8-4-2017

Evaluation of a Pilot Multidisciplinary Debriefing Program: Promoting Pediatric Provider Emotional, Social, and Spiritual Wellbeing

Allison E. Reynolds

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Evaluation of a Pilot Multidisciplinary Debriefing Program: Promoting Pediatric Provider Emotional, Social, and Spiritual Wellbeing

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August 2, 2017
Dedication

For my parents, thank you for selflessly giving me everything I needed to succeed, and always being my greatest source of love and encouragement. For my pediatric patients and families, who I have been blessed to care for over the past several years. You have taught me about life, and daily inspired me to pursue my professional passions. Finally, for my Savior, Who sustained me through this journey of the pursuit of knowledge. Thank you for choosing me to further Your kingdom through the profession of nursing.
Acknowledgments

I wish to acknowledge the contributions of my project team who have been instrumental in bringing this scholarly project to completion. Thank you for your endless hours of reading and meetings in order to guide me through this process. I would also like to acknowledge the contributions of the Helen DeVos Children’s Hospital pediatric palliative care team and pediatric residency program. Thank you for partnering with me in this project work. Your collaboration, facilitation, and encouragement in this project work were crucial to the success of this project work. I am sincerely grateful beyond what words can express.
Abstract

Regular exposure to trauma, such as the act of bearing witness to intense suffering and pain of pediatric patients and families, has a significant effect on healthcare professionals. Despite the fact that traumatic situations in pediatrics are a reality, there is little education and few interventions focused on how to prepare and support healthcare providers to care for dying children and families or for other clinically challenging situations. Pediatric residency program directors within a large, freestanding children’s hospital identified a subjective need for support for their pediatric residents in dealing with clinically challenging situations faced during residency, motivating residency program directors to implement monthly debriefing sessions for pediatric residents following their pediatric intensive care (PICU) and neonatal intensive care (NICU) rotations. An appraisal of evidence further justified the need for provision of support and highlighted various methods for the provision of support. Utilizing the Model of Evidence-based Practice Change for evidence-based practice implementation, the purpose of this pilot program evaluation was to determine the efficacy and impact of these monthly, multidisciplinary debriefing sessions on resident emotional, social, and spiritual wellbeing and compassion fatigue. Outcomes showed that this pilot multidisciplinary debriefing session was a compelling example of a deliberative, routine, support measure for combating provider distress supported by both quantitative and qualitative outcome measures.

Keywords: Healthcare provider, pediatric, resident, support, emotional, debriefing
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Executive Summary

Providing care to pediatric patients can occasionally result in a healthcare provider’s exposure to intense suffering and trauma. Regular exposure to these types of challenging situations can have profound effects on the healthcare professional’s practice and personal life. Despite this, there is little education and few interventions focused on how to promote support for healthcare providers in caring for dying children and families and other clinical challenging situations (Serwint, Rutherford, & Hutton, 2006).

Pediatric residents are a particularly vulnerable population of healthcare providers for encountering clinically challenging situations. A Midwest pediatric residency program and pediatric palliative care program recognized the vulnerability of its own pediatric residents, and sought to evaluate a pilot multidisciplinary debriefing session program intended to improve the provision of interventions focused on preparing and supporting healthcare providers. Given this, the purpose of this scholarly project was twofold: to determine whether participating in a multidisciplinary debriefing session following an intensive care rotation in a Midwest children’s hospital had an impact on a resident’s level of compassion fatigue; and whether there was value assigned by pediatric residents to participating in the multidisciplinary debriefing experience.

Following an extensive literature review and assessment of organizational readiness, a quality improvement evaluation of a pilot, multidisciplinary debriefing session program utilizing an evidence-based practice approach was implemented. This three month pilot program evaluation utilized a matched pairs, pretest-posttest design with a qualitative content analysis component. Each month, following a pediatric resident’s pediatric intensive care and/or neonatal intensive care rotation, the pediatric resident was invited to attend a two-hour multidisciplinary debriefing session facilitated by a pediatric intensivist attending physician, this author, and two
pediatric chaplains. In order to evaluate the efficacy of these multidisciplinary debriefing sessions, residents involved in three months of debriefing sessions voluntarily participated in a pre- and post-debriefing survey. In order to evaluate the effects the debriefing sessions had on residents’ levels of compassion fatigue, the professional quality of life scale (proQOL) was utilized. In addition to the quantitative measures in the form of the pre- and post-debriefing sessions, qualitative data were gathered through open-ended survey questions, recording of debriefing session conversations, and semi-structured interviews.

Outcomes following scholarly project implementation were compelling in regards to the multidisciplinary debriefing session efficacy in reducing residents’ levels of compassion fatigue and perceptions of meaning and value among the pediatric residents involved. Fifty-five percent of eligible residents attended the debriefing sessions, and utilizing pre- and post-survey data obtained using the proQOL evaluating levels of compassion fatigue, findings exhibited a statistically significant improvement, namely in the area of secondary traumatic stress. Despite a lack of statistically significant change in individual proQOL questions, a number of questions did exhibit a median change, indicating that multidisciplinary debriefing sessions might have had a greater impact on the concepts that those individual questions assessed. Finally, quantitative and qualitative data also strongly supported the value, meaning, and importance of the debriefing sessions.

In light of the project outcomes, there were many weaknesses, barriers, strengths, and facilitators of the project. In addition, considering the project outcomes, many recommendations to the pediatric residency program faculty were developed and disseminated in order to improve the multidisciplinary debriefing session program. Overall, this project with its purpose to determine the efficacy and impact of a monthly, multidisciplinary debriefing session on resident
emotional, social, and spiritual wellbeing has incredible implications for the pediatric residents and other pediatric healthcare providers within this healthcare organization.
Implementation of a Pilot Multidisciplinary Debriefing Program: Promoting Pediatric Provider Emotional and Social Wellbeing

Providing care to pediatric patients can be full of games, toys, fun, and joy, while at other times, providing care to pediatric patients can be full of trauma, heartache, and sorrow. Pediatric care occasionally involves highly emotional and intense situations, life-threatening illnesses, and death (Serwint et al., 2016). A major accomplishment of modern medicine is the drastic decrease in childhood morbidity and mortality, but despite these advances, childhood illness and death is still inevitable (Stillion & Papadatou, 2002). Regular exposure to clinical situations such as the act of bearing witness to intense suffering and pain of pediatric patients and families has a significant effect on healthcare professionals. Compassion fatigue, potentially resulting from this exposure, subsequently has a significant effect on the healthcare professional’s practice and personal life. These traumatic exposures in pediatrics are a reality, yet, there is little education and few interventions focused on how to prepare and support healthcare providers in caring for dying children and families or for other clinically challenging situations (Serwint et al., 2006).

A Midwest pediatric hospital palliative care program and residency program recognized this reality and evaluated a pilot debriefing program, intended to improve the provision of interventions focused on preparing and supporting healthcare professionals in caring for dying children and for other clinically challenging situations. This document is a final report of a scholarly project focused on the evaluation of this pilot program to address this recognized problem. The goal was to assess the efficacy of these monthly multidisciplinary debriefing sessions in improving pediatric residents’ levels of compassion fatigue and providing support in caring for dying and clinically challenging pediatric patients. This final report discusses the background and significance of the problem, a review of evidence for the piloted intervention, a
discussion of organizational readiness for the intervention, conceptual frameworks utilized to
guide the evaluation and its implementation, a detailed description of the project plan, project
outcomes, implications for practice, and sustainability of the pilot program within the
organization.

**Background and Significance**

Pediatric residents, while encountering many clinically challenging situations during the
course of their pediatric residency, care for an average of thirty-five pediatric patients who die
(Kolarik, Walker, & Arnold 2006; Yazdani, Evan, Roubinov, Chung, & Zelter, 2010). The
burden of personal suffering as a result of exposure to patient deaths and clinically challenging
situations is inevitable and cumulative (Rushton, Reder, Hall, Comello, Sellers, Hutton, 2006).
Despite the frequent occurrence of these challenging situations in pediatric residency, nearly
two-thirds of pediatric physicians state that they had little to no prior education or training in
either supporting families and patients at the end-of-life, or instruction in personal coping (Foster
& Hafiz, 2015; Kolarik et al., 2006). Dickens (2009) examined confidence levels of pediatric
providers in delivering pediatric end-of-life care and showed that the majority of providers
reported that formal education did not help them feel more adequately prepared to care for
children with terminal illness. Despite education and experience, discomfort and challenges of
caring for children and families at the end of life may persist throughout a physician’s career,
indicating that measures to promote provider wellbeing and reduce provider distress are
necessary.

Lee and Dupree (2008) examined experience with end-of-life care among individuals
working in the pediatric intensive care unit. Many staff members reported frequent feelings of
grief, helplessness, and frustration throughout their careers. In a study performed by Serwint
(2004), a third of pediatric residents surveyed reported feeling guilt as a result of a patient death or challenging patient situations. These feelings can cause emotional stress and exhaustion for the provider. Considering this, compassion fatigue is the manifestation of the emotional, physical, social, and spiritual exhaustion that is caused by chronic exposure to challenging and traumatic clinical situations (Henson, 2017). Compassion fatigue can further manifest into burnout and secondary traumatic stress, and potentially inhibits the healthcare provider from providing compassionate care (Stamm, 2010). Pediatric residents exposed to frequent pediatric patient deaths and other challenging clinical situations increase their risk of experiencing emotional distress and subsequent compassion fatigue (Dyrbye et al., 2014).

As alluded to, compassion fatigue among residents may result in a variety of effects including decreased professionalism, decreased quality of care, increased medical errors, mental health conditions, substance abuse, and difficulty with relationships (Dyrbye et al., 2014). Compassion fatigue, and its other manifestations, may also result in career dissatisfaction and decisions to leave the medical profession (Hu et al., 2012). The cost of physician turnover is significant, equating to nearly $120,000 in recruitment and over two million dollars in lost revenue (Hu et al., 2012). Emotional distress and subsequent manifestations of compassion fatigue have effects on the physician personally, but also a potential effects on the quality of patient care provided and its outcomes (Dyrbye et al., 2014). Because of the emotional burden of challenging clinical situations and patient deaths, pediatric residents may choose to distance themselves from patients and families, but this action has significant impact on satisfaction and coping of the bereaved and suffering (Serwint, 2004).

As evidenced above, consequences of pediatric residents lacking proper education and/or organizational support in caring for clinically complex patients and for patient death experiences
have impactful effects on the feelings and wellbeing of the residents (Brock, Cohen, Popat, & Halamek, 2015; Forster & Hafiz, 2015; Yazdani et al., 2010). Many residents report that the overall stress and demands of residency give them little time to cope with the death of their patients and many have underlying beliefs that the expression of grief and personal distress in relation to their patient care experiences is unprofessional (Schiffman et al., 2008). Despite this, there is little evidence regarding interventions to support pediatric residents and other healthcare providers in their reactions to patient death and in other challenging clinical situations. In a survey done by Serwint (2004), debriefing with residents only occurred after 30% of patient deaths, and of those debriefings, only 40% of residents reported debriefing with an attending physician. Twenty-two percent reported debriefing with the team and/or with a colleague. A failure to recognize the feeling associated with and debrief experiences discussed above with pediatric residents can lead to acute stress, physical symptomology, and moral distress, and may ultimately hinder future engagement with the pediatric population (Yang et al., 2011; Yazdani et al., 2010).

This issue of supporting healthcare providers is recognized by many organizations important to healthcare, pediatrics, and medical education. The Institute for Healthcare Improvement (IHI) has expanded the Triple Aim into the Quadruple Aim in order to capture the impact that provider wellness has on patient outcomes (Bodenheimer & Sinsky, 2014). The National Academy of Medicine (NAM), emphasizes the importance of acknowledging and supporting the reactions of all, including health care providers involved in a patient’s death (Field & Behrman, 2003). The American Academy of Pediatrics (AAP) (2000) in its statement regarding the provision of pediatric palliative care similarly emphasized the importance of providing support of healthcare professionals caring for clinically complex and dying pediatric
patients. Given their knowledge base, expertise in communication, and clinical experience, pediatric palliative care providers are invaluable at providing caregiver support, including supporting fellow healthcare professionals.

The Academic Pediatrics Association Educational Guidelines discuss the need to provide opportunities for physicians and physician trainees to share openly with colleagues their feelings and emotions surrounding clinical cases and professional life (Serwint, 2004). These guidelines also emphasize the need for health care providers to understand their personal responses and feelings when dealing with death and dying, in order to promote personal and professional wellness as well as quality of care (Serwint, 2004). Finally, the Accreditation Council for Graduate Medical Education (ACGME) has a heightened awareness of the impact that unresolved resident distress and lack of organizational support has on resident wellbeing (Vassar, 2015). Given this, when this project was in process, the ACGME was developing recommendations for solutions to combat the issue of resident distress and to promote wellness (Vassar, 2015). The ACGME was encouraging residency programs to establish more formal systems for peer and faculty support and mentoring, while also promoting a supportive environment within residency programs (Daskivich et al., 2015). The scope of the problem, overwhelming support for intervention, and the potential consequences for lack of intervention motivated the following discussion and project implementation.

**Problem Statement**

These issues and recommendations gave cause for the evaluation of a pilot program addressing the need for amplifying support for pediatric residents in coping with patient death and challenging clinical situations. The two clinical questions that drove this evaluation were as follows:
• Does participating in a multidisciplinary debriefing session following a PICU and/or NICU rotation in a Midwestern children’s hospital have an impact on a resident’s level of compassion fatigue?
• Is there value assigned by pediatric residents to participating in the multidisciplinary debriefing experience?

Considering these clinical questions, this program evaluation had three aims:

• To determine the efficacy and impact of a multidisciplinary debriefing session for pediatric residents following their PICU and/or NICU rotations on compassion fatigue.
• To determine the level of need among the organization’s residents for increased support during residency while assessing value assigned to participating in the debriefing experience.
• To provide recommendations to the organization’s pediatric residency program faculty based upon program evaluation results, regarding opportunities to improve the structure and format for the multidisciplinary debriefing sessions.

In order to further describe the project intervention, an in-depth exploration of literature reviewed in preparation for the project will be discussed below.

Evidence in Literature: Findings

As already alluded to, pediatric residents are a vulnerable population among healthcare professionals for experiencing personal and professional distress related to pediatric patient deaths and difficult clinical situations. Given this, there is a need for pediatric residency programs and hospital organizations to provide education and support for pediatric residents in these circumstances. The following is a summary of a literature review performed prior to the project implementation, focused on answering the following question: “what are the documented
outcomes of interventions provided in healthcare organizations to address issues of provider distress and bereavement?”

Ten journal articles meeting the inclusion criteria were selected and examined in detail in the integrative literature review. Selection criteria were the following: peer reviewed articles, articles describing interventions addressing provider distress and/or bereavement, in which the intervention was evaluated utilizing quantitative and/or qualitative outcomes. The themes identified and summarized by this author as important, given the focus of the review, included: the debriefing audience, frequency of debriefing sessions, methods of debriefing facilitation, debriefing format, outcome measures utilized, and overall outcomes of debriefing sessions. The themes were summarized and aspects of the themes utilized in the multidisciplinary debriefing sessions described in this project report are provided in the following sections.

