</tbody>
</table>

Average scores were used for ties.

Kruskal-Wallis Test

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>DF</th>
<th>Pr &gt; Chi-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.7950</td>
<td>2</td>
<td>0.6720</td>
</tr>
</tbody>
</table>

KW non-significant, no post hoc analysis required
Table 6: Written policies on family presence during resuscitation are needed to ensure family presence during resuscitation?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>493</td>
<td>268904.50</td>
<td>272136.0</td>
<td>4513.01587</td>
<td>545.445233</td>
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<td>Feb-2014</td>
<td>461</td>
<td>260113.00</td>
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</tr>
<tr>
<td>Sept-2016</td>
<td>149</td>
<td>79838.50</td>
<td>82248.0</td>
<td>3102.74301</td>
<td>535.828859</td>
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</table>

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square 1.7292

DF 2

Pr > Chi-Square 0.4212

KW non-significant so no post-hoc analysis
Table 7: Consensus among the team allowing families to be present during resuscitation is necessary to allow family presence?

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
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<tr>
<td>Sept-2016</td>
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<td>67007.0</td>
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</table>

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square 34.7089

DF 2

Pr > Chi-Square <.0001

post hoc
2012 v 2014 p=.25 NS
2014 vs 2016 p<.001
Table 8: I support offering families the option to be present during resuscitation if a support person is present.

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct-2012</td>
<td>497</td>
<td>271948.00</td>
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<td>Sept-2016</td>
<td>150</td>
<td>96794.50</td>
<td>83550.0</td>
<td>3060.96255</td>
<td>645.296667</td>
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</table>

Average scores were used for ties.

Kruskal-Wallis Test

Chi-Square 18.9421

DF 2

Pr > Chi-Square <.0001

post hoc
2012 v 2014 NS p=.64
2014 vs 2016 p<.001
Table 9: Believes family presence helps families with end of life decisions

<table>
<thead>
<tr>
<th>Pre-Post Dates</th>
<th>N</th>
<th>Sum of Scores</th>
<th>Expected Under H0</th>
<th>Std Dev Under H0</th>
<th>Mean Score</th>
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</table>

Average scores were used for ties.

Kruskal-Wallis Test

<table>
<thead>
<tr>
<th>Chi-Square</th>
<th>12.2278</th>
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<tr>
<td>DF</td>
<td>2</td>
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<tr>
<td>Pr &gt; Chi-Square</td>
<td>0.0022</td>
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</tbody>
</table>

post hoc

2012 v 2014 NS p=.09

2014 vs 2016 p<.001
Table 10: Frequency Distribution Table: What is your role on the health care team?

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Table of Role by Pre-Post Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre Oct-2012</td>
<td>MidPoint Feb-2014</td>
</tr>
<tr>
<td>APRN</td>
<td>15</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>3.00</td>
<td>4.07</td>
</tr>
<tr>
<td>DO</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>1.00</td>
<td>1.28</td>
</tr>
<tr>
<td>EMT - P</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1.20</td>
<td>0.00</td>
</tr>
<tr>
<td>MD - Faculty</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>10.40</td>
<td>13.92</td>
</tr>
<tr>
<td>MD - Resident</td>
<td>25</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>3.00</td>
</tr>
<tr>
<td>NCT</td>
<td>45</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>9.00</td>
<td>1.28</td>
</tr>
<tr>
<td>PA</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1.20</td>
<td>0.21</td>
</tr>
<tr>
<td>Pastoral Care</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1.40</td>
<td>0.00</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>0.20</td>
<td>1.28</td>
</tr>
<tr>
<td>RN</td>
<td>322</td>
<td>341</td>
</tr>
<tr>
<td></td>
<td>64.40</td>
<td>73.02</td>
</tr>
<tr>
<td>RT</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3.20</td>
<td>1.93</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td>467</td>
</tr>
</tbody>
</table>
Frequency Missing = 1

<table>
<thead>
<tr>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>20</td>
<td>430.8047</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>
Figure 1. Does UK Healthcare currently have a written policy that either allows or prohibits family presence during resuscitation?
Figure 2. Family presence interferes with the resuscitation process?
Figure 3. Family presence increase levels of stress on the medical team?
Figure 4. Family presence creates fear of medico-legal litigation?
Figure 5. An increased understanding among healthcare professionals on the benefits of family presence would increase family presence during resuscitation?
Figure 6. Plan Do Study Act

- Distribute web based training enterprise wide during annual competency
- Collect specified AHA data and pre and posttest responses

- Educate Staff on Family Presence during resuscitation (FPDR)
- Complete pre and post test to ensure understanding
- Measure AHA FPDR pre and post educational intervention

- Analyze pre and post test results to ensure understanding of FPDR.
- Analyze AHA pre intervention FPDR practice state.

- Collect final AHA post education data
- Determine necessary modifications
- Plan next test

- Measure AHA FPDR pre and post educational intervention
Figure 7. Process Flow Chart
## Appendix A: Comprehensive literature review table

<table>
<thead>
<tr>
<th>Author:</th>
<th>Year:</th>
<th>Title:</th>
<th>County:</th>
<th>Funding:</th>
</tr>
</thead>
</table>

### Theoretical basis for study

<table>
<thead>
<tr>
<th>Methods:</th>
<th>Clinicians, patients’ families, and patients in the ED, adult ICU’s and NICU surveyed</th>
<th>300 bed academic hospital</th>
<th>Design:</th>
<th>Descriptive Survey Design</th>
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</thead>
</table>

### Number Characteristics

<table>
<thead>
<tr>
<th>Number Characteristics:</th>
<th>Exclusion criteria</th>
<th>Attrition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Providers:</td>
<td>- 98 physicians</td>
<td>- 88% white</td>
</tr>
<tr>
<td>- 98 nurses</td>
<td>- 65% Female</td>
<td></td>
</tr>
<tr>
<td>- 6 respiratory therapists</td>
<td>- Mean age 40</td>
<td></td>
</tr>
<tr>
<td>- Patients:</td>
<td></td>
<td>- 44.</td>
</tr>
<tr>
<td>- 72% white, 52% female, mean age 43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Inclusion Criteria:

- All MD’s, Nurses and Respiratory therapists at University of Colorado Hospital, Patients and families in NICU,

### Independent Variables

| IV1 = Healthcare providers |
| IV2 = Patients and family members |

### Dependent Variables:

- Attitudes and beliefs about family presence.

### Scales:

- 4pt. Likert Scale
- Parkland Survey
- Reliability: Cronbach α values .97 healthcare survey, .93 family survey, .89 patient survey

### What stats used:

- Stats: SPSS

### Statistical findings or qualitative findings:

- Findings:
  - Healthcare providers had an overall positive attitude about family presence
  - Majority of healthcare providers supported FP during CPR
  - Safety concern
  - Family members felt it was their right to witness loved ones resuscitation
  - Would like the option to participate
  - Family members thought they would better be able to understand patient’s condition.
  - Patients felt it was their right to have family present
  - Patients felt that the option to have family

### Level:

- Leve l: IV

### Strengths:

- Qualitative data from patients and families minimal
- Nonrespondant bias may be present due to length of survey or because only those interested in the subject responded
- Sample lacked ethnic diversity
- Risk/harm: Benefits outweigh risk

### Limitations:

- Response rate from healthcare providers low
- Qualitative data from patients and families minimal
- Nonrespondant bias may be present due to length of survey or because only those interested in the subject responded
- Sample lacked ethnic diversity
- Risk/harm: Benefits outweigh risk

### Feasibility:

- Implementation of FP into practice should be very easy.
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Country</th>
<th>Funding</th>
<th>Theoretical Basis</th>
<th>Number Characteristics</th>
<th>Exclusion Criteria</th>
<th>Attrition</th>
<th>Independent Variables</th>
<th>What scales used</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level</th>
<th>Strengths</th>
<th>Limitations</th>
<th>Risk or harm if implemented</th>
<th>Feasibility of use in your practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Compton, Rosemarie Fernandez</td>
<td>2014</td>
<td>France</td>
<td>N/A</td>
<td>N/A</td>
<td>570 adult family members of patients undergoing CPR</td>
<td>One group given the option of family presents, others followed standard protocol</td>
<td>Measured anxiety, depression, PTSD</td>
<td>Randomized control trial</td>
<td>IV1 = Given the option of being present during their family members resuscitation</td>
<td>Impact of Event Scale (IES)</td>
<td>Results from analyzing the individual imputed data sets were combined using Rubin’s rules.</td>
<td>PTSD symptoms higher in control group</td>
<td>Level 1</td>
<td>Strengths: RCT</td>
<td>Cultural differences related to perceptions of CPR and dying</td>
<td>Risk/harm: Higher anxiety and PTSD symptoms without family</td>
</tr>
</tbody>
</table>
standard protocol.

depressive episode

Reliability:
- ICG: validated by Bourgeois
- DSM-IV: widely used international tool.

categorical outcomes

Mixed models of ANOVA were used for quantitative outcomes
- All statistical tests were two tailed with a 0.05 error, P<0.05 considered significant.
- SAS software used

higher in control group

No difference between groups on symptoms of depression


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
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<th>County</th>
<th>Funding</th>
<th>Theoretical basis for study</th>
<th>Methods:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomlinson, K., Golden, I., Mallory, J., Corner, L.</td>
<td>2010</td>
<td>Family presence during adult resuscitation: a survey of emergency department registered nurses and staff, attitudes.</td>
<td>United States</td>
<td>N/A</td>
<td>Theoretical Basis: Chaos Theory</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number Characteristics</th>
<th>Exclusion criteria</th>
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<tbody>
<tr>
<td>Number Characteristics:</td>
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</table>
- 65% female |
- 35% Male |
- 31-50 years old |
- Exclusion Criteria: 1 person self excluded from research. |
- Attrition: 1 person self excluded |