**Debriefing Audience**

Four studies of the reviewed studies incorporated individuals from various disciplines including, but not limited to physicians, nurses, social workers, and child-life specialists (Keene, Hutton, Hall, & Rushton, 2010; Meadors & Lamson, 2008; Rushton et al., 2006; Sands, Stanley, & Charon, 2008). Five studies included physicians and/or residents in the support interventions (Armstrong, Lederberg, & Holland, 2004; Berman & Villarreal, 1982; Feld & Heyse-Moore, 2006; Gunnasingam, Burns, Edwards, Dinh, & Walton, 2015; Serwint et al., 2002). Finally, one study examined debriefing methods with registered nurses only (Macpherson, 2008).

When comparing studies, the structure of the audience present at the debriefing sessions did not appear to have significant impact on the overall efficacy of the intervention, although this conclusion was tentative considering the differing interventions. This author’s impression of the studies was that a multidisciplinary audience provided an added benefit of the promotion of
mutual interprofessional understanding that was not seen in studies with an audience from only one discipline. The structure of the debriefing session that was evaluated through this project work consisted of a focus audience of pediatric residents, as an identified group of healthcare professionals within the project organization in need of debriefing intervention.

**Debriefing Frequency**

Debriefing frequency varied among the articles included within the literature review. Frequencies utilized included an annual intervention, a routine, scheduled intervention (twice weekly to monthly), and an intermittent intervention. Annual seminars, often, involved debriefing sessions accompanied by education related to communication skills, end-of-life conversations, grief, bereavement, and professional coping (Berman & Villarreal, 1982; Meadors & Lamson, 2008; Serwint et al., 2002). Studies in which the participants met more frequently were organized during a particular timeframe, and it is unclear whether the interventions continued beyond the study period (Gunnasingam et al., 2015; Macpherson, 2008; Sands et al., 2008). Debriefing sessions described by Feld and Heyse-Moore (2006) and Armstrong and colleagues (2004) met on a monthly and biweekly basis, respectively, and appear to have a more sustained effect. Finally, bereavement interventions described by Keene and colleagues (2010) and Rushton and colleagues (2006) met on an as-needed basis at the request of the healthcare professional. These sessions often revolved around a patient death for which healthcare professionals involved with the patient identified a need for debriefing (Keene et al., 2010; Rushton et al., 2006).

The differences observed between routine interventions and as-needed interventions were that as-needed interventions were related to one patient case; whereas, routinely scheduled interventions focused on multiple cases and more generalized experiences, attitudes and feelings.
The purposes of the multidisciplinary debriefing sessions evaluated in this project were for reflecting on a month-long experience following a pediatric resident’s PICU and/or NICU rotation. Therefore, a routine, monthly frequency for the multidisciplinary debriefing session was utilized.

**Debriefing Facilitation**

Facilitators of the support interventions described in the literature ranged from an individual to a team of facilitators consisting of physicians only, or a multidisciplinary team. The sessions described by Armstrong and colleagues (2004) and Berman and Villarreal (1982) consisted of a multidisciplinary facilitation team of fellows, chief residents, attending physicians, psychiatrists, and registered nurses. In the intervention described by Serwint and colleagues (2002), resident faculty, pathologists, hospital chaplains, social workers, nurses, a family advocate, and parents facilitated different aspects of the seminar-style intervention. A hospital bereavement coordinator facilitated other interventions involving healthcare provider bereavement (Keene et al., 2010; Rushton et al., 2006). Finally, an independent facilitator guided two interventions in order to ensure confidentiality and promote open discussion of the session topics (Feld & Heyse-Moore, 2006; Gunasingam et al., 2015).

Similar to the other themes, facilitation by a group did not appear to make a noteworthy difference in the overall efficacy of the intervention, although the varied facilitation methods make this difficult to determine. However, this author made the observation that the interventions that utilized a multidisciplinary approach to facilitation provided an added benefit of the promotion of mutual interprofessional understanding that was not seen in studies with an audience from only one discipline. Because of this observation, a multidisciplinary team that
included a physician, a registered nurse, and chaplains facilitated debriefing sessions that were evaluated through this project work.

**Debriefing Format**

Given the variability of the audience and frequency of the support interventions, the intervention formats varied as well. The debriefing session formats described in included articles could be grouped as education-focused, intermittent, narrative-focused, and routine open-discussion. The literature will be described according to those groupings.

**Education-focused.** As previously stated, two of the ten articles selected for the literature review involved one-day seminar interventions and revolved mostly around providing participants with education. Education topics included compassion fatigue, strategies for managing stress, grief in healthcare professionals, simulations related to end-of-life communication, organ donation, and supporting grieving families (Meadors & Lamson, 2008; Serwint et al., 2002). In both studies describing education-focused interventions, attendees were given the opportunity to discuss and debrief in small groups regarding lessons learned and personal experiences related to seminar topics (Meadors & Lamson, 2008).

**Intermittent.** Two interventions involving intermittent bereavement debriefing were also represented. The as-needed bereavement interventions were implemented after a patient death and initiated by a healthcare team member who was involved. Other multidisciplinary team members involved in the patient case were also invited to participate (Keene et al., 2010; Rushton et al., 2006). Both examples of as-needed bereavement debriefing sessions utilized the critical incident stress management model (CISM) of debriefing (Keene et al., 2010; Rushton et al., 2006). The CISM model is a model of debriefing based upon crisis theory, with the goal to minimize the impact of a traumatic event and accelerate the recovery process (Mitchell,
Sakraida, & Kameg, 2003). In CISM debriefing, participants are encouraged to verbalize their distress, form appropriate concepts about their own stress reactions before false interpretations of the experience can be developed, and find ways to return to a functioning state similar to prior to the traumatic event (Mitchell et al., 2003). The hope through CISM debriefing is to combat stress and trauma at an early stage so that healthy coping and normal functioning can be preserved (Mitchell et al., 2003).

**Narrative-focused.** Two studies included in this review of literature revolved around the power of storytelling and narrative as methods of meaning-making and processing professional losses (Macpherson, 2008; Sands et al. 2008). Both interventions described by Sands and colleagues (2008) and Macpherson (2008) gave healthcare providers a routine opportunity to share stories and experiences using a narrative format. Sands and colleagues (2008) described the role of *narrative competence* in medical education as a way to improve empathy, teamwork, and resilience, and this concept motivated the intervention. Narrative competence, further, is a practitioner’s ability to understand stories, recognize differing points of view, to empathize with other individuals, and reflect upon personal experiences (Sands et al., 2008). In both interventions, healthcare professionals took turns sharing their stories and time was given for others to listen and respond to the stories shared (Macpherson, 2008; Sands et al., 2008).

**Routine open discussion.** Finally, the remaining four studies included in this literature review utilized a routine, open debriefing format (Armstrong et al., 2004; Berman & Villarreal, 1982; Feld & Heyse-Moore, 2006; Gunasingam et al., et al., 2016). Armstrong and colleagues (2004) and Berman and Villarreal (1982) utilized an open discussion format where attendees could share difficult cases from an emotional and psychological perspective and have discussions related to those experiences. Gunasingam and colleagues (2015), on the contrary, utilized an
open discussion format, but discussions revolved around themes provided by an impartial, independent debriefing facilitator. Themes discussed included workplace challenges, coping strategies, relationships, and organizational support (Gunasingam et al., 2016). The debriefing session structure utilized in this project most similarly resembled the routine, open discussion format.

**Outcome Measurement**

There were similarities and variations in the methods used to determine outcomes. Many studies utilized both qualitative and quantitative methods of outcome evaluation. Qualitative data were obtained through open-ended survey questions, interviews, and/or compilation of debriefing session themes throughout the study period (Armstrong et al., 2004; Gunasingam et al., 2015; Keene et al., 2010; Rushton et al., 2006; Sands et al., 2008; Serwint et al., 2002).

In addition, quantitative data were obtained through a variety of methods and using a variety of tools. Some authors created their own surveys, in order to gather demographic data related to the healthcare professional participants and/or their personal and professional experiences with death (Berman & Villarreal, 1982; Macpherson, 2008). Other study authors created surveys in order to evaluate how effectively the intervention met specific goals and objectives defined for the educational seminars or debriefing sessions (Berman & Villarreal, 1982; Feld & Heyse-Moore, 2006; Keene et al., 2010; Serwint et al., 2002). For interventions that occurred on an intermittent basis, data were collected regarding the frequency of debriefing sessions, the demographics of the audience, location of sessions, and nature of sessions (Keene et al., 2010; Rushton et al., 2006). Finally, several studies also utilized formal, standardized measurement tools. Examples of the tools utilized include: the Maslach Burnout Survey (MBS); the Hogan Grief Reaction Checklist (HGRC); the Inventory of Social Support (ISS); the Social
Readjustment Rating Scale (SRRS); the Index of Clinical Stress (ICS); the Interpersonal Reactivity Index (IRI); and the Stressor Scale for Pediatric Oncology Nurses (SSPON) (Gunasingam et al., 2016; Macpherson, 2008; Meadors & Lamson, 2008; Sands et al., 2008).

In considering the vast array of outcome measures reported throughout the included studies, this author observed that the studies that utilized a combination of qualitative and quantitative data reported richer testimonies of outcomes and efficacy. Subsequently, the planning and implementation of outcome measurement for this project work were modeled after this group of studies. In the following section, specific debriefing session outcomes and reported efficacy are described.

**Debriefing Session Outcomes and Efficacy**

Overall, in all the studies included in the review of literature, various support interventions for healthcare professionals’ distress and bereavement were efficacious. Both qualitative and quantitative outcomes were evaluated. Outcomes that evaluated changes in pre- and post-intervention measures were specifically highlighted, recognizing that this type of data analysis has a potential to show the strongest evidence of an intervention’s efficacy. Given the variation in interventions and measures utilized among the included studies, it was difficult to compare and generalize study outcomes. Because the format for the multidisciplinary debriefing sessions utilized within this project work most closely resembled a routine open-discussion format, outcomes and efficacy of that format will be discussed.

**Routine open-discussion.** All four studies that utilized a routine, open-discussion debriefing format reported outcomes that indicated high participant satisfaction (Armstrong et al., 2004; Berman & Villarreal, 1982; Feld & Heyse-Moore, 2006; Gunasingam et al., 2015). Armstrong and colleagues (2004) utilized qualitative reporting for their assessment of outcomes.
Participants reported that participation in the biweekly sessions exceeded their expectations and the time was highly revered (Armstrong et al., 2004).

Berman and Villarreal (1982) surveyed participants regarding the achievement of course objectives, and participants reported the objectives most effectively achieved included dealing with feelings of anger and inadequacy; development of camaraderie among fellow residents; the provision of emotional support for one another understanding the stress of internship; and strategies for coping with the stress of internship. Themes of conversation identified and described by Berman and Villarreal (1982) included feelings of failure and inadequacy; the development of unrealistic expectations in ability to heal; the need for time for personal reflection; the tendency of over identification with teenage patients; and challenges of sudden-death situations.

Feld and Heyse-Moore (2006) reported similar participant satisfaction, and in the survey distributed to the participants, no respondents reported the debriefing sessions as unhelpful. These residents stated that sessions were valuable because of the opportunity to share experiences, build relationships with colleagues, have a confidential space to process out loud, and to have time set aside during a busy schedule to debrief and process challenging aspects of a career in hospice and palliative care (Feld & Heyse-Moore, 2006).

Finally, Gunasingam and colleagues (2015) took a different approach to reporting and evaluating outcomes and sought to observe how participation in routine debriefing sessions impacted physician burnout. At baseline, 68% of resident participants exhibited at least one characteristic of burnout according to the Maslach Burnout Inventory (MBI), and the characteristics of burnout most exhibited were emotional exhaustion and cynicism (Gunasingam et al., 2015). Following participation in the monthly debriefing sessions, only 55% of the
participants exhibited at least one characteristic of burnout. However, whether improvement in MBI scores can be attributed to the debriefing session is unclear, because scores of the intervention group did not increase significantly above the scores of the control group (Gunasingam et al., 2015). Gunasingam and colleagues (2015) also gathered qualitative data regarding the themes discussed during the debriefing. Topics included work-life balance, lack of support, inadequate supervision, staff relationships, and neglecting personal health. Of the residents who participated, 60% recommended the continuation of the sessions, and 90% found the sessions to be a good source of emotional and social support (Gunasingam et al., 2015).

**Identified Gaps of Evidence in Literature**

As can be seen throughout the discussion thus far, there was strong evidence of a need to provide increased education and support for healthcare professionals in dealing with clinically challenging situations and with dying pediatric patients. However, significant gaps in the literature compromised the evidence base for taking action. Literature failed to provide consensus about the best approaches in helping support pediatric residents in such clinical situations, both in their ability to manage personal emotions, and in developing clinical competence. There was also limited understanding of how physicians, uniquely, address personal needs for emotional support throughout their professional careers (Rushton et al., 2010). These facets made it increasingly difficult to design and implement support interventions for medical professionals.

Even though examples of interventions to provide emotional and social support to healthcare providers were found and examined, there appeared to be a lack of compelling evidence regarding best practice for debriefing methods. As was previously discussed, a factor associated with the lack of compelling evidence for best practice in debriefing methods for
physicians and other healthcare professionals was the relatively inadequate assessment of outcomes through quantitative methodologies. However, there was an overwhelming positive tone promoting debriefing sessions in the qualitative data represented. Also, author-created assessments evaluating the debriefing sessions supported the efficacy and usefulness of debriefing sessions. Despite this, there was not strength in quantitative results utilizing standardized assessment tools, especially those comparing pre- and post-intervention data.

It could be speculated that the poor strength of quantitative outcomes may have been due to the lack of reliable measures for assessing provider distress in caring for clinically challenging and dying pediatric patients, a unique and multi-faceted phenomenon. Therefore, debriefing and support measures for pediatric healthcare providers need to be implemented with subsequent evaluation of outcomes utilizing valid and reliable instruments, in order to add to the body of evidence and promote evidence-based practice models. These factors drove this doctor of nursing practice (DNP) student’s decision to choose a different, validated and reliable standardized assessment tool in the evaluation of the organization’s debriefing program’s efficacy.

In summary, the literature review conducted prior to this pilot program evaluation ultimately sought to examine outcomes associated with interventions aimed towards addressing healthcare provider distress and bereavement. An examination of the literature showed a limited amount of evidence addressing distress and bereavement interventions among pediatric residents, specifically, but some examples of interventions were uncovered when inclusion criteria were expanded to include all healthcare providers of various disciplines and specialties. Interventions most commonly consisted of debriefing sessions and/or annual educational seminars. A wide
variation in intervention format, audience, frequency, and facilitation was observed, making
direct outcome comparisons challenging.

Regardless, all interventions examined in the integrative literature review revealed high
participant satisfaction, and nearly all study participants found great value in debriefing-type
interventions. Quantitative data obtained through the studies were not as strongly supportive of
debriefing intervention efficacy. However, there was little consistency in measures validated for
evaluation. When both quantitative and qualitative results were considered, there was strong
support for health care organizations and residency programs to consider incorporating
interventions to reduce healthcare provider distress and bereavement.