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>IV1 = N/A</th>
<th>IV2 = N/A</th>
</tr>
</thead>
</table>

| Dependent Variables: |
| Scale: N/A |
| Reliability: N/A |

| What scales used - reliability info (alphas) |
| Stats: N/A |

| Statistical findings or qualitative findings |
| Findings: |
- 79 surveys |
- 82% supported FP during resuscitation |
- Barriers to FP include families interference during resuscitation, increased stress on staff |

| Level = V |

| Strengths: |
- Consistent results with other research |
- Consistent barriers to practice implementation |
- Limitations: |
- Small sample |
- Limited area |

| Risk/harm: |
- Benefits outweigh risk |

| Feasibility: |
- Implementation into practice, need to educate staff |

Presence being facilitated to family members

Benefits outweigh risk

Feasibility: To incorporate family practice is very easy, making a common widespread practice may prove to be more difficult.
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<tbody>
<tr>
<td>Feagan, L. M.</td>
<td>2011</td>
<td>The impact of Education on Provider Attitudes Toward Family-Witnessed Resuscitation</td>
<td>US</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Theoretical Basis for Study**

- *Lewins Change theory*

**Methods**

- Phase I: conducted in ED, all inpatient units in 2 acute care hospitals: 1 academic and 1 community hospital
- Phase II: non academic facility
- Phase I: convenience sample of physicians and RN’s from both facilities surveyed about opinions and beliefs regarding family presence during resuscitation.
- Phase II: in community hospital, resurveyed post education program.

**Number Characteristics**

- **Exclusion criteria**
  - **Attrition**
  - 46 participants didn’t participate in phase II

**Independent Variables**

- **IV1**: Educating staff
- **IV2**: N/A

**Dependent Variables**

- Opinion on Family witnessed resuscitation

**Scales**

- **Reliability:** Cronbach value .882

**Stats**

- Phase I: Spearman’s rho, independent t-tests
- Phase II: Independent t-tests, one-way ANOVA

**Findings**

- Prior experience with FP and CPR were shown to support FP
- Prior education on FP also showed greater support for FP

**Level:** III

**Strengths**

- Standardized presentation format for all groups
- Reduction of investigator bias created by educational program being designed to present oppositional and supportive points of view.
- Study questions masked to reduce risk of awareness bias
- Study surveyed outside of critical care and ED, also within a non academic facility
- Fills gap in literature related to above statement

**Limitations**

- Risk or harm if implemented
- Feasibility of use in your practice

<table>
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<tr>
<th>Author Year Title</th>
<th>Theoretical basis for study</th>
<th>Number Characteristics Exclusion criteria Attrition</th>
<th>Independent variables IV1 = IV2 = Dependent variables</th>
<th>What scales used - reliability info (alphas)</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level = Strengths Limitations Risk or harm if implemented Feasibility of use in your practice</th>
</tr>
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<tbody>
<tr>
<td>Roberta Basol, Kathleen Ohman,</td>
<td>Theoretical basis: N/A</td>
<td>Methods: Distributed 1402 surveys 625 returned</td>
<td>Number Characteristics: 97.3% white</td>
<td>Independent Variables: IV1= N/A</td>
<td>Scales: Reliability: Cronbach reliability</td>
<td>Stats: N/A</td>
<td>Findings: 69.4% of respondents indicated they would want</td>
</tr>
<tr>
<td>• Phase II: quantitative comparative data • Overall before – after correlational design.</td>
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<tr>
<td>• Attrition could be associated with 6 months between phase I and Phase II • Phase I subjects didn’t complete pre education survey immediately before education, maturity bias possible. • Risk/harm: Benefits outweigh risk • Feasibility: This program is ideal in my practice, educating staff helps to decrease barriers to FP.</td>
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<tr>
<td>Susan MacLean, Cathie Guzzetta,</td>
<td>Theoretical basis: N/A</td>
<td>Exclusion criteria:</td>
<td>IV1 = IV2 =</td>
<td>Scales: 30 item survey</td>
<td>Stats: SPSS and Descriptive statistics</td>
<td>Findings:</td>
<td>Level: VI</td>
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<tr>
<td></td>
<td></td>
<td>1500 AACN &amp; 1500 ENA members mailed survey</td>
<td>Mean age: 42y</td>
<td>Independent variables:</td>
<td>Reliability: Panel of</td>
<td>Only 5% of respondents worked on</td>
<td></td>
<td>Strengths:</td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>IV1 = N/A</td>
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</table>

- **Author**: Susan MacLean, Cathie Guzzetta, N/A
- **Methods**: 1500 AACN & 1500 ENA members mailed survey
- **Number Characteristics**: Exclusion criteria: 1500 ENA members mailed survey, Mean age: 42y
- **Independent variables**: IV1 = IV2 = Dependent variables
- **What scales used - reliability info (alphas)**: Scales: 30 item survey, Reliability: Panel of
- **What stats used**: Stats: SPSS and Descriptive statistics
- **Statistical findings or qualitative findings**: Findings: Only 5% of respondents worked on
- **Level**: VI
- **Strengths**: Examined critical and emergency nurses only
- **Limitations**: Risk or harm if implemented
- **Feasibility of use in your practice**: Feasible to implement policy, need to make sure it requires all individuals to do the same thing regarding FP.
Cheri White, et al.  
- Year: 2003  
- Country: US  
- Funding: N/A

**Design:** Survey of AACN & ENA members.  
- 90% women  
- 50% baccalaureate prepared  
- Exclusion Criteria: Non AACN or ENA members  
- Attrition: 984 out of 3000 surveys sent out.