As has been briefly discussed in the previous sections, many of the themes observed in
the literature were reflected in the multidisciplinary debriefing program structure for pediatric
residents within the healthcare organization that served as the setting for this project. The hope
was that the program evaluation outcomes obtained from this scholarly project work, would
provide support of evidence-based debriefing for pediatric residents. The next section will
describe the degree of pediatric resident support that was already being provided within this
healthcare organization, while also recounting evidence of organizational readiness for
implementing change.

**Organizational Assessment of Project Need**

The organization in focus was a large, not-for-profit, integrated healthcare organization in
the Midwest region of the United States. Within this healthcare organization was a large and
freestanding children's hospital that served as a regional referral center. In addition, an
independent community-based consortium worked closely with the organization and children’s
hospital to develop and offer a wide range of postgraduate medical education, including a
pediatric residency program housed within the children’s hospital. Each of these entities, although separate, collaborated to provide high quality care to pediatric patients in western Michigan, and also to provide high quality professional education to physicians and other healthcare students in training.

During the process of performing the organizational assessment, it was determined that within the healthcare organization existed a gap in the provision of support among pediatric residents struggling with provider distress. This organizational assessment focused upon the pediatric palliative care program within the hospital and the pediatric residency program. Through this organizational assessment, the need and readiness for change in the area or support measures for pediatric residents and other healthcare professionals was also determined.

This organizational assessment was performed using the Causal Model of Organizational Performance and Change, a conceptual framework developed by Burke and Litwin (1992) in order to understand organizational structure and propensity for change. According to Burke and Litwin (1992), change occurs in response to factors that impact an organization’s functioning, core values, and structure. Transformational factors include the external environment; leadership; and mission and strategy (Burke & Litwin, 1992). Transactional factors include structure; management practices; tasks and individual skills; work climate; motivation; policies and procedures; and individual needs and values (Burke & Litwin, 1992). Individual and organizational performance is considered both a transformational and transactional factor. Transformational change is most likely to occur from environmental factors, both internal and external, and result in new behaviors (Burke & Litwin, 1992). In contrast, transactional change occurs on a more internally focused level that is often reciprocal in nature (Burke & Litwin, 1992).
Doing the organizational assessment prior to the pilot program evaluation, all twelve of the transactional and transformational factors were identified and described. Within the context of the problem and clinical questions motivating this project, the following factors within the Burke Litwin (1992) conceptual model were the most relevant and impactful to consider. The factors were the external environment, culture, and motivation. These factors are described in detail along with an assessment of organizational readiness considering these factors.

**External Environment**

Burke and Litwin (1992) state that the external environment is the most influential aspect in contributing to organizational change. The external environment refers to the outside conditions and situations that facilitate organizational functioning and performance (Burke & Litwin, 1992). Given that there was an identified need for providing more supportive interventions for pediatric residents within the children’s hospital, the pediatric palliative care program was identified as a program rich in resources for providing healthcare provider support (AAP, 2000). For the purpose of understanding the role of the pediatric palliative care program within the context of providing support for pediatric residents, specific external factors that will be discussed include the pediatric hospital, the overarching organizational system, the community-based educational consortium, the affiliated medical school, and the relationships that existed among them all. In addition to these relationships, recommendations of various professional organizations and educational accreditation standards also had an important influence over the provision of supportive interventions for pediatric residents within the organization.

As previously stated, the pediatric palliative care program was located within a large and freestanding children’s hospital. This children’s hospital served as a regional referral center and
level I trauma center for thirty-seven Michigan counties (G, n.d.). Made up of forty pediatric specialties, the children’s hospital housed west Michigan’s only bone marrow transplant unit and complex congenital heart disease center, and the nation’s tenth largest neonatal intensive care unit (G, n.d.). The children’s hospital served over 8,000 inpatients, 190,000 outpatients, and 40,000 emergency room patients annually (G, n.d.).

The children’s hospital was a part of a larger medical system, and decisions made at the executive level influenced organization structure and practice within pediatrics. The medical system had a board of trustees made up of 28 members and was led by the organization’s chief executive officer who made decisions that governed the system at large (S Foundation, 2016). In addition, the children’s hospital had its own board of trustees made up of 37 members, and was chaired by a sitting member on the organizational board of trustees. This board served as an extension of the organizational board of trustees, and helped make decisions that were unique to the pediatric population in conjunction with the president and medical director of the children’s hospital (S Foundation, 2016).

The medical system had a commitment to investing in the community, as evidenced by large monetary contributions to community initiatives. Nearly 15 million of 326 million dollars in contributions were for the purpose of educating health care professionals (S, 2016a). The community-based consortium, with affiliations to a local medical school, existed to provide an exceptional educational experience for physician residents and other healthcare professional learners (G, n.d.). The educational consortium was also affiliated with the medical system described above and other local systems to provide clinical experiences for west Michigan’s healthcare learners. This community-based educational consortium served over 300 residents in twenty-one different specialties and subspecialties (G, n.d.). In addition to providing
clinical education support for physician residents and other healthcare professionals, the education consortium also offered the largest platform for continuing medical education (CME) in the state of Michigan (G[...], n.d.).

The education consortium, in partnership with the children’s hospital, offered a high-quality pediatric residency program with a focus on residents gaining experience within a regional referral children’s hospital, with access to numerous pediatric specialties (G[...], n.d.). The pediatric residency program was committed to providing a high quality educational experience while also being committed to promoting a healthy learning and work environment (G[...], n.d.). The pediatric residency program consisted of 43 pediatric residents, two chief residents, and 29 formal pediatric faculty from a wide array of pediatric specialties (G[...], n.d.). The pediatric residency program was made up of five program tracks including: critical care or emergency medicine track; primary care, underserved, or academic medicine track; global health track; subspecialty track; and hospitalist track (G[...], n.d.). Within each of these tracks, residents had required experiences and elective experiences, where they were able to tailor their experiences to their unique learning needs and interests (G[...], n.d.). The educational consortium and the pediatric residency program served an essential need at the children’s hospital by supplying healthcare providers that care for west Michigan’s pediatric population and by providing educational opportunities for these learners and other medical professionals within the medical system.

Finally, as previously alluded to, the issue of supporting healthcare providers was recognized by professional organizations and educational accreditation programs. The National Academy of Medicine (NAM) emphasized the importance of healthcare providers acknowledging their distressing reactions and healthcare organizations providing additional
institutional support (Field & Behrman, 2003). The AAP (2000), too, recognized the importance of providing support for healthcare professionals caring for clinically challenging situations and dying pediatric patients and encourages pediatric palliative care providers to be involved in organizational efforts to provide support for healthcare professionals.

The ACGME was a not-for-profit organization that determined and enforced standards for postgraduate medical educational programs (Accreditation Council for Graduate Medical Education [ACGME], 2017). The ACGME was committed to promoting best practice standards across the continuum of postgraduate medical education, in order to improve and advance healthcare delivery and medical education (ACGME, 2017). A common program requirement for residency programs was the provision of systems to promote resident wellbeing and to create a supportive clinical and educational environment (ACGME, 2017). The ACGME, as previously stated, had a heightened awareness of the impact that unresolved resident distress and lack of organizational support has on resident wellbeing (Vassar, 2015). The ACGME encouraged residency programs to establish more formal systems for peer and faculty support and mentoring (Daskivich et al., 2015).

The pediatric residency program and educational consortium within the healthcare organization was held to standards put forth by the ACGME. These observations and recommendations made by the ACGME strongly motivated the residency program’s desire to improve interventions for providing support to pediatric residents and similarly motivated collaboration with the pediatric palliative program to implement interventions. The interaction and relationships between influencing entities and organizational and educational standards drove much of the purpose and mission of the pediatric palliative care program and pediatric residency program.
Culture

An organization’s culture is described by Burke and Litwin (1992) as the values and principles that guide behavior within the organization. When considering the culture of the pediatric palliative care program, it was important to consider how the palliative care program fit into the culture of the medical system, the children’s hospital, residency programs, and the overall culture of pediatric healthcare.

In spite of the widespread recommendations from organizations such as the American Academy of Pediatrics (AAP), the National Academy of Medicine (NAM), and the World Health Organization (WHO), regarding the importance of involving palliative care in the care of children with life-limiting and life-threatening illness early on in the illness trajectory, the broader pediatric community continued to be slow to fully embrace palliative care principles and incorporation of a palliative care program (Wallace, Halpern, Joshi, & Zwerdling, 2015). The children’s hospital, as an organization, embraced the recommendations by the AAP, NAM, and WHO, as evidenced by its establishment of a pediatric palliative care program.

Despite this, there were still pediatric providers within the organization who did not fully value the principles of palliative care or the role of the palliative care program in providing consultative services and professional resources to healthcare providers. In addition to providing care to pediatric patients with life-limiting and life-threatening illness, the palliative care program hoped to change this culture through the provision of excellent care to pediatric patients and education and support of pediatric health care providers. The support of providers was expected to instill more competence, confidence, and comfort in caring for clinically challenging and dying pediatric patients. Considering pediatric residents specifically, addressing issues of distress and discomfort in residency, as was the goal of this scholarly project was hoped to be a
way to change the trajectory of devaluing palliative care consultative services and attending to personal wellbeing, greatly influencing pediatric healthcare culture in the future.

As previously alluded to, observations of the pediatric residency program demonstrated a strong culture of promoting a positive educational environment that placed a high premium on residents’ clinical and personal growth and wellbeing. This culture was further evidenced by the pediatric residency faculty’s recognition of distress among pediatric residents and need for improved interventions to support residents through this distress. In addition to this, the pediatric residency faculty and program, as a whole, was eager to collaborate with various specialties and professions, as evidenced by this scholarly project. The residency faculty highly valued input from a palliative care and nursing perspective in regards to best-practice approaches to improving interventions to support pediatric residents. This culture of interprofessional collaboration within the residency program became a strong, influential factor in the successful implementation of this scholarly project work.

The medical system, like the children’s hospital, not only embraced palliative care but also placed a high premium on staff wellness. This value trickled down throughout the organization and influenced staff within the children’s hospital, including pediatric residents. This value also expressed itself through the establishment of programs such as the Schwartz Center Rounds and Critical Incident Stress Management (CISM) sessions for staff who were in need of increased support in caring for challenging patients and clinical situations. Schwartz Center Rounds utilized a grand rounds platform to provide interdisciplinary healthcare providers with the opportunity to attend a regularly scheduled, open meeting to freely discuss social and emotional burdens they experienced in caring for patients and families (Schwartz Center, 2017). CISM sessions were debriefing sessions in which participants were encouraged to verbalize their
distress, form appropriate concepts about their own stress reactions before false interpretations of
the experience can be developed, and find ways to return to a state of functioning present prior to
the traumatic event (Mitchell et al., 2003).

These programs supported by the medical system gave evidence of the organization’s
awareness of the burden of challenging clinical situations, and the organization’s value on
supporting healthcare staff in dealing with those burdens. Given the clinical expertise of
pediatric palliative care providers in areas of communication and discussing uncomfortable
information, members of the pediatric palliative care program were invaluable in helping to
promote and facilitate organizational programs such as those described above and this scholarly
project.

Motivation

Finally, Burke and Litwin (1992) describe an organization’s motivation as the tendency
for the organization and the individuals who make up the organization to move towards the
organization’s mission, vision, and strategy. Based upon observations of the pediatric palliative
care team, the strongest motivator of individuals and the program as a whole was the children
they serve. The mission of the pediatric palliative care program (to improve the quality of life
and minimize suffering for medically complex children, while assisting families with decision-
making, coordinating care, and addressing barriers to quality care) strongly motivated the actions
and work of the team (S, 2016b). Not only were the actions of the team directed toward
clinical care, but also towards educating staff and urging pediatric providers to adopt pediatric
palliative care values within their own practices as they cared for clinically complex children.

Accompanying the desire to educate, members of the palliative care team also made
themselves available to support the healthcare team in caring for medically complex and dying
pediatric patients. More efforts were made to determine how pediatric palliative care providers could better provide this support. The pediatric palliative care program started provision of support by offering a two-day end-of-life nursing consortium (ELNEC) training to pediatric nurses in a variety of departments in order to increase their comfort and skill in caring for terminally ill and dying pediatric patients. These desires spoke to the team’s motivation for changing culture within the children’s hospital to embrace palliative care principles within all aspects of patient care. Further discussion regarding motivation of other important stakeholders will occur in subsequent sections of this final report.

Organizational Readiness and Project Feasibility

Utilizing the Causal Model of Organizational and Performance and Change (Burke & Litwin, 1992), the following were important observations regarding organizational motivation and organizational readiness for the scholarly project intervention (Burke & Litwin, 1992). A SWOT analysis stands for strengths, weaknesses, opportunities and threats and is a tool utilized to identify its internal strengths and weaknesses, as well as its external opportunities and threats. A SWOT analysis for the pediatric palliative care program and pediatric residency program considering this scholarly project work was developed and is represented in Appendix A.

As was previously discussed, the pediatric palliative care program was committed to improving the access to pediatric palliative care for patients at the children’s hospital and children in the surrounding community, while also providing support to pediatric healthcare providers. The pediatric palliative care program consisted of highly knowledgeable individuals who were capable of providing high quality education and support to pediatric residents. This scholarly project served to provide an important example of the type of resource pediatric palliative care team members could be in initiating and supporting interventions and programs to
promote staff coping and wellness related to the burdens of caring for clinically complex and dying pediatric patients.

The pediatric residency program consisted of faculty who were highly motivated to discover and implement strategies to support pediatric residents while they care for clinically complex and dying pediatric patients, in conjunction with recommendations from professional organizations and accrediting bodies such as the ACGME. Prior to this project, pediatric residency faculty had already begun a pilot multidisciplinary debriefing program for pediatric residents following their PICU and/or NICU rotation in an attempt to address gaps in the provision of support for pediatric residents.

The characteristics of the pediatric palliative care program and pediatric residency program described above gave evidence to an organizational readiness to evaluate the pilot program’s efficacy. The pediatric residents’ willingness, motivation, and valuing of increased support following their difficult rotations had not been previously assessed. Given the evidence in the literature previously discussed and evidence of organizational readiness, the following section is a discussion of the conceptual frameworks that guided the development of the plan for implementation of the multidisciplinary debriefing program evaluation.

**Conceptual Frameworks**

Conceptual frameworks are essential for informing phenomena and guiding processes towards interventions aimed at improving evidence-based practice. Two conceptual frameworks were selected to help define the phenomena of grief and stress experienced by healthcare professionals that necessitates the support this project would evaluate. A second conceptual framework was selected to help inform and direct the process of evidence-based implementation
of the scholarly project. The following is a detailed description of both conceptual frameworks used to complete this program evaluation.

**Conceptual Framework: Model of Health Professionals’ Grieving Process**

Although grief is often associated with death, grief can encompass an array of circumstances that cause keen distress or sorrow. As previously noted, pediatric residents and other healthcare professionals often bear witness to nearly daily events of pain and suffering, and occasionally death. In the pediatric setting, this call to bear witness to the pain and suffering of children has the potential to affect the healthcare provider in a profound and personal way. Papadatou (2000) recognized this challenging nature of the work environment of healthcare professionals, and sought to provide insight into this unique form of grief experienced by healthcare professionals.