**IV2=N/A**  
- Dependent Variables: N/A  
- Experts, 3 nurses, 3 emergency nurses, 1 physician rated the relevance and clarity of survey

**Units that had written policies allowing the option of family presence during CPR:**  
- 45% of nurses stated that their unit allowed family presence during CPR even though no policy existed  
- ¼ of the nurses reported that family presence was prohibited for CPR even though no policy existed.  
- 37% of the nurses preferred a policy  
- 39% preferred allowing FP during CPR but didn’t want a policy.

**Limitations:**  
- Did not undergo reliability testing  
- Only one third of the sample returned surveys; generalizability is limited.  
- Preferences of patients’ and families not examined  
- Risk/harm: Benefits outweigh risk

**Feasibility:** Utilizing family practice can be done with or without official guidelines as proved by this survey, though policy creates consistency.

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<tbody>
<tr>
<td>Cheryl Hanson, Donna Strawser</td>
<td>• Author: Cheryl Hanson, Donna Strawser</td>
<td>• Method: 47 family members surveyed Evaluation of a program that had been in place since 1982 Design: Convenience Survey</td>
<td>• Number Characteristics: N/A</td>
<td>• Independent Variables: IV1 = N/A IV2 = N/A</td>
<td>• Scales: N/A</td>
<td>• Stats: N/A</td>
<td>• Findings: 76% felt their adjustment to death was made easier by their presence. 64% felt their presence was beneficial to the dying person. Family members have commented that they could see how much effort went into the attempts to save their loved ones.</td>
<td>• Level: VI</td>
<td>• Strengths: First Family presence Program in US. • Limitations: Did not undergo reliability testing. Small sample size. Risk/harm: Benefits outweigh risk • Feasibility: This program was instituted in the 1980’s, it is completely appropriate to implement into current practice.</td>
<td></td>
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</tr>
</tbody>
</table>

<table>
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<tr>
<th><strong>Author:</strong></th>
<th>Christophe T Doolin, Lisa Quinn, Lesley Bryant, Ann Lyons, Ruth Kleinpell</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year:</strong></td>
<td>2011</td>
</tr>
<tr>
<td><strong>Country:</strong></td>
<td>US</td>
</tr>
<tr>
<td><strong>Funding:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Theoretical basis:</strong></td>
<td>Kolcaba’s Theory of Comfort, Lewin's Three step Change theory</td>
</tr>
<tr>
<td><strong>Methods:</strong></td>
<td>Utilized Ebscohost, CINAHL, Pre-CINAHL, Medline Plus</td>
</tr>
<tr>
<td><strong>Number Characteristics:</strong></td>
<td>No limitations were set for searches.</td>
</tr>
<tr>
<td><strong>Exclusion Criteria:</strong></td>
<td>Initial search yielded n=92 articles used 38.</td>
</tr>
<tr>
<td><strong>Statement from Nursing credentialing bodies:</strong></td>
<td></td>
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<tr>
<td><strong>Practice Guidelines:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Design:</strong></td>
<td>Comprehensive Review</td>
</tr>
<tr>
<td><strong>Independent Variables:</strong></td>
<td>IV1=N/A, IV2=N/A</td>
</tr>
<tr>
<td><strong>Dependent Variables:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Scales:</strong></td>
<td>Melnyks and Fineout-Overholts modified hierarchy of evidence</td>
</tr>
<tr>
<td><strong>Stats:</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Findings:</strong></td>
<td>97.5% of family members interviewed stated that they had the right to be present and would do so again.</td>
</tr>
<tr>
<td></td>
<td>Only 22% of cardiac arrests occurring in the hospital setting actually survive.</td>
</tr>
<tr>
<td></td>
<td>21% of ED’s do not permit FPDR. Most common reason is not being asked.</td>
</tr>
<tr>
<td></td>
<td>Key elements in successful protocol implementation are having a strong support committee.</td>
</tr>
<tr>
<td></td>
<td>Trained family support facilitators that have knowledge of resuscitative procedures are needed to be with family.</td>
</tr>
<tr>
<td><strong>Level:</strong></td>
<td>V</td>
</tr>
<tr>
<td><strong>Strengths:</strong></td>
<td>Includes overview of data on multiple levels of family presence.</td>
</tr>
<tr>
<td><strong>Limitations:</strong></td>
<td>RCT’s need to be completed</td>
</tr>
<tr>
<td><strong>Valid outcome measures to determine short and long term effects of family presence.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Risk/harm:</strong></td>
<td>Benefits outweigh risk</td>
</tr>
<tr>
<td><strong>Feasibility:</strong></td>
<td>To utilize the implications for practice, implementing a policy on family presence is possible, need to create a committee and follow national recommendations.</td>
</tr>
</tbody>
</table>


54
<table>
<thead>
<tr>
<th>Author</th>
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<th>Title</th>
<th>County</th>
<th>Funding</th>
<th>Theoretical basis for study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerri Holzhauzer, Julie Finucane, Susan DeVries</td>
<td>2006</td>
<td>Presenting the option for family presence program.</td>
<td>Australia</td>
<td>Research grants from PA Hospital Research and Development Foundation, Princess Alexandra Nurses Association, and Johnson &amp; Johnson.</td>
<td>• Specific theory not listed, utilized ENA’s Presenting the option for family presence program.</td>
</tr>
</tbody>
</table>

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<th>Strengths Limitations Risk or harm if implemented Feasibility of use in your practice</th>
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<tr>
<td>100 met inclusion criteria, 1 declined to participate, total sample for study 99</td>
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<td>• One of few RCT on family presence</td>
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<tr>
<td>Follow up survey 1 month after resuscitative encounter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Follow current family presence recommendations from ENA</td>
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<tr>
<td>Design: Randomized controlled trial</td>
<td></td>
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<td></td>
<td></td>
<td>• Experimenta l group showed positive outcome for family presence</td>
</tr>
<tr>
<td>Method: Emergency department in Queensland teaching hospital. Relatives meeting inclusion criteria were randomly assigned into either the control or experimental group.</td>
<td></td>
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<td>• Limitations Small sample size 3 year time frame.</td>
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<td>• Feasibility: Putting family presence to practice is very feasible, having been done in other places.</td>
</tr>
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<td></td>
<td>• Feasibility: Putting family presence to practice is very feasible, having been done in other places.</td>
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significant other  
• Gave written consent  
• Trained support person and relative must not be disruptive to patient.  
• Attrition: 30/39 for the control group and 58/60 for the experimental group

doesn’t seem to them cope better.  
• 92% of the experimental group felt they had adequate support during resuscitation  
• 58% of experimental group stated they had adequate support following resuscitation  
• 18% of control group felt they had adequate support following resuscitation


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>County</th>
<th>Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theresa Meyers, Dezra J Eichhorn,</td>
<td></td>
<td>Theoretical basis for study</td>
<td></td>
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<td></td>
<td></td>
<td>Theoretical basis:</td>
<td>Holistic Framework,</td>
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<tr>
<td></td>
<td></td>
<td>Method:</td>
<td>940-bed, university affiliated, level</td>
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<td></td>
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<td>Number Characteristics:</td>
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<td>Attrition:</td>
<td>Holistic Framework,</td>
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<td>Dependent variables:</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>IV1 = N/A</td>
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<tr>
<td></td>
<td></td>
<td>IV2 = N/A</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Scales:</td>
<td>37-item family survey</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Stats:</td>
<td>Fishers exact or chi-square test for categorical survey items</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Findings:</td>
<td>57% of spouses were present</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Level = I V</td>
<td>Strengths:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strengths:</td>
<td>Used a variety of data sources</td>
<td></td>
</tr>
</tbody>
</table>
directs caring activities of the healthcare provider in preserving the wholeness, dignity and integrity of the family unit from birth to death.

1 trauma center.

- Qualitative and quantitative
- Convenience sample 39 family members and 96 healthcare providers

Design:
- Descriptive Study

- 11 males
- 28 females
- Healthcare providers: 60 nurses
- 36 physicians
- Average age 35
- 42 Males
- 54 Females

Exclusion Criteria: N/A

Inclusion Criteria:
- 18y or older
- Considered family members
- Ability to speak English
- Absence of combative ness, extreme emotional instability, behaviors suggesting intoxication, AMS
- Offered FP option
- Agreed to participate
- RN’s and Physicians also invited to participate in study

Attrition: 96/121 healthcare providers

- IV2= N/A
- Dependent Variables: N/A

- 33-item healthcare provider survey
- Family presence attitude scale
- 4point likert scale
- Reliability: Cronbach’s α of .92 for family survey and .91 for healthcare provider survey.

- Students’ t-test or ANOVA for attitude scores.
- SAS software used
- Two tailed P values of less than 0.05 were considered significant.
- NUD*IST utilized to identify themes in qualitative responses.

Results show FP from multiple perspectives
- Broadly represents the experience thus strengthening the findings of credibility.

Limitations:
- Generalizability of family responses limited because only those family members assessed as suitable FP candidates who accepted the visitation option were included.
- Unknown how representative these families are
- Interviews conducted with families 2 months after FP
- Attending were limited to those who supported
- Risk/harm: Benefits outweigh risk

Feasibility:
- Instituting family presence policy is highly feasible for
of the patient’s condition and to know that everything possible was being done.

- 80% of family members felt FP experience was important to families.