Papadatou (2000) studied the grief reactions of pediatric healthcare professionals, specifically in the areas of pediatric oncology and pediatric critical care. In this ethnographic study, Papadatou (2000) recognized six categories of losses that healthcare professionals experience (See Appendix B). Recognizing that these losses, among others experienced by healthcare professionals, are a reality of the work, she described the experience of healthcare professionals as oscillating between realizing personal grief reactions, and repressing reactions. The model of health professionals’ grieving process is centered upon this phenomenon.

Within the model, Papadatou (2000) recognizes that the health professional seeks to achieve a healthy balance between experiencing and recognizing the grief, and repressing the grief in order to continue important caring work. Difficulties occur when the healthcare professional is unable to, or ceases to oscillate between experiencing and repressing grief (see Appendix C). This results in a potential inability to function, a loss of empathy, and potential
secondary traumatic stress that may culminate in intense compassion fatigue or burnout (Papadatou, 2000).

In the midst of the oscillation, the health professional undergoes, either consciously or unconsciously, a set of tasks that set a foundation in order to provide meaning and achieve a sense of transcendence above the grief-causing situation. These occur in order to continue investing and caring for subsequent patients (Papadatou, 2000). An individual’s ability to provide meaning and transcend the experience while oscillating between recognizing and repressing the experience is influenced by life-style and the unit work-style. Life-style is defined by Papadatou (2000) as how one’s personality, history, and system of beliefs and values impact ability to grieve and process challenging experiences. These experiences have the potential to either validate or invalidate assumptions about oneself and/or the work, which can have a profound effect on the individual. Unit work-style is defined by Papadatou (2000) as the institutional context and cultural environment that determines how, through a set of group behaviors and practices, a health professional is expected to grieve. The interaction between these described factors can be viewed in the model represented in Appendix C.

In considering this conceptual framework, the importance of maintaining a sense of oscillation between recognizing and repressing professional grief responses was acknowledged. This would assist in providing an opportunity to assign meaning to these unfortunate circumstances and allow oneself to transcend them, in order to maintain self and continue caring work. Considering that an undesired effect from a lack of oscillation between recognizing and repressing is intense compassion fatigue, in this project, compassion fatigue was used as an outcome indicator to identify efficacy of the pilot debriefing program. In choosing this, the hypothesis was that by attending the multidisciplinary debriefing sessions, residents would be
given an opportunity to recognize and give meaning to challenging circumstances, hopefully decreasing levels of compassion fatigue.

In recognizing the grief reactions of healthcare professionals and considering opportunities to help support health professionals in this necessary process, the unit work-style was recognized as being the domain within the model in which intervention to promote support could be most impactful and sustainable (Papadatou, 2000). The pilot multidisciplinary debriefing program presented the potential to provide an opportunity for collective sharing and collective grieving to occur, in order to promote individual grieving, meaning-making, and transcendence. In addition, it was hoped that through the evaluation of the pilot program, institutional culture would come to promote and value this opportunity for collective sharing. In order to effectively implement and evaluate this pilot multidisciplinary debriefing program, the utilization of an evidence-based implementation model also occurred.

**Evidence-Based Implementation Model: A Model of Evidence-based Practice Change**

The Model of Evidence-based Practice Change was originally developed by Rosswurm and Larrabee (1999), to help practitioners implement evidence-based practice, utilize research, and promote change theory through quality improvement. Revised by Larrabee (2009), the model continues to provide a guide for practitioners to translate evidence into practice. The Model of Evidence-based Practice Change is comprised of six steps (Ciliska et al., 2011; Larrabee, 2009). A schematic representation of the model can be viewed in Appendix D. The six steps of the Model of Evidence-based Practice Change will be reviewed, and the manner in which it was applied in this scholarly project.

Step one of the model involves the assessment of the need for practice change (Ciliska et al., 2011; Larrabee, 2009). This involves creating a team of stakeholders and identifying the
problem at hand. In addition to identifying the problem, the team would need to collect baseline data in order to further support the problem (Ciliska et al., 2011; Larrabee, 2009).

During the course of this project development and implementation, a group of stakeholders including the pediatric residency program directors, pediatric chief residents, and pediatric palliative care nurse practitioner identified an issue with the provision of support for pediatric residents. As already indicated, there were many anecdotal reports of several residents experiencing emotional stress following their PICU and NICU rotations. Other than these reports there were little data about the current problem, motivating this DNP student’s desire to gather baseline data through use of a pretest-posttest intervention design.

Step two involves locating the best available evidence in the literature through conducting a search of literature (Ciliska et al., 2011; Larrabee, 2009). Following an extensive search through the literature, step three involves critically appraising the evidence in order to synthesize best evidence to be utilized in practice implementation and program evaluation (Ciliska et al., 2011; Larrabee, 2009). As was clearly stated in the section of this document discussing the evidence in literature, the literature failed to provide a strong consensus regarding the best approach to preparing pediatric residents for clinically challenging situations and pediatric patient deaths. Despite this, there were many elements of the multidisciplinary debriefing program that were reflected in the literature.

In addition to appraising the evidence, an intervention needs to be assessed for feasibility within the practice setting (Ciliska et al., 201; Larrabee, 2009;). For this scholarly project, an integrative literature review, synthesis of evidence-based findings, and analysis of the findings from the evidence were implemented. Also, as a part of the project implementation, a thorough organizational assessment was performed in order to determine organizational need for the
intervention, feasibility of intervention implementation, and organizational readiness for the intervention.

Step four of the model involves designing the practice change (Ciliska et al., 2011; Larrabee, 2009). As a part of the practice change design, necessary resources should be identified along with a plan for evaluation and implementation of the change (Ciliska et al., 2011; Larrabee, 2009). Following the design, step five involves implementation and evaluation of the intervention (Ciliska et al., 2011; Larrabee, 2009). When outcomes are gathered, conclusions and recommendations based upon those outcomes can be generated (Ciliska et al., 2011; Larrabee, 2009). Finally, step six involves the integration and maintenance of the intervention into practice (Ciliska et al., 2011; Larrabee, 2009).

The Model for Evidence-based Practice Change was chosen as a framework for this scholarly project work because of the systematic approach to implementation and evaluation of evidence-based practice. Within the context of this evidence-based practice model, the project largely involved the process of evaluation and analysis of outcomes, in order to formulate conclusions and recommendations regarding the efficacy of the pilot program. In addition to this, due to the lack of compelling support from the literature for evidence-based approaches to debriefing with pediatric residents, the project also generated outcomes to further support an evidence-based practice approach to debriefing for this population. For this project, strengths of the model included the focus on synthesis of evidence, the incorporation of a pilot phase of the intervention implementation prior to full integration of the intervention into practice, and the focus on continual monitoring of outcomes. Utilizing the aforementioned conceptual frameworks, the following project plan was developed and implemented.
Project Plan

Purpose

The purpose of this project was to evaluate the efficacy and impact of a pilot program dedicated to providing a monthly, multidisciplinary debriefing session with pediatric residents following their PICU and/or NICU rotations. The purpose was addressed through the following clinical questions:

- Does participating in a multidisciplinary debriefing session following a PICU and/or NICU rotation in a Midwestern children’s hospital have an impact on a pediatric resident’s level of compassion fatigue?
- Is there value assigned by these pediatric residents to participating in the multidisciplinary debriefing experience?

In order to further define the purposes of this project, explicit objectives were formulated.

Objectives. Efficacy of a pilot, multidisciplinary debriefing session program for pediatric residents was evaluated through this scholarly project. Objectives for this evaluation project included:

- Create and implement a pre-debriefing and post-debriefing, online survey for the organization’s pediatric residents. The online surveys were created on March 31, 2017 and implementation was initiated prior to the April 2017 multidisciplinary debriefing session.
- Gather qualitative data by recording themes from three months of monthly multidisciplinary debriefing sessions starting in April 2017. Qualitative data from this project were inclusive of the April, May, and June 2017 debriefing sessions.
• Perform five to ten focus interviews with volunteer pediatric residents who have been involved in any debriefing session since their inception, to gather more qualitative data regarding the value of debriefing sessions, by July 1, 2017.

• Analyze quantitative and qualitative data for three months of monthly, multidisciplinary debriefing sessions starting in April 2017.

• Evaluate data collected, and make recommendations to pediatric residency faculty regarding future directions for the multidisciplinary debriefing sessions, by July 31, 2017.

**Project Type**

This scholarly project was a quality improvement evaluation of a pilot program utilizing an evidence-based practice approach. Evidence-based practice is a systematic approach to appraising and synthesizing evidence through the lens of one’s own clinical expertise in order to improve the quality of healthcare delivery and patient outcomes (Melnyk & Fineout-Overholt, 2011; Rouen, 2017). Three essential components of evidence-based practice are external evidence from research, clinical expertise, and patient preferences and values (Melnyk & Fineout-Overholt, 2011). The utilization of evidence-based practice leads to a high quality of care and optimal patient outcomes (Melnyk & Fineout-Overholt, 2011).

In addition to this project utilizing an evidence-based practice approach to implementation, the project could also be considered a quality improvement initiative. According to the United States Department of Health and Human Services (2011), quality improvement is a systematic approach to utilizing data in order to show measurable improvements in healthcare services, processes, and health status. Given that the multidisciplinary debriefing program was already an established process within the residency program, the project work was directed towards developing and incorporating a process for data
collection in order to assess efficacy of the program and achieve optimal results and performance from the program work. The hope was that this evaluation of the pilot multidisciplinary debriefing program would be the beginning of a commitment to continual monitoring, assessing, and improving of the program within the organization.

As was previously discussed, for the purposes of this project, an evidence-based practice implementation model was ultimately chosen as the framework to guide project planning and implementation. The quality improvement initiative of this pilot program aligned with evidence from external research and had the potential to indirectly affect the healthcare delivery system and/or clinical outcomes by addressing important aspects of the Quadruple Aim, which was discussed previously by the IHI as an expansion of the Triple Aim (Bodenheimer & Sinsky, 2014). In addition, the outcomes gathered through the continual monitoring, assessing, and improving of the program were expected to further inform evidence-based practice.

**Project Setting**

The setting for project implementation was a large, not-for-profit, integrated healthcare organization in the Midwest region of the United States. A large and freestanding children’s hospital that served as a regional referral center was within this healthcare organization. More specifically, within the children’s hospital, this project implementation occurred in conjunction with efforts by the pediatric palliative care department and in-house pediatric residency program.

**Needed Project Resources**

Resources required for implementation of this project largely included human, time, and technology resources. Human resources necessary for project implementation included many individuals who made up the team and assisted this author in project implementation. A pediatric palliative care nurse practitioner served as an organizational project mentor to this DNP
student. Pediatric residency program directors and chief residents, worked alongside this author, and devoted time to planning the quality improvement project and evaluating the efficacy of the pilot program. In addition to this team, individuals active in the monthly debriefing sessions were necessary to the successful implementation and evaluation of the pilot program. These individuals included a residency program director who was also an attending physician in the PICU, and who, along with this author, facilitated the monthly debriefing sessions; two chaplains who attended debriefing sessions and provided necessary insight; and pediatric residents who were the audience of the debriefing intervention.

As previously discussed, time was an important resource necessary for the implementation of the scholarly project. Time was devoted to determining the process for this program evaluation in addition to preparing necessary outcome measures and institutional review board (IRB) applications. In addition, the multidisciplinary debriefing session required two hours of time, monthly, from the individuals involved in the facilitation of debriefing sessions.

Finally, technology resources were crucial in the successful collection of outcome data. The surveys were created using survey functionality within Survey Monkey ®. This platform was selected because of its ease of use, feasibility within the organization, its ability to keep survey data confidential and anonymous, and its familiarity among pediatric residents, the recipients of the surveys.

**Project Design**

The project questions addressed whether or not participation in a multidisciplinary debriefing session following a PICU and/or NICU rotation had an impact on a resident’s level of compassion fatigue, and whether there was value assigned to participating in the debriefing experience within a Midwestern children’s hospital. Given that both clinical questions that drove
the project involved both quantitative and qualitative outcomes of the multidisciplinary
debriefing sessions, both were reflected in the project design. This scholarly project was a
quality improvement, pilot program evaluation using a pretest-posttest design with a qualitative,
content analysis component.

Each month, the pediatric residents spent time in various clinical settings as a part of their
residency program curriculum. At least once per program-year, pediatric residents spent time in
the NICU and PICU, respectively. Following the recognition of pediatric residents’ emotional,
social, and spiritual struggles, pediatric residency program directors implemented a pilot,
multidisciplinary debriefing program, following their PICU and NICU rotations, in August 2016.
The PICU and NICU rotations were selected as rotations after which to conduct the monthly
debriefing sessions because of the recognition that in these rotations existed the highest
concentration of clinically challenging and dying pediatric patients that contributed to resident
distress.

On the Thursday following the completion of a clinical rotation schedule each month,
pediatric residents who had completed their PICU or NICU rotation in the previous month were
invited by this author to attend a two-hour, non-mandatory, multidisciplinary debriefing session.
Again, the debriefing sessions were comprised of a select group of pediatric residents who chose
to attend and who had recently completed their PICU and/or NICU rotation; a PICU attending
physician who also served as a residency program director; this DNP student who was also a
PICU registered nurse and representative of the pediatric palliative care program; and two
hospital chaplains. The various healthcare professions involved made the debriefing sessions
multidisciplinary, adding to the richness of perspective and conversation. The structure of
debriefing sessions incorporated findings from the integrative literature review discussed previously.

The primary goal of the debriefing sessions was to provide a safe, protected space for residents to share and reflect upon their experiences in the PICU and NICU settings, while being affirmed by peers, faculty, and interprofessional colleagues. Through the course of the debriefing session, conversations regarding experiences were not focused on clinical aspects of cases, but rather, the emotional, psychological, and spiritual aspects of clinical cases that made an impact on the pediatric residents. The structure of the monthly multidisciplinary debriefing session is provided in outline format in Appendix E.

Because there were no baseline data for pediatric resident compassion fatigue within the organization, a pretest-posttest study design was utilized in order to evaluate for changes in outcome measures. Quantitative data were collected before and after involvement in three months of debriefing sessions, assessing for changes in residents’ levels of compassion fatigue in order to evaluate the efficacy of these debriefing sessions. Other quantitative data that were solicited in order to further provide outcome measures included demographic information from the residents involved, and information regarding differences in the number of residents invited, compared to the number of residents who attended a debriefing session.

The qualitative component of the design came in three forms. First, open-ended questions were embedded in the post-survey that asked pediatric residents to reflect upon the debriefing experience. Second, topics discussed in three months of multidisciplinary debriefing sessions were recorded in notes taken by this author, who was in attendance at each of the three months of multidisciplinary debriefing sessions. As previously noted, before this project implementation, a strong understanding of pediatric residents’ perceptions of need for
interventions to support distress experienced in residency was lacking, apart from anecdotal reports.