<table>
<thead>
<tr>
<th>Author Year Title County Funding</th>
<th>Theoretical basis for study</th>
<th>Number Characteristics Exclusion criteria Attrition</th>
<th>Independent variables IV1 = IV2 = Dependent variables</th>
<th>What scales used - reliability info (alphas)</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level = Strengths Limitations Risk or harm if implemented Feasibility of use in your practice</th>
</tr>
</thead>
</table>
| • Author: Patricia C. Bassler • Year: 1996 • Country: US • Funding: N/A | • Theoretical basis: Four tasks of Mourning developed by Worden. | • Methods: Convenience sample of 46 critical care and emergency nurses 
• Took place at 800-bed teaching hospital in Northeast. 
• Multiple classes until all 46 nurses had completed the course. 
• Design: Quantitative Quasi- | • Number Characteristics: 14 critical care nurses 
22 emergency nurses 
10 didn’t answer the specialty question 
Mean age 37y 
Exclusion Criteria: Register ed nurses who worked outside of | • Independen t Variables: IV1= Educating staff on FP 
IV2=N/A 
Dependent Variables: Beliefs about FP. | • Scales: Not provided 
Reliability: Not provided | • Findings: 
• Pretest 25/45 thought the choice of FP should be given 
• Post test 40/45 thought the choice should be given after education. 
• Pre test, 5/46 gave families the choice of being present. | • Level : IV 
• Strengths: Education on FP can increase participation and understanding of importance. 
• Limitations: 
• Small sample size 
• Not a randomized sample 
• Data collected during high census period, staff unable to participate |
experimental study with pre and posttest.

the critical care or emergency room.
- Nurses who worked less than 6 months in the area.
- Attrition: N/A

- Post test 34/43 stated they would give families the choice to be present.

- Risk/harm: Benefits outweigh risk
- Feasibility: Educating staff is feasible at any level of nursing.


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
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<th>Theoretical basis</th>
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<th>Attrition</th>
<th>Independent variables</th>
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<th>What scales used</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level =</th>
<th>Strengths</th>
<th>Limitations</th>
<th>Risk or harm if implemented</th>
<th>Feasibility of use in your practice</th>
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</thead>
<tbody>
<tr>
<td>Maria Hung, Samntha Pung</td>
<td>2010</td>
<td>Family presence preference when patients are receiving resuscitation in an accident and emergency department</td>
<td>China</td>
<td>Not listed</td>
<td>N/A</td>
<td>Age 20-89y, 9men, 9women</td>
<td>Family members, 18y or older, Patient had to have survived resuscitation</td>
<td>Attrition: 18 participants out of 32 eligible</td>
<td>N/A Variable: N/A</td>
<td>Reliability: Interview scales used were conducted twice to ensure consistency</td>
<td>N/A</td>
<td>Stats: N/A</td>
<td>Findings: Themes: Being engaged in what’s going on, providing information to the team, perceived appropriateness Recognizing the AED procedures, Perceived inconvenience, Perceived prohibition</td>
<td>I/V</td>
<td>Strengths: Identified how families felt when present during resuscitation</td>
<td>Limitations: Didn’t exam after policy implementation</td>
<td>Risk/harm: Benefits outweigh risk</td>
<td>Feasibility: feasible use within practice</td>
<td></td>
</tr>
<tr>
<td>Methods:</td>
<td></td>
<td>18 participants Interviews conducted within 24 hours Data saturation occurred after 15 patients Audio recorded interviews transcribed verbatim</td>
<td>Design:</td>
<td>Interpretive phenomenological</td>
<td>Number Characteristics:</td>
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<table>
<thead>
<tr>
<th>Author Year Title</th>
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<th>What scales used - reliability info (alphas)</th>
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<th>Statistical findings or qualitative findings</th>
<th>Level = Strengths Limitations Risk or harm if implemented Feasibility of use in your practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mangurten, J., Scott, S., Guzzetta, C., Sperry, J., Vinson, L., et al.</td>
<td>N/A</td>
<td>Educated staff by inviting a panel of speakers</td>
<td>IV1 = Educating staff on FP IV2 = N/A</td>
<td>Not provided</td>
<td>N/A</td>
<td>74% felt they provide this support during RI</td>
<td>Education on FP can increase participation and understanding of importance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family presence self assessment survey</td>
<td>Dependent Variables: Beliefs about FP</td>
<td>Reliability: Not provided</td>
<td></td>
<td>60% felt comfortable performing in front of family</td>
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<tr>
<td></td>
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<td>109 surveys completed</td>
<td>Policy implementation</td>
<td></td>
<td></td>
<td>76% felt performance was not affected during RI</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Design: Convenience survey</td>
<td></td>
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<td>71% would want their family present during RI</td>
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<td></td>
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<td></td>
<td></td>
<td>54 families were assessed</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chaplains, family facilitator</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Patient care wasn’t interrupted</td>
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</tbody>
</table>

### Keeper Article 14 ENA. (2010). Family presence during invasive procedures and resuscitation in the emergency department.