To gain more insight into the debriefing experience and the perception of need of such experience within pediatric residency, this author hoped to perform five to ten focused, semi-structured interviews with willing pediatric residents who had participated in a multidisciplinary debriefing session since their inception in August 2016. The step-by-step approach taken in the program evaluation implementation will be outlined in greater detail in the Steps for Implementation section of this document. In the following section, a description of the participants and recruitment are discussed.

**Participants and Recruitment**

The participants for the multidisciplinary debriefing sessions included any pediatric residents who had completed their NICU or PICU rotation in the prior month, and who voluntarily attended the scheduled monthly debriefing session. Participants were recruited through an email invitation sent by this author, notifying them of the opportunity to participate in the debriefing session. Participants for the focused, semi-structured interviews were pediatric residents who had participated in a multidisciplinary debriefing session since their inception in August 2016. Participants for the interviews were recruited via an email invitation to voluntarily participate. Willing participants for the interviews were then scheduled on an individual basis. The following section will describe in more detail the measures utilized in this project to determine efficacy of the pilot program.

**Project Measures**

Data collected throughout this process were both qualitative and quantitative. As stated previously in the discussion of the review of literature, studies that were found to utilize a
combination of quantitative and qualitative measures had richer testimonies of outcomes and efficacy.

Quantitative data were collected in order to evaluate efficacy of the monthly, multidisciplinary debriefing sessions. The measurement chosen in order to evaluate efficacy of the debriefing session was level of compassion fatigue. This measure was chosen because of the support of the conceptual model describing health professionals’ grieving processes. Papadatou (2000) proposed that the ineffective processing of healthcare provider grief might result in compassion fatigue, sometimes including features of burnout and/or secondary traumatic stress. Therefore, a standardized assessment tool, the Professional Quality of Life Scale (proQOL), was selected in order to measure the level of compassion fatigue experienced by pediatric residents (Stamm, 2010). This standardized tool is included for reference in Appendix F.

Within the proQOL, scores are assigned for two domains, compassion satisfaction and compassion fatigue (Stamm, 2010). Compassion fatigue is further delineated into domains of burnout and secondary traumatization (Stamm, 2010). Definitions for these domains and a visual representation of their relationship can be found in Appendix G. These domains are assessed using a thirty-item, self-report tool. The thirty questions are assessed using six point response options ranging from never to very often (Stamm, 2010).

In addition to the rationale presented previously, the proQOL scale was chosen over other standardized assessment tools measuring compassion fatigue because of its extensive usage, high level of familiarity among healthcare professionals, psychometric strength, availability, and ease of use. According to Stamm (2010), the proQOL scale has been utilized in a majority of published papers on compassion fatigue, burnout, and secondary traumatization. The proQOL has strong psychometric properties, and good construct validity has been reported in nearly 200
published papers (Stamm, 2010). Internal consistency reliability for each domain has been measured and alpha coefficients are as follows: compassion satisfaction $\alpha = 0.88$; burnout $\alpha = 0.75$; and secondary traumatization $\alpha = 0.81$ (Hudnall, Stamm, 2016; Stamm, Higson-Smith).

Finally, the self-report nature and thirty-question assessment made the proQOL easy to use while not sacrificing reliability and validity. The proQOL was readily available via the author’s website and permission to use was freely given. The proQOL and statement of permission are included in Appendix F for reference (Stamm, 2010).

In order to determine efficacy of the pilot program, a pretest-posttest measurement design was chosen. To establish baseline assessment data, pediatric residents were administered a pre-survey evaluating their baseline level of compassion satisfaction or compassion fatigue along with some demographic questions related to their residency program year, residency program track, level of experience in their residencies with patient death, and experiences with patient death over the previous intensive care rotation. In addition to these questions, the participants were asked to provide a unique, memorable date (e.g., a loved one’s birthdate or special anniversary) to be remembered for a subsequent survey. This information was requested in order to pair pre- and post-intervention data for more advanced statistical analyses, while keeping individual responses anonymous. This pre-survey can be reviewed in Appendix H.

In order to assess for changes in level of compassion satisfaction or compassion fatigue following the debriefing session, a post-survey was administered two weeks following a multidisciplinary debriefing session. This post-test survey included the proQOL scale, demographic questions, and questions to ascertain whether residents perceived the debriefing sessions as being valuable and meaningful. Again, the participants were asked to provide the same unique, memorable date recorded in the pre-survey, in order to pair their pre-and post-
debriefing session data. This post-survey can be reviewed in Appendix I. Both pre-and post-surveys were formatted into Survey Monkey®, using the organization’s subscription.

Finally, an important quantitative measure relevant to evaluating the efficacy and value of the multidisciplinary debriefing sessions was a comparison of the number of pediatric residents who were eligible to attend the debriefing session and the number of pediatric residents who attended. The purpose in tracking these data was to attempt to provide important information regarding the value assigned to the debriefing experience, under the hypothesis that pediatric residents who value the debriefing experience would voluntarily attend.

Qualitative data were also collected in order to obtain further information regarding the efficacy of the pilot multidisciplinary debriefing program for supporting pediatric residents. Qualitative data were gathered in the post-survey through open-ended short-answer questions assessing value of the debriefing experience, suggestions for improving the debriefing experience, and level of support (see Appendix I). This DNP student recorded themes of discussion in each of the three debriefing sessions using pen and paper, in order to gather insight into the nature of the conversations that occurred within the debriefings. Qualitative data recorded by pen and paper were immediately transferred to a password-protected electronic document. In order to protect participant confidentiality and to protect the sessions as a safe space to share personal experiences, debriefing sessions were not tape-recorded.

Finally, this author had a goal of performing 5 to 10 focused, semi-structured interviews with willing pediatric residents who had attended at least one multidisciplinary debriefing session since August 2016, in order to gather insights into challenges specific to pediatric residency and challenging clinical environments; perceptions of available support and the need for support in caring for clinically challenging and dying pediatric patients; and their experiences
with the debriefing sessions. The Semi-structured Interview Topic Guide can be reviewed in Appendix J. Using pen and paper, information was gathered from these focused, semi-structured interviews. Data collected were immediately transcribed to an encrypted electronic document and notes were subsequently destroyed. The following section will describe the steps of implementation of the project.

**Steps for Implementation Including Project Timeline**

The steps taken in the implementation of this pilot program evaluation are outlined below and can be reviewed in a visual timeline format in Appendix K.

- Defended scholarly project proposal at Grand Valley State University (GVSU) on March 22, 2017.
- Created online versions of the pre-survey and post-survey on March 31, 2017.
- Applied for institutional review board (IRB) approval through GVSU and the organization on April 4, 2017.
- Emailed multidisciplinary debriefing session invitations with an attached pre-survey to eligible pediatric residents for the April debriefing session on April 7, 2017.
- Facilitated the April multidisciplinary debriefing session on April 13, 2017.
- Emailed the post-survey to pediatric residents who attended the April debriefing session on April 27, 2017.
- Emailed invitations to participate in focused, semi-structured interviews to all pediatric residents on May 1, 2017.
- Emailed pediatric residents who received the April debriefing session post-survey a survey completion reminder on May 1, 2017.
Emailed multidisciplinary debriefing session invitations with an attached pre-survey to eligible pediatric residents for the May debriefing session on May 12, 2017.

Facilitated the May multidisciplinary debriefing session on May 18, 2017.

Emailed the post-survey to pediatric residents who attended the May debriefing session on June 1, 2017.

Emailed multidisciplinary debriefing session invitations with an attached pre-survey to eligible pediatric residents for the June debriefing session on June 9, 2017.

Emailed pediatric residents who received the May debriefing session post-survey a survey completion reminder on June 9, 2017.

Facilitated the June multidisciplinary debriefing session on June 15, 2017.

Emailed the post-survey to pediatric residents who attended the June debriefing session on June 29, 2017.

Conducted four focused semi-structured interviews with pediatric residents by July 1, 2017.

Emailed pediatric residents who received the June debriefing session post-survey a survey completion reminder on July 6, 2017.

Continually analyzed all quantitative and qualitative data as it was obtained.

Defended final scholarly project defense at GVSU on August 2, 2017.

**Project Evaluation Plan**

In order to evaluate the efficacy of the multidisciplinary debriefing session in reducing compassion fatigue, pre-test and post-test surveys were distributed by this author and data were collected through Survey Monkey ®. The survey data were analyzed and synthesized using descriptive and non-parametric statistics using SAS Statistical software. In order to perform
more robust, parametric statistics, a power of at least 80% and normal distributions for the data would have to be achieved. To generate this power and likely normal distributions, at least 96 surveys would have needed to be collected, but because this was an evaluation of a pilot program specific to this healthcare organization, generalization was not intended. Therefore, less robust, non-parametric statistics were utilized.

Qualitative data obtained from the post-survey and conversations during the debriefing sessions were analyzed and assessed for recurring themes. Similarly, focused, semi-structured interviews were assessed for recurring themes. This DNP student and a DNP student peer independently evaluated these themes in order to decrease the risk of bias and attempt to achieve consensus.

**Ethics and Human Rights Protection**

This proposed project did not involve any contact with patient subjects. Rather, project participants were organizational employees and learners. These subjects were invited to voluntarily participate in the multidisciplinary debriefing session and complete associated surveys with no risk associated with not participating. The pre- and post-surveys asked for participants to provide a unique and memorable date (e.g. a birthdate of a loved one or anniversary) for purposes of pairing pre- and post-surveys, in order to enhance the level of statistical analyses that could be performed on the data. The request of a unique and memorable date was chosen because it would be easy to remember and maintain anonymity.

As previously stated, all electronic surveys were uploaded and distributed through Survey Monkey ® software using the healthcare organization’s subscription. Survey Monkey ® has a commitment to maintaining data security and is HIPAA compliant (Survey Monkey, 2017). Data are secured and validated by Norton ® and TRUSTe ® (Survey Monkey, 2017). The
healthcare organization’s subscription provided access to these data security features and also enabled surveys to be anonymous by not recording IP addresses of participants. All electronic versions of quantitative data outputs were either stored in the secure Survey Monkey ® software or on an encrypted USB drive and/or password-protected university network. Despite all these security measures, risks of compromising electronic data still existed and participants were made aware of these risks using a consent statement at the beginning of each electronic survey. This consent can be viewed on the pre-test and post-test surveys in Appendices K and L. Participants indicated their consent through voluntary continuation of the surveys.

As previously stated, the multidisciplinary debriefing sessions were not audio or video recorded in order to promote confidentiality of the participants and to reserve the sessions as a safe place to share distressing clinical experiences. Rather, themes from conversations occurring during the debriefing sessions were recorded by this author using pen and paper. Themes recorded from the multidisciplinary sessions were kept confidential by immediate transcription to an encrypted electronic file. Pen-and-paper documents were immediately shredded following the transcription. No individual or identifiable information was included in any of the notation sources. During the introduction of the multidisciplinary debriefing session, this DNP student made participants aware of the purpose of the debriefing sessions and the purposes of the note taking, which was to evaluate the program for opportunities for improvement and continuation.

Finally, participants involved in focused, semi-structured interviews did so on a voluntary basis. Given that interviews cannot be anonymous due to the face-to-face nature of the data collection, participants were given an informational letter describing the purpose of the interview at the beginning of the interview session. This informational letter can be viewed in Appendix L. In order to further protect the confidentiality of the volunteer participants of the semi-structured
interviews, these interview sessions were not audio or video recorded. Instead, this DNP student, who was the interviewer, took notes using pen and paper. Again, these recorded notes did not contain any identifiable information. Notes on pen-and-paper were immediately transcribed to an encrypted electronic file, and pen-and-paper documents were immediately destroyed. All raw data, both quantitative and qualitative, were kept only until data analysis for this project was complete and was promptly and securely disposed of.

An application was submitted through Grand Valley State University’s (GVSU) Human Research Review Committee for determination of this project’s status as subject to regulations of the United States Office of Human Protections and was deemed as not research. In addition, an application was also submitted through the organization’s IRB and was given a similar designation. Copies of the determination letters from Grand Valley State University and the organization can be viewed in Appendix M and N, respectively.

**Project Budget**

The cost of the proposed intervention was minimal. The greatest cost to the successful implementation of the proposed intervention was time. Time from this author, two pediatric residency program directors, and two pediatric chief residents, and a pediatric palliative care nurse practitioner was used in planning and preparing the intervention. For this project, all time devoted to project planning by these individuals was volunteered or a part of an individual’s workload as defined by his/her job description and role.

There was a cost associated with the utilization of the pre- and post-surveys for the multidisciplinary debriefing sessions because the electronic platform for survey distribution using Survey Monkey ® required a subscription. The healthcare organization had a subscription, making this an indirect cost. Without potential corporate discounts or surcharges that may have
existed, the estimated cost of the subscription could be $1020 per year (Survey Monkey, 2017). The standardized assessment tool chosen to assess compassion fatigue had no cost associated with its usage. There was also a cost associated with the utilization of the platform for statistical analyses. For this DNP student, the statistical platform, SAS Statistics, was free of charge because both the university and the organization have a subscription. Again, without potential corporate or university discounts or surcharges that may exist, the cost for a subscription could have been between $1000 and $8000 per year (IBM, n.d.). In order to perform statistical analyses, the DNP student sought free statistical support services through GVSU.

The cost associated with the multidisciplinary debriefing sessions involved time of the participants. This author, the PICU attending physician, and hospital chaplains donated their time to attend the monthly, two-hour sessions. The cost of attendance by the pediatric residents was none because the debriefing sessions were integrated into their educational time associated with their residency schedule.

Other costs, including technology, space, and material resources were negligible and all readily available within the healthcare organization. Even though within the scope of this project costs were negligible because of the presence of technology, space, and material resources as well as individuals free and willing to give their time within the university and healthcare organization, a budget was created with estimated project costs as well as cost projections in order to inform future program sustainability (that will be further discussed in subsequent sections of this final report). The estimated project costs for this scholarly project can be viewed in Appendix O.

The potential cost savings of this proposed project to the organization was difficult to determine. There is a significant cost associated with healthcare provider (e.g., physician)
compassion fatigue and potentially subsequent burnout, equating to nearly $120,000 in recruitment costs and nearly two million dollars in lost revenue (Hu et al., 2012). Although these costs may not be as high when considering pediatric residents, the cost of burnout as a result of severe, unresolved compassion fatigue would still be significant. Even though not in the scope of this project, it was hoped that with the incorporation of support measures in the form of a monthly debriefing session, pediatric residents would experience improved wellness, improved effectiveness, and decrease their potential need for personal healthcare utilization.

**Stakeholder Support**

Stakeholder support was an important component of successful project implementation. Meaningful stakeholders who impacted the project evaluation were numerous. The members of the pediatric palliative care team benefited from this project. This DNP student, as a pediatric palliative care representative, provided an example of the type of resource pediatric palliative care team members could be in initiating and supporting important interventions and programs that promote staff coping and wellness related to the burdens of caring for clinically complex and dying pediatric patients. Involvement with this type of work, perhaps, increased residents’ knowledge of the presence of pediatric palliative care within the children’s hospital.