<table>
<thead>
<tr>
<th>Author Year Title</th>
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<th>Number Characteristics</th>
<th>Independent variables</th>
<th>What scales used - reliability info (alphas)</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level = Strengths Limitations</th>
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<td></td>
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<tr>
<th>County Funding</th>
<th>Exclusion criteria</th>
<th>Attrition</th>
<th>IV2 = Dependent variables</th>
<th>reliability info (alphas)</th>
<th>qualitative findings</th>
<th>Risk or harm if implemented</th>
<th>Feasibility of use in your practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Author: ENA</td>
<td>• Methods:</td>
<td>• Number</td>
<td>• Independent variables:</td>
<td>• Scales: Not provided</td>
<td>• Findings:</td>
<td>• Strengths:</td>
<td>• Education on FP can increase participation and understanding of importance.</td>
</tr>
<tr>
<td>• Year: 2010</td>
<td>• Position statement</td>
<td>Characteristics:</td>
<td>IV1=N/A</td>
<td>Relevance: Not provided</td>
<td>Healthcare organizations should develop and disseminate educational resources for the public concerning the option of family presence during invasive procedures and resuscitation.</td>
<td>• Practice Alert</td>
<td>• Limitations</td>
</tr>
<tr>
<td>• Country : US</td>
<td>• Design: N/A</td>
<td>• Exclusion Criteria:</td>
<td>IV2=N/A</td>
<td>N/A</td>
<td>• N/A</td>
<td>• Risk/harm: Benefits outweigh risk</td>
<td>• Feasibility: Educating staff is feasible at any level of nursing.</td>
</tr>
<tr>
<td>• Funding : N/A</td>
<td>• Attrition: N/A</td>
<td>• IV1 = N/A</td>
<td>• Dependent variables:</td>
<td>• IV2=N/A</td>
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<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elinar Lowry</td>
<td>2012</td>
<td>Family Presence Protocol in Emergency Nursing</td>
</tr>
</tbody>
</table>

- **Theoretical basis for study:** N/A
- **Methods:** 14 ER nurses, face-to-face interviews
- **Number Characteristics:** N/A
  - Exclusion Criteria: N/A
  - Attrition: N/A
- **Independent variables:** IV1 = N/A, IV2 = N/A
- **What scales used:** Not provided
  - Reliability: Not provided
- **What stats used:** Not provided
- **Statistical findings:** Family able to see evolving events, patients condition change over time, family able to validate efforts used to save loved one.
- **Level:** IV
- **Strengths:** Information from nurses with an established FPDR protocol
  - Limitations: Small sample, one hospital, only nurses views
  - Risk/harm: Benefits outweigh risk
  - Feasibility: Promotes/support established protocol.


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tudor, K., Berger, J., Polivka, B.J., Chelbowy, R., Thomas, B.</td>
<td>2014</td>
<td>Nurses’ Perceptions of Family Presence During Resuscitation</td>
</tr>
</tbody>
</table>

- **Theoretical basis for study:** N/A
- **Methods:** N/A
- **Number Characteristics:** N/A
  - Exclusion Criteria: N/A
  - Attrition: N/A
- **Independent variables:** IV1 = N/A, IV2 = N/A
- **What scales used:** Not provided
  - Reliability: Not provided
- **What stats used:** Not provided
- **Statistical findings:** Not provided
- **Level:** N/A
- **Strengths:** Information from nurses with an established FPDR protocol
  - Limitations: Small sample, one hospital, only nurses views
  - Risk/harm: Benefits outweigh risk
  - Feasibility: Promotes/support established protocol.
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<tr>
<th>Funding</th>
<th>Attrition</th>
<th>Dependent variables</th>
<th>Feasibility of use in your practice</th>
</tr>
</thead>
</table>
| • Author: Tudor, K., Berger, J., Polivka, B.J., Chelbowy, R., Thomas, B | • Number Characteristics: 154 nurses working inpatient/ outpatient units | • Scales: The Family Presence Risk Benefit Scale | • Strengths: 
| Year: 2014 | • Exclusion: N/A | • Dependent Variables: N/A | • Supports placing policy |
| Country: US | • Reliability: Previously validated by Twibell et al. | • Stats: SPSS version 22 | • Limitations: 
| Funding: N/A | • Methods: Descriptive Cross sectional survey | • Level: V | • Can not be generalized beyond survey respondents |
| | • Independent Variables: IV1= N/A IV2=N/A | • Findings: 25.0% indicated they would want to be present |
| | • Design: Conveniencesample | • 16.2% had been present when a member of their family was resuscitated |
| | • Number Characteristics: 154 nurses working inpatient/ outpatient units | • Level: V |
| | • Exclusion: N/A | • Strengths: 
| | • Reliability: Previously validated by Twibell et al. | • Supports placing policy |
| | • Methods: 154 nurses survey 63 item survey | • Limitations: 
| | • Design: Descriptive Cross sectional survey | • Can not be generalized beyond survey respondents |
| | | • Feasibility: Instituting family practice is feasible at any level. |