Pediatric residents, the audience for the intervention, were important stakeholders, as they reaped personal and professional benefits from the project intervention. As discussed previously, pediatric residents exposed to frequent pediatric patient deaths and other traumatic clinical situations have an increased risk of experiencing emotional distress and subsequent compassion fatigue. This emotional distress and compassion fatigue can result in decreased professionalism, decreased quality of care, increased medical errors, mental health conditions, substance abuse,
and difficulty with relationships, to name a few (Dyrbye et al., 2014). These may also result in career dissatisfaction and decisions to leave the medical profession (Hu et al., 2012).

In reviewing the literature, many residents report that the overall stresses and demands of residency give them little time to cope with the death of their patients, and they have underlying beliefs that the expression of grief and personal distress in relation to their patient care experiences is unprofessional (Schiffman et al., 2008). An intervention aimed at providing time for pediatric residents to emotionally, socially, and spiritually debrief with peers, faculty, and other interdisciplinary team members following two of their, arguably, most difficult rotations, provided residents with protected time to process and learn coping skills through conversation with one another and experiences of faculty.

Along with the pediatric palliative care program and pediatric residents, another important contributing body to the project intervention was the faculty of the pediatric residency program. The pediatric resident faculty, namely the program director and associate program directors, were primarily employed through the medical system and also held additional appointments through the community-based educational consortium. The faculty members were responsible for providing a quality, evidence-based clinical educational experience to pediatric residents.

The faculty of the pediatric residency program had informally identified levels of distress in pediatric residents following their PICU and NICU rotations. These observations caused a heightened interest in discovering ways to support and educate residents in coping with the challenging clinical situations they encounter throughout their pediatric residency. Evidence of this heightened interest was shown through the implementation of monthly, multidisciplinary debriefing sessions initiated by one of the pediatric residency program associate directors in
August 2016. This associate program director and the rest of the pediatric residency program faculty desired to further formalize and evaluate this debriefing program to further justify its need and efficacy.

The healthcare system, as an organization, gained from this project work. As previously stated, the system valued healthcare staff wellness and had already implemented resources for supporting staff members in personally dealing with the social and emotional burdens of caring for patients and families. The healthcare system gained through the evaluation of this pilot program by having pediatric resident providers who were potentially more comfortable and confident in caring for clinically challenging and dying pediatric patients, subsequently improving overall patient care, patient satisfaction, and provider retention.

Finally, an important factor to consider was this DNP student’s investment in the problem and this scholarly project and her capabilities for effectively executing the program evaluation. The involvement of a DNP student and/or future pediatric nurse practitioner (PNP) in initiating and facilitating a project directed towards medical residents was unique and slightly unprecedented. This DNP student’s experience with the pediatric palliative care program and interest in educating and supporting healthcare providers in caring for medically complex and dying pediatric patients provided motivation to address needed education and/or support in an appropriate audience. Although working with a registered nurse or nurse practitioner audience would have been more traditional, the pediatric residents had an identified need for intervention that aligned with this DNP student’s interest and expertise, and the pediatric resident faculty were already motivated to intervene. A program promoting support and education for healthcare providers caring for medically complex and potentially dying pediatric patients is transferrable to
the PNP, for PNPs also care for this challenging patient population. This further validates this work from the perspective of this DNP student and future PNP.

When this author’s interest and potential involvement in addressing the problem of resident support was presented, the pediatric residency faculty fully embraced the idea. Again, this speaks highly of the culture of the pediatric residency program and the overall culture within the children’s hospital, which valued interprofessional collaboration. The residency faculty valued the unique contribution the DNP student provided, using a nursing perspective. Also, the DNP student had a unique expertise and was capable of contributing to this multidisciplinary debriefing program because of a scholarly focus in pediatric palliative and end-of-life care, clinical experience working with the pediatric palliative care program, and nursing experience working in pediatric critical care.

According to the AAP (2000), there are challenges of providing appropriate access to pediatric palliative care services, because of a lack of providers. PNPs trained in pediatric palliative care principles can help improve access and provision of palliative care within pediatrics. In addition to providing palliative care services to patients, the provision of support to healthcare providers caring for children with life-limiting and/or life-threatening illness and who are dying is within the palliative care provider’s scope (AAP, 2000). Given this, it is appropriate and imperative for a PNP, with a focus in palliative care, to be involved with the interdisciplinary healthcare team to promote support in caring for clinically challenging and dying pediatric patients.

**Project Outcomes**

Following the project implementation, data gathered from the pre- and post-surveys, debriefing sessions, and semi-structured interviews were analyzed, and conclusions were formed.
In order to provide reference for the following discussion of outcomes, the following project aims provided a framework for the evaluation of outcomes:

- To determine the efficacy and impact of a multidisciplinary debriefing session for pediatric residents following their PICU and/or NICU rotations on compassion fatigue.
- To determine the level of need among the organization’s residents for increased support during residency while assessing value assigned to participating in the debriefing experience.
- To provide recommendations to the organization’s pediatric residency program faculty, based upon program evaluation results, regarding opportunities to improve the structure and format for the multidisciplinary debriefing sessions.

Quantitative and qualitative outcomes will be discussed separately followed by a discussion of the significance of the results.

**Quantitative Outcomes**

Quantitative data were obtained utilizing a paired pretest-posttest measurement design. The main outcome measure utilized to determine efficacy was compassion fatigue using the professional quality of life scale (proQOL). Once participants completed the proQOL scale, three individual scores were computed: a compassion satisfaction score, a burnout score, and a secondary traumatic stress score (both burnout and secondary traumatic stress making up the compassion fatigue domain) (Stamm, 2010). In order for the intervention to be deemed efficacious, an increase in compassion satisfaction and/or a decrease in compassion fatigue domains would need to be observed.

**Data analysis.** With help from the Grand Valley State University Statistical Consulting Center, quantitative data were exported from Survey Monkey ® into an Excel ® document and
analyzed using SAS statistical software and Descriptive statistics were used for analyzing demographic information. Due to the small sample size and inability to assume normality, non-parametric statistics were utilized for analyzing proQOL information. In order to observe for changes in subscale scores comparing pre- and post-survey results, the Wilcoxon Signed-Rank nonparametric statistical test was utilized. Statistical significance for these tests were determined using a \( p \) value of < 0.05. Finally, each question was compared individually to determine if there was a statistically significant change from the pre-survey to the post-survey using McNemar’s Test of Agreement. Because of the small sample size, a 2 X 2 table design was utilized and the five-point ordinal scale utilized in the proQOL survey was merged into two categorical variables of high and low. Similarly, statistical significance for these tests was determined using a \( p \) value of < 0.05.

**Results.** Throughout the three-month intervention period, 18 residents were eligible to attend the multidisciplinary debriefing sessions because they had finished either their PICU or NICU rotation the month prior. Of these eighteen residents, ten residents attended a debriefing session (55.6%). During the months of April and May, there were four residents in attendance, and at the June debriefing session there were two residents in attendance. Of the ten residents who attended debriefing sessions over the three-month intervention period, nine completed the pre-survey (90%). Of these nine, seven also completed the post-survey (77.8%).

The sample consisted of all female pediatric residents. Ages of residents ranged from 27 to 30 years \( (M = 28.2, SD = 0.83) \). Participants included residents from each program year, with the exception of program year four and each program track with the exception of the subspecialty track. The number of pediatric patient deaths experienced throughout residency ranged from 0 to 15 patients \( (M = 3.3, SD = 4.74) \). The number of patient deaths in the intensive...
care rotation over the previous month ranged from 0 to 3 \( (M = 1.2, SD = 1.22) \). Table 1 below summarizes these and other sample characteristics.

Table 1

**Sample Characteristics**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>9</td>
<td>100</td>
</tr>
<tr>
<td>Male</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year of Training</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG1</td>
<td>5</td>
<td>55.6</td>
</tr>
<tr>
<td>PGY2</td>
<td>3</td>
<td>33.3</td>
</tr>
<tr>
<td>PGY3</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>PGY4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Program Track</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Care / Emergency Medicine</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Primary Care / Underserved / Academic Medicine</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td>Global Health</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>Subspecialty</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hospitalist</td>
<td>2</td>
<td>22.2</td>
</tr>
</tbody>
</table>

*Note.* \( N = 9 \)

Because of the small sample size and the lack of even distributions among sample characteristics, demographic data were not utilized to analyze for differences in pre-and post-survey results among various sample characteristics.

**ProQOL measures.** As previously stated, surveys were utilized in a paired pretest-posttest design. Because of the discrepancy in pre-and post-surveys completed, the sample size for comparing paired data was \( n = 7 \). Because of the small sample size, non-parametric statistics and medians were utilized because of an inability to assume normality and insufficient power to complete parametric statistical tests. First, subscale scores were analyzed and compared, followed by individual proQOL questions.

After computing subscale scores, each individual score was given a level described in the proQOL manual by Stamm (2010). Table 2 provides a count of individual proQOL subscale
scores categorized as high, average, and low within the sample that completed both pre- and post-surveys.

Table 2

*Counts of Individual ProQOL Subscale Responses Categorized as High, Average, and Low*

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Average</td>
</tr>
<tr>
<td>Compassion Satisfaction</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Burnout</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Secondary Traumatic Stress</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

*Note: n = 7*

Table 3, provides the results of the Wilcoxon Signed Rank tests comparing pre-debriefing sessions and post-debriefing sessions ProQOL compassion satisfaction scores for the 7 residents who completed both pre- and post-surveys. As is illustrated, there were no statistically significant changes in the scores for the compassion satisfaction subscale.

Table 3

*ProQOL Subscale Median Scores and Levels for Pre- and Post-survey Results with Corresponding p-values*

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Pre-survey Median</th>
<th>Pre-survey Level</th>
<th>Post-survey Median</th>
<th>Post-survey Level</th>
<th>P-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion Satisfaction</td>
<td>43</td>
<td>High</td>
<td>43</td>
<td>High</td>
<td>0.8125</td>
</tr>
<tr>
<td>Burnout</td>
<td>21</td>
<td>Low</td>
<td>19</td>
<td>Low</td>
<td>0.2188</td>
</tr>
<tr>
<td>Secondary Traumatic Stress</td>
<td>22</td>
<td>Low</td>
<td>16</td>
<td>Low</td>
<td>0.0313**</td>
</tr>
</tbody>
</table>

*Note. * Wilcoxon signed rank statistical test
** Statistically significant difference observed between median pre-survey and post-survey subscale scores
Median compassion satisfaction scores both pre- and post-survey were considered high, potentially explaining the lack of significant change pre- and post-intervention. In addition, only 3 individuals’ (42.9%) satisfaction scores were improved after the debriefing session. One individual’s scores were unchanged, and 3 individuals (42.9%) exhibited a reduction in compassion satisfaction scores.

Table 4

Counts of Individuals Exhibiting Changes in ProQOL Subscale Scores Between Pre-debriefing and Post-debriefing

<table>
<thead>
<tr>
<th></th>
<th>Positive Change</th>
<th>No Change</th>
<th>Negative Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compassion Satisfaction</td>
<td>3</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Burnout</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Secondary Traumatic Stress</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. n = 7

Again, compassion fatigue is measured in both the burnout and secondary traumatic stress subscales. There was no statistically significant median change in median burnout scores comparing the pre-survey and post-survey scores (See Table 3). Median burnout scores both pre-debriefing and post-debriefing were considered low, potentially explaining the lack of significant change pre- and post-intervention (See Table 3). In addition, burnout scores for 5 individuals (71.4%) were lower after the debriefing session. There was no change for one individual, and one individual’s burnout score was higher after the debriefing session (See Table 4).

Finally, there was a change in median secondary traumatic stress scores from the pre-debriefing and post-debriefing, from 22 to 16, respectively (See Table 3). As illustrated in the Table 3, this was a statistically significant reduction in secondary traumatic stress following the
debriefing session. However, adding to the findings, all but one individual (85.7%) had improved secondary traumatic stress scores (See Table 4). This individual exhibited no change.

In order to gain a greater appreciation for how the multidisciplinary debriefing sessions may have impacted individual facets of the measures of compassion fatigue, each individual question in the proQOL was examined for changes between the pre- and post-survey responses. McNemar’s Test of Agreement did not detect a statistically significant change between the individual responses. This, perhaps, can be explained by the small sample size \((n = 7)\).

Additionally, Table 5, illustrates that there was no change observed in the majority of items of the proQOL.
Table 5

Descriptive Statistics and Median Change for Individual ProQOL Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre-survey Mean</th>
<th>Pre-survey Median</th>
<th>Pre-survey Mode</th>
<th>Post-survey Mean</th>
<th>Post-survey Median</th>
<th>Post-survey Mode</th>
<th>Median Change*</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Q1</td>
<td>3.9</td>
<td>4</td>
<td>4</td>
<td>4.3</td>
<td>4</td>
<td>4.5</td>
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<td></td>
</tr>
<tr>
<td>Q2</td>
<td>2.9</td>
<td>3</td>
<td>2</td>
<td>2.6</td>
<td>2</td>
<td>2</td>
<td>-1</td>
<td>0.5</td>
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<tr>
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<td>5</td>
<td>5</td>
<td>3.9</td>
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<td></td>
</tr>
<tr>
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<td>4</td>
<td>4</td>
<td>3.9</td>
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<tr>
<td>Q5</td>
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<td>2</td>
<td>1.9</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
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<tr>
<td>Q6</td>
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<td>3</td>
<td>3</td>
<td>4.0</td>
<td>4</td>
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<td>+1</td>
<td>0.25</td>
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<tr>
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<td>2.5</td>
<td>2.3</td>
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<td>2</td>
<td>-1</td>
<td>1.0</td>
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<td>1.7</td>
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<td>0</td>
<td></td>
</tr>
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<td>1.9</td>
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</tr>
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<td>Q10</td>
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<td>1.7</td>
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<td>0</td>
<td></td>
</tr>
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<td></td>
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<td></td>
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<td>Q13</td>
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<td>-1</td>
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<td></td>
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<tr>
<td>Q16</td>
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</tr>
<tr>
<td>Q17</td>
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<td>3</td>
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<td>4.0</td>
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<td>+1</td>
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<tr>
<td>Q18</td>
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<td>3.9</td>
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<td></td>
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<tr>
<td>Q19</td>
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<td>3.1</td>
<td>3</td>
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<td></td>
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<tr>
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<td>4.1</td>
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<tr>
<td>Q21</td>
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<td>3.0</td>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>Q22</td>
<td>4.0</td>
<td>4</td>
<td>4</td>
<td>4.4</td>
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<td>5</td>
<td>+1</td>
<td>1.0</td>
</tr>
<tr>
<td>Q23</td>
<td>1.6</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Q24</td>
<td>4.1</td>
<td>4</td>
<td>5</td>
<td>4.3</td>
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<td>5</td>
<td>+1</td>
<td>1.0</td>
</tr>
<tr>
<td>Q25</td>
<td>1.2</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Q26</td>
<td>3.2</td>
<td>3</td>
<td>3</td>
<td>3.1</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Q27</td>
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<td>3</td>
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<td>3.3</td>
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<td>Q28</td>
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<td>0</td>
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</tr>
<tr>
<td>Q29</td>
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<td>Q30</td>
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<td>4.1</td>
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<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Note. n = 7
* McNemar Test of Agreement
** Unable to run statistical test due to data distribution

Of interest, in 9 of the 30 items there was a change in the median ratings between surveys. The questions, associated subscale, and change that occurred are summarized in Table 6, below.

Table 6
Individual ProQOL Questions that Exhibited a Change in Pre- and Post-Survey Responses

<table>
<thead>
<tr>
<th>Question</th>
<th>Subscale Domain</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2</td>
<td>I am preoccupied with more than one person I [help]</td>
<td>Secondary Traumatic Stress</td>
</tr>
<tr>
<td>Q4</td>
<td>I feel connected to others</td>
<td>Burnout</td>
</tr>
<tr>
<td>Q6</td>
<td>I feel invigorated after working with those I [help]</td>
<td>Compassion Satisfaction</td>
</tr>
<tr>
<td>Q7</td>
<td>I find it difficult to separate my personal life from my life as a [helper]</td>
<td>Secondary Traumatic Stress</td>
</tr>
<tr>
<td>Q9</td>
<td>I think that I might have been affected by the traumatic stress of those I [help]</td>
<td>Secondary Traumatic Stress</td>
</tr>
<tr>
<td>Q13</td>
<td>I feel depressed because of the traumatic experiences of the people I [help]</td>
<td>Secondary Traumatic Stress</td>
</tr>
<tr>
<td>Q17</td>
<td>I am the person I always wanted to be</td>
<td>Burnout</td>
</tr>
<tr>
<td>Q22</td>
<td>I believe I can make a difference through my work</td>
<td>Compassion Satisfaction</td>
</tr>
<tr>
<td>Q24</td>
<td>I am proud of what I can do to help</td>
<td>Compassion Satisfaction</td>
</tr>
</tbody>
</table>

Note. n =7

Items exhibiting changes in responses represented all of the subscales, however, more questions of the secondary traumatic stress subscale exhibited changes. This is consistent with the finding that the secondary traumatic stress subscale was the only one for which there was significant change from pre-debriefing to post-debriefing surveys. All questions identified in Table 6 exhibited a change in the expected direction.

Value and meaning measures. The final questions posed on the post-debriefing survey were designed to determine the value and meaningfulness of the multidisciplinary debriefing sessions among the pediatric residents who attended. Six of the seven residents who completed the post-debriefing survey found the sessions both valuable and meaningful, indicating support for the debriefing among pediatric residents. In addition to finding the multidisciplinary debriefing sessions valuable and meaningful, six out of seven of the pediatric residents who completed post-surveys indicated that the multidisciplinary debriefing session experience was an
important aspect of their pediatric residency program. Again, 55.6% of eligible residents voluntarily attended the multidisciplinary debriefing session, potentially providing further evidence of the value and importance of the sessions.

**Qualitative Outcomes**

As was described in the discussion of the project plan, three sources of qualitative data collection were used. Qualitative data came in the form of three, open-ended questions included in the post-survey; note taking recordings of debriefing session themes; and content from semi-structured interviews with volunteer pediatric residents. Methods for analyzing the qualitative data and abstracted results are discussed below.

**Data analysis.** Due to the nature of the qualitative data collected, content analysis methodology described by Elo and Kyngas (2008) was used to determine themes. Content analysis was performed using a modified inductive approach, in which qualitative data were reviewed and coded; categories were created; and subsequent abstraction of significant themes followed. Methodology described by Elo and Kyngas (2008) was modified because robust coding could not occur. This was because verbatim recording of debriefing and interview data had not been done, as intensive content analysis was not within the scope of this project. In order to minimize bias and enhance credibility of the analysis, a DNP student colleague reviewed the data to determine consistency of the abstracted themes.

**Results.** Three qualitative questions included in the post-debriefing surveys were as follows: *what was the most positive aspect of the debriefing session experience; do you have any suggestions for improving the debriefing session experience; and do you have any other comments related to the debriefing session experience?* When discussing the most positive aspects of the multidisciplinary debriefing session, the overwhelming consensus among all seven
respondents was the benefit of being given time to talk and process with others who could understand and relate to one’s experiences, and receiving validation for those experiences. When questioned about opportunities to improve the multidisciplinary debriefing sessions, only one respondent commented, saying that s/he would have appreciated a debriefing session of only peers and an overseeing attending physician, for experiences of the multidisciplinary team were too diverse to relate appropriately. Finally, many other comments given expressed appreciation for the opportunity to debrief and encouragement to continue debriefing sessions in future months.

*Debriefing session themes.* A total of ten residents attended a debriefing session during the pilot period. Unlike the previous sample characteristics show, both male and female residents were in attendance at the multidisciplinary debriefing sessions. As previously stated, in order to gain more insight into conversations occurring in the multidisciplinary debriefing sessions, notes were recorded throughout debriefing session conversations. Five main themes emerged from the notes.

First, many of the residents discussed the experience of making personal parallels to difficult patients, and how making these parallels often made the emotional toll of the difficult patient cases more consuming and burdensome. For example, one resident discussed how during her rotation in the NICU, she cared for a baby born at the same gestation as the child she was carrying at that time. Caring for this child made her draw parallels with her own situation, causing her to dream and ruminate over thoughts of her own baby being born prematurely, causing her additional emotional distress throughout the rotation.

Secondly, there were many conversations surrounding high levels of personal anxiety and responsibility that was unique in the PICU and NICU settings, causing an added sense of
exhaustion and emotional distress. One resident commented how a previously difficult experience in the PICU caused anxiety about the PICU rotation weeks before it started. This resident stated that the unresolved emotional burdens experienced in the previous rotation seemed to amplify the effect of the experiences over the most recent experience. In addition, other residents commented about how the higher levels of patient acuity increased a sense of personal responsibility, making it difficult to “leave work at work.” One resident commented about how he/she would leave the PICU rotation afraid that he/she was forgetting something, resulting in difficulty “turning off her work brain” after a shift.

Similarly, a third theme was related to the difficulties walking away from work at the end of the day. Many residents commented about their tendencies to “obsess” over challenging patient cases. This would result in thinking often about patients while at home, or continuing to “chart stalk” following the end of their rotation. This would cause them to dwell over these difficult patient cases, making it difficult to move past the challenging situations and emotions that accompanied them.

A fourth theme was related to how rotations in the intensive care settings affect personal life and personal relationships. Many residents discussed how demanding the rotations in the intensive care setting were in regards to time at the hospital, making time for personal self-care challenging. In addition, many residents also shared about how time in the intensive care rotations were straining on personal relations. One resident talked about how because of the experiences in the intensive care he/she would struggle with empathizing with his/her significant other’s concerns of the day. Another resident talked about how the normal demands of life outside of work often conflicted with what he/she needed to cope with the demands of the rotation.
Finally, many residents discussed that the patient situations that they found the most emotionally distressing and challenging were the cases characterized by sudden trauma or acute deterioration. Many stated that these cases had a more profound, and lasting effect on their emotional wellbeing. One of the most challenging aspects of these cases that many of the residents reflected upon was the interaction with the families in these sudden, traumatic situations. Because of the level of trauma, many of the residents talked about how difficult it was to bear witness to the intense levels of parental grief, causing many of them to internalize the grief themselves.

Semi-structured interviews. The final source of qualitative data was the semi-structured interviews. There was a goal of performing 5 to 10 semi-structured interviews to gather insight into unique challenges in pediatric residency; perceptions of the need for emotional, social, and spiritual support; and experiences with the multidisciplinary debriefing sessions. Unfortunately, only 4 semi-structured interviews occurred. Analyzing notes from the interviews, the following themes emerged.

One of the most significant challenges of pediatric residency was the intense amount of time spent at work, resulting in a subsequent lack of connection with support systems and finding purposes outside of the work environment. Unanimously, the pediatric residents who were interviewed stated that the intensive care units were the most challenging clinical environments because of the large concentration of emotionally and intellectually challenging cases. In addition, these clinical rotations were also more demanding with respect to schedules and intellectual challenge. A common theme among the interviewees regarding how they mentally, emotionally, and spiritually processed challenging cases or rotations was through talking to
others; but significant barriers to doing this consistently and well were time demands and physical proximity to social support systems.

When discussing their experiences with the multidisciplinary debriefing sessions, all spoke very positively of the experience. Consistent with what was stated previously, one of the most positive aspects of the debriefing sessions was the time devoted to talking about challenging clinical cases and the validation that others were experiencing similar experiences and challenges. The only negative aspect noted was that one pediatric resident attended a debriefing session, which could not be attended by the other resident who was also in the PICU the previous month. Because of this, the resident did not have the same opportunity to receive validation for his/her experiences. In addition, she was the only resident in her third program year; this also made it challenging to identify with peers who were in earlier program years.

Regarding additional methods of providing emotional, social, and spiritual support, all the pediatric residents highly praised their pediatric residency program for what it was currently doing to provide support, identifying the multidisciplinary debriefing sessions as an important part of that support. One of the pediatric residents identified the possibility of having more formal education in the residency regarding issues surrounding compassion fatigue and burnout, and strategies for avoiding these consequences of caring through education about healthy methods of coping. Overall, findings from the semi-structured interviews strongly supported the need for and value of the multidisciplinary debriefing sessions. Considering the qualitative and quantitative data discussed above, the following section will consist of a discussion highlighting significant project outcomes.
Discussion

Despite the inability to use robust statistical tests and a rigorous content analysis methodology for data analysis, some important conclusions were made regarding the project findings. Again, 55.6% of eligible residents voluntarily attended the debriefing sessions. Anecdotally, most of the residents who were unable to be in attendance could not attend due to schedule conflicts. Because of this, it is possible that even more residents would have attended voluntarily.

As previously stated, none of the individual participants exhibited any extreme subscale results. The lack of pre-survey data indicating strong levels of compassion fatigue, in the form of burnout and/or compassion satisfaction, decreased the potential for statistically significant change as a result of the multidisciplinary debriefing session intervention. However, with a statistically significant change in median scores of secondary traumatic stress subscales was observed. This, potentially, indicated that the multidisciplinary debriefing session did, indeed, have an effect on the pediatric residents’ experiences with compassion fatigue.

When examining individual questions of the pre- and post-debriefing session surveys, no statistically significant changes were found, and many individual questions did not exhibit a median change. There were, however, nine questions that did exhibit median changes. A potential conclusion from this result is that the multidisciplinary debriefing sessions might have had a greater impact on the perceptions that those individual questions assessed, and these were most often issues related to secondary traumatic stress.

This conclusion was also supported by qualitative data. Qualitative data gathered from the debriefing sessions yielded four themes: drawing personal parallels; anxiety and personal responsibility; difficulties leaving work at work; and patient cases involving sudden, acute
deterioration carrying a more profound effect. Many of these themes were representative of the questions that exhibited change on the post-debriefing surveys. In addition, many of the themes observed in the debriefing session conversations were surrounding issues related to the secondary traumatic stress components of compassion fatigue. This suggests that multidisciplinary debriefing sessions as a form of intervention to support emotional, social, and spiritual wellbeing, may have a more profound effect on issues related to secondary traumatic stress rather than burnout.

Although more data would have strengthened the following conclusion, the data described above suggests that multidisciplinary debriefing sessions were efficacious in impacting levels of compassion fatigue, namely compassion fatigue characterized by secondary traumatic stress. In addition to this, data gathered from the pediatric residents involved in the three months of multidisciplinary debriefing sessions provided support for the value and meaningfulness of the sessions. Many residents expressed positive sentiments regarding the experience of the debriefing sessions and made requests for them to continue in future months; this shows that residents feel a strong need for the provision of routine debriefing. This, again, is reflective of the multidisciplinary debriefing session program’s efficacy, for it was deemed as highly valuable, meaningful, and important to pediatric resident participants.

**Evaluation of Project Objectives**

Another important aspect of evaluating scholarly project outcomes is an evaluation of the clinical questions motivating the project work, project aim, and project objectives determined at the start of this project work. It is believed that all three project aims were successfully accomplished through this project work. As previously described, quantitative and qualitative data supported that the multidisciplinary debriefing session program had a positive impact on
pediatric residents’ levels of compassion fatigue. Similarly, quantitative and qualitative data also emphasized the need for support through reports of the debriefing sessions as being highly valuable, meaningful, and important. Finally, as will be discussed in the subsequent section of this document, recommendations could be generated from the outcomes of this project work.

In addition to the accomplishment of these aims, it is also important to evaluate the completion of the project objectives. Each of the project objectives are described below with a determination of whether that objective was **MET, UNMET, PARTIALLY MET, or ONGOING** at the conclusion of the project work.

- **Create and implement a pre-debriefing and post-debriefing, online survey for the organization’s pediatric residents.** The online surveys were created on March 31, 2017 and implementation was initiated prior to the April 2017 multidisciplinary debriefing session. **MET**

- **Gather qualitative data by recording themes from three months of monthly multidisciplinary debriefing sessions starting in April 2017.** Qualitative data from this scholarly project were inclusive of the April, May, and June 2017 debriefing sessions. **MET**

- **Perform five to ten focus interviews with volunteer pediatric residents who have been involved in any debriefing session since their inception, to gather more qualitative data regarding the value of debriefing sessions, by July 1, 2017.** **PARTIALLY MET**

- **Analyze quantitative and qualitative data for three months of monthly, multidisciplinary debriefing sessions starting in April 2017.** **MET**
• Evaluate data collected, and make recommendations to pediatric residency faculty regarding future directions for the multidisciplinary debriefing sessions, by July 31, 2017.

**MET**

Finally, this scholarly project work helped to satisfy the clinical questions motivating the intervention:

• Does participating in a multidisciplinary debriefing session following a PICU and/or NICU rotation in a Midwestern children’s hospital have an impact on a resident’s level of compassion fatigue?

• Is there value assigned by pediatric residents to participating in the multidisciplinary debriefing experience?

Overall, this scholarly project accomplished its overall purpose of evaluating the efficacy of a multidisciplinary debriefing session in reducing levels of compassion fatigue for pediatric residents. Based upon this conclusion and other conclusions formulated as a result of the outcomes previously discussed, important recommendations for future improvements to the multidisciplinary debriefing session program were made.

**Recommendations for Multidisciplinary Debriefing Session Improvement**

Based upon the conclusions previously discussed and data gathered, the following recommendations for improvement of the multidisciplinary debriefing sessions were formulated. The first, and perhaps the strongest recommendation made by this author as a result of the project outcomes, was the continuation of the debriefing session program for pediatric residents following their PICU and NICU rotations. This author believed that evidence of efficacy described above, along with indications from residents valuing the experience and requesting for the program’s continuation, supported the continuation of the debriefing sessions. In addition it
was also recommended that evaluation of outcomes be continued in order to further determine program efficacy in the long-term. Evaluation might not only further justify program need, but might also provide insight into phenomena related to pediatric residents’ emotional, social, and spiritual wellbeing and interventions for providing support. Data of this nature would help to further support a limited body of evidence and inform future evidence-based practice.

Secondly, it was recommended, that additional data related to the multidisciplinary debriefing sessions following residents’ PICU and NICU rotations be gathered. Other data that could be beneficial includes information relating to the month’s clinical environment in the intensive care settings. For example, the number of patient deaths experienced over the past month, unit census, distribution of diagnoses, etc., could further inform the organization regarding the types of intensive care environments that pose the most risk to pediatric resident wellbeing.