<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Title</th>
<th>County</th>
<th>Funding</th>
<th>Theoretical basis for study</th>
<th>Number Characteristics</th>
<th>Exclusion criteria</th>
<th>Attrition</th>
<th>Independent variables</th>
<th>IV1 =</th>
<th>IV2 =</th>
<th>What scales used - reliability info (alphas)</th>
<th>What stats used</th>
<th>Statistical findings or qualitative findings</th>
<th>Level</th>
<th>Strengths</th>
<th>Limitations</th>
<th>Risk or harm if implemented</th>
<th>Feasibility of use in your practice</th>
</tr>
</thead>
</table>
| ENA    | 2012 |       | US     | N/A     | Theoretical basis: N/A    | Number Characteristics: 117 included | Exclusion Criteria: N/A | Attrition: N/A | IV1= N/A IV2=N/A | N/A | N/A | Scales: NA Reliability: N/A | Stats: Levels of Recommendation for Practice | . Findings: | Level: V | Strengths: 
<p>| | | | | | | | | | | | | | | | | | | | |
|        |      |       |        |         |                           |                       |                     |          |                      |       |       |                        |             |                             |       |            |          |                            |                        |
|        |      |       |        |         |                           |                       |                     |          |                      |       |       |                        |             |                             |       |            |          |                            |                        |</p>
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<th>Level =</th>
<th>Strengths Limitations</th>
<th>Risk or harm if implemented</th>
<th>Feasibility of use in your practice</th>
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<tbody>
<tr>
<td>• Author: Redley &amp; Hood</td>
<td>• Theoretical basis: N/A</td>
<td>• Design: Convenience sample</td>
<td>• Number Characteristics: N/A</td>
<td>• Scales: Family presence survey</td>
<td>• Stats: SPSS</td>
<td>• Level: V</td>
<td>• Strengths: Supports placing policy</td>
<td>• Limitations: Cannot be generalized beyond survey respondents</td>
<td>• Feasibility: Instituting family practice is feasible at any level</td>
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<td>• Year: 1996</td>
<td>• Exclusion Criteria: N/A</td>
<td>• Independence Variables: N/A</td>
<td>• Reliability: N/A</td>
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<td></td>
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</tr>
<tr>
<td>• Country: US</td>
<td>• Attrition: N/A</td>
<td>• IV1 = N/A</td>
<td>• Family presence is being offered with in the metro area</td>
<td></td>
<td></td>
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<tr>
<td>• Funding: N/A</td>
<td>• IV2 = N/A</td>
<td>• Disclosed barriers to family presence</td>
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</table>

CPR-Cardiopulmonary resuscitation; FP-Family presence; RN- registered nurse; MD- Medical Doctor; CI-confidence interval; RCT- randomized control trial; y-years; PTSD- post traumatic stress disorder, FPDR/FPDAR-Family presence during resuscitation/adult resuscitation; IV-independent variable, RI-resuscitative interventions.

Grading the Levels of Evidence*

I. Evidence from a systematic review or meta-analysis of all relevant randomized controlled trials (RCTs) or evidence-based clinical practice guidelines based on systematic reviews of RCTs
II. Evidence obtained from at least one properly designed RCT
III. Evidence obtained from well-designed controlled trials without randomization
IV. Evidence obtained from well-designed case control and cohort studies
V. Evidence from systematic reviews of descriptive and qualitative studies
VI. Evidence from a single descriptive or qualitative study
VII. Evidence from opinion of authorities and/or reports of expert committees

(Melnyk & Fineoult-Overholt, 2011)
Appendix B: Survey

1. What is your role on the health care team?
   - APRN
   - DO
   - MD-Faculty
   - MD-Resident
   - NCT
   - PA
   - Pastoral Care
   - Pharmacist
   - RN
   - RT
   - EMT-P

2. Does UK Healthcare currently have a written Policy that either allows or prohibits family presence during resuscitation?
   - yes
   - unsure
   - no

3. Have you taken a family member to the patient’s bedside during resuscitation in the last year?
   - No, and Would Not do so if the opportunity presented itself
   - No, but Would if the opportunity presented itself
   - Yes

4. Family presence interferes with the resuscitation process?
   - no
   - unsure
   - yes

5. Family presence increase levels of stress on the medical team?
   - No
   - unsure
   - yes
6. Family presence creates fear of medico-legal litigation?
   - no
   - unsure
   - yes

7. Written policies on family presence during resuscitation are needed to ensure family presence during resuscitation?
   - no
   - unsure
   - yes

8. Consensus among the team allowing families to be present during resuscitation is necessary to allow family presence?
   - no
   - unsure
   - yes

9. An increased understanding among healthcare professionals on the benefits of family presence would increase family presence during resuscitation?
   - no
   - unsure
   - yes

10. I support offering families the option to be present during resuscitation if a support person is present.
    - no
    - unsure
    - yes

11. I believe family presence during resuscitation can be beneficial for helping families decide when to stop life saving measures.
    - no
    - unsure
    - yes
Bibliography


presence during cardiopulmonary resuscitation: Using evidence-based knowledge to
guide the advanced practice nurse in developing formal policy and practice guidelines.

*Journal of the American Academy of Nurse Practitioners.* 23.


participation during resuscitation: An option. *Annals of Emergency Medicine, 16:*6, 673-675


about family presence: a survey of healthcare providers, patients’ families and patients.


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Hanson, C., & Strawser, D. (1992). Family presence during cardiopulmonary resuscitation:
Foote Hospital emergency department’s nine-year perspective. *Journal of Emergency Nursing, 18*(2), 104-106.