Thirdly, it was recommended that the Professional Quality of Life Scale (proQOL) be utilized at other times throughout residency in order to track compassion fatigue over time. Although Stamm (2010) clearly reports that the proQOL scale is not a diagnostic tool for determining the presence of compassion fatigue, it might be useful to pediatric residency faculty in tracking residents’ wellbeing, and to generate conversations related to personal and professional wellbeing during routine checkpoints and evaluations.

Additionally, given that the outcome data revealed that compassion fatigue in the form of secondary traumatic stress was, perhaps, most affected by the debriefing intervention, it was recommended the residency program explore issues of secondary traumatic stress. Further exploration of this topic could improve multidisciplinary debriefing session methodology to either address issues of secondary traumatic stress more effectively, or attempt to more
holistically encompass other aspects of compassion fatigue. In addition exploring issues into secondary traumatic stress, it might also be interesting to explore more into how professional distress experienced by residents affects others, such as parents, significant others, and children.

Unfortunately, outcome data did not strongly support the provision of the multidisciplinary aspect of the debriefing session program. Given this, further exploration of the value and need for the multidisciplinary component of the sessions was recommended. If future exploration of the multidisciplinary component of the sessions determines it was not highly valued in future exploration, further promotion of multidisciplinary collaboration among pediatric residents, or modification of debriefing sessions to only include physician providers would be recommended.

Finally, it was recommended that the pediatric residency faculty provide future educational sessions related to topics surrounding compassion fatigue, burnout, and secondary traumatic stress, and strategies for avoiding these common effects of a caring profession. This recommendation was based upon data gathered from the semi-structured interviews.

**Dissemination of Outcomes**

As a DNP-prepared advanced practice nurse, an important responsibility is to share with the nursing profession and healthcare community at large ways to incorporate research into practice to instill more widespread evidence-based practice and engrain it into healthcare culture. For this project, dissemination of findings first occurred with the pediatric residency faculty and pediatric palliative care program. Findings from the evaluation of the pilot program were presented to them along with the previously discussed recommendations for improvements to the current multidisciplinary debriefing structure and evaluation process. Dissemination also
occurred for this project through the scholarly defense of this DNP student that occurred on August 2, 2017.

In addition to these activities, a poster of this program evaluation was presented at the National Association for Pediatric Nurse Practitioners (NAPNAP) Michigan Chapter spring conference in April 2017. This dissemination opportunity highlighted to Michigan PNPs the important role they can play in interprofessional, collaborative work and among physician colleagues. A second abstract for a poster presentation of this project was submitted for the Midwest Interprofessional Practice, Education, and Research Center Fall 2017 conference. This dissemination opportunity was chosen because of the interprofessional implications of this project work. Finally, in conjunction with the pediatric residency faculty, an abstract for a poster presentation of this project was submitted for the Society of Critical Care Medicine (SCCM) 47th Critical Care Congress in February 2018. This dissemination opportunity was chosen because of the implications for pediatric resident wellbeing through debriefing in critical care settings.

If data collection were continued by pediatric residency directors or other pediatric residency staff, the project team hoped to apply for publication in a peer-reviewed print or online journal in order to further disseminate results for utilization by other organizations and residency programs. As the project report was completed, it was not known whether this author would be a part of this dissemination process. Other opportunities for dissemination included, but were not limited to, future webinar presentation, oral presentations at conferences or organizational grand rounds, and dissemination to organizational leadership. None of these dissemination opportunities were planned at the conclusion of the project. In order to further support the need for dissemination of the outcomes of this scholarly project, the following section will describe the implications of this project for practice.
Implications for Practice

This scholarly project work has significant implications for practice, namely in the areas of the provision of pediatric healthcare provider support. The following section will discuss the various strengths, weaknesses, and limitations of this project; unintended project consequences; recommendations for sustainability; relationship with other healthcare trends; and how this DNP student was able to enact elements of the DNP Essentials through the project work.

Project Weaknesses, Barriers, and Limitations

Despite intentional planning of this scholarly project implementation, barriers were encountered and there were weaknesses and limitations of this project work. One of the most significant limitations to this project was the small number of participants, which limited the data analysis possible with the quantitative measures. In addition to the inability to perform more robust statistical analyses of the data, another consequence of a small number of participants was the increased risk for bias. This was especially true because of the small number of volunteer, interview participants.

Two potential explanations for the small number of participants was the short pilot period of three months and the time within the calendar year in which this scholarly project took place. Residency schedules were demanding, inhibiting some residents from attending the multidisciplinary debriefing session and/or participating in the semi-structured interviews. As was previously discussed, 18 residents were eligible to attend the three debriefing sessions, yet only 10 did attend. Data collection for this scholarly project occurred during the months of April, May, and June, the last three months of the residency year. Because of this, there were many schedule conflicts for third year residents related to board review sessions, travel, and early departure for subsequent jobs and fellowship programs. Should the data collection have
happened at an earlier point within the calendar year, there might have been more participants and subsequently more data for which to analyze.

As previously alluded to, due to the limited number of participants, statistical analyses had to be completed utilizing non-parametric statistics, undermining the strength of conclusions made based upon the data. Only 7 of the 10 residents who attended sessions completed both pre- and post-surveys, giving only a sample size of 7 when analyzing data for matched pairs. Again, due to the small sample size, demographic data could not be used to explore how various characteristics of pediatric residents may impact their experience of compassion fatigue and changes in compassion fatigue as a result of participating in the multidisciplinary debriefing sessions. An inappropriate measurement tool, or a flawed implementation design may have also amplified problems arising from the small sample size, but this is difficult to determine with confidence.

In addition to the small sample size, the numerous confounding variables that could not adequately be accounted for in analyzing data also presented limitations in deriving conclusions from the findings. As previously discussed, provider distress is a complex phenomenon with many facets. The complexity made it difficult to determine the impact multidisciplinary debriefing sessions had on compassion fatigue variables. There may have been many other influencing factors affecting scores of the surveys.

An additional weakness to this project work was the lack of compelling evidence regarding the best approaches to support and debrief pediatric residents in caring for clinically challenging and dying pediatric patients. However, evidence was limited regarding the debriefing format, various elements of the debriefing structure that were utilized were supported within the literature.
Project implementation was delayed because of the academic process necessary for this scholarly project. Even though all elements of the academic process were incredibly beneficial for the success of project implementation and planning for long-term program evaluation, the timeline of the academic progress was much slower than the process to determine and optimize organizational readiness. This is often a challenge with process improvement work and evidence-based practice implementation in clinical practice; for the desired need for change in clinical practice is often accelerated as compared to the process for producing process improvement work and evidence-based practice implementation from an academic perspective. Despite this perception of organizational readiness for project implementation, it is important to consider whether the multidisciplinary debriefing program would have been sufficiently established to appropriately evaluate for its efficacy. Despite these competing factors, this DNP student’s intense involvement with the academic process through the completion of this scholarly project work resulted in data supporting the efficacy of the multidisciplinary debriefing session program, which will hopefully contribute to future endeavors of process improvement and evidence-based practice implementation.

**Project Strengths, Facilitators, and Successes**

In addition to the project weaknesses, barriers, and limitations stated above, this project also exhibited many strengths and successes. An important strength of this scholarly project was its grounding in theory as evidenced through the utilization of a number of conceptual frameworks including the Causal Model of Organizational Performance and Change, the Model of Health Professionals’ Grieving Process, and a Model of Evidence-based Practice Change to guide project development and implementation. The conceptual frameworks utilized within this
scholarly project assisted in providing insight into motivating phenomena and the organization into project planning and implementation.

Despite the small number of participants, there were strengths and successes in the data analysis and results. The response rate of participants who completed the pre-and post-survey was strong, 90% and 70%, respectively. According to Polit and Beck (2012), a response rate greater than 65% minimizes the risk of response bias that could skew quantitative data collection, potentially limiting conclusions made through quantitative data analysis.

Finally, based upon the outcomes described above, this program evaluation provided an important contribution to the provision of evidence-based support for debriefing methods for supporting pediatric residents in caring for clinically challenging situations and dying pediatric patients. Quantitative and qualitative data both supported efficacy of the multidisciplinary debriefing session program for reducing pediatric residents’ levels of compassion fatigue, namely the aspect of secondary traumatic stress. In addition to efficacy in reducing compassion fatigue, quantitative and qualitative data strongly indicated that pediatric residents valued and found meaning through participation in the debriefing sessions, strongly supporting future continuation of the sessions.

Many factors contributed to the strengths and successes of this scholarly project work. One of the most significant facilitators of the success of this project implementation included the strength of stakeholder support. The stakeholders, particularly the pediatric residency program faculty and pediatric palliative care nurse practitioner, took a vested interest in the project and contributed significantly to promoting project implementation and addressing barriers that impeded it. In addition, because the project took place within a large healthcare organization, with many relationships with external organizations such as the educational consortium
previously discussed, there was access to numerous resources that helped with project planning and implementation. Finally, an important facilitator was this DNP student’s unique academic and clinical expertise, and connections to the pediatric critical care community. The expertise and professional connections contributed to the success of the multidisciplinary debriefing program and provided access to necessary resources that facilitated the project planning and implementation. In addition to the weaknesses, difficulties, limitations, strengths, facilitators, and successes discussed, this scholarly project work also had some unintended consequences worth noting.

**Unintended Consequences**

Unintended consequences are project outcomes that were not accounted for in the planning of the project. Unintended consequences can be positive or negative in nature. A positive, unintended consequence of this scholarly project work is the example this scholarly project work provides of interprofessional collaboration and the potential contributions nursing practice can make to medical education. It is hoped that this project work can pave the way for future collaboration between nursing and the pediatric residency program within the organization, in order to enhance pediatric resident education and support.

Despite this, a negative unintended consequence of this project work was the potential lack of appreciation among pediatric residents for the multidisciplinary aspects of the debriefing sessions. Because determining the successfulness of the multidisciplinary aspect was not a primary aim of this scholarly project, there was no data collection focused upon assessing this aspect of the debriefing methodology. Unfortunately, the one negative comment related to the multidisciplinary debriefing sessions was regarding the multidisciplinary facilitation. Further
exploration of this finding would be needed in order to more thoroughly determine if pediatric residents valued the multidisciplinary aspect of the debriefing sessions.

**Recommendations for Sustainability**

Overall, the evidence for efficacy of the multidisciplinary debriefing session program provided support for future program sustainability. Support from the organization’s pediatric palliative care program and pediatric residency program was strong, indicating a strong likelihood for intervention sustainability. At the conclusion of the project, the pediatric residency program directors and pediatric chief residents made a verbal commitment to continuing with the data collection and analysis after this DNP student’s involvement ended. To further facilitate sustainability of this project work, the pediatric residency associate director and chief residents were provided access to the pre- and post-debriefing surveys, allowing continued use for future data collection. In addition, project sustainability was promoted through assistance in drafting a new investigational review board application for future data collection. This addressed the program directors’ desires to publish findings from the project continuation.

Considering that this DNP student was a registered nurse in the PICU, she planned to continue to be involved in the multidisciplinary debriefing sessions until a future role change prohibited this involvement. Upon anticipation of the cessation of this DNP student’s involvement, it was planned that another PICU registered nurse would be recruited to become involved so that a nursing perspective would continue to be provided. Recruitment of a registered nurse from the NICU was also planned in order to contribute a nursing perspective from this care setting as well.

A final important consideration in the sustainability of this multidisciplinary debriefing program for pediatric residents was the cost associated with maintaining the program. In the
*Project Budget* section of this document, the costs associated with this pilot program evaluation were shown. In addition, a budget was created highlighting the cost associated with continuing to implement the multidisciplinary debriefing sessions over a period of a year. This cost projection can be viewed in Appendix O.

As was the case with the budget of the pilot, many of the long-term costs associated with sustainability of this project were negligible because many of the resources for continued implementation of the debriefing sessions were readily available within the organization. The most important, and perhaps most costly, resource that would need to be considered for the sustainability of this project work was the time of the individuals involved in the multidisciplinary debriefing sessions. In order to further justify sustainability of this program, it was anticipated that the pediatric residency program might have to consider analyzing how the annual cost associated with implementing the program compared with potential mitigated costs, although these may be difficult to measure. This type of analysis was outside of the scope of this scholarly project work. Another important contribution to the sustainability of programs such as the multidisciplinary debriefing session was the relationship of outcomes to other evidence and current healthcare trends.

**Relations to Other Evidence and Healthcare Trends**

As previously discussed, the provision of emotional and psychological support for healthcare providers is strongly supported by organizations such as the IOM, AAP, and ACGME. Pediatric healthcare providers are at high risk for experiencing distress (emotional, social, and, spiritual) because of a high exposure to suffering children (Jonas & Bogetz, 2016; Meadors & Lamson, 2008). Supporting pediatric providers during these times of distress is critical to preventing compassion fatigue and its negative effects (Jonas & Bogetz, 2016;
Deliberative, routine support measures are critical to ensuring provider wellbeing, while also helping healthcare providers learn and realize the importance of caring for themselves and how participation in a caring profession has the potential to affect personal life (Jonas & Bogetz, 2016; Meadors & Lamson, 2008). Unfortunately, despite the recognized needed for providing support measures, there is little consensus in literature to describe best practice for providing this support to healthcare providers, namely pediatric residents.

This scholarly project, as an evaluation of a multidisciplinary debriefing session for pediatric residents, was an example of a deliberative, routine, support measure for combating pediatric provider distress. The pilot program evaluation achieved by this project showed efficacy and provided evidence of reducing levels of compassion fatigue in pediatric residents who attended the debriefing session. In addition, it showed that pediatric residents in the project setting, specifically, experienced a need for support and valued the provision of support in the form of multidisciplinary debriefing sessions following their PICU and NICU rotations. At the completion of this project work, the hope was that sustainability in the multidisciplinary debriefing session program would be accompanied with long-term outcome evaluation in order to further inform evidence-based practice regarding interventions for providing support for healthcare provider distress.

**Enactment of the DNP Essentials**

The Doctor of Nursing Practice (DNP) degree is a terminal practice degree in nursing that focuses on influencing healthcare outcomes for individuals and/or populations including direct care of individuals, management of care of individuals and populations, administration of healthcare organizations, and the development and implementation of healthcare policy (AACN,
EVALUATION OF A DEBRIEFING PROGRAM

The Essentials of Doctoral Education for Advanced Practice (2006) are curricular competencies determined by the American Colleges of Nursing (AACN) that students pursuing the DNP degree should obtain prior to graduation. The DNP scholarly project, along with other course objectives throughout the program, is intended to provide students with an opportunity to utilize DNP Essentials in order to inform and transform clinical practice (American Association of Colleges of Nursing [AACN], 2006). Throughout the process of planning, implementing, and evaluating this DNP scholarly project and through clinical immersion hours, this DNP student was able to practice and grow in each of the DNP Essentials. Appendix P provides a chart illustrating how various aspects of each of the Essentials that were enacted. A more detailed description of how this student enacted the DNP Essentials most relevant to this scholarly project work were enacted follows.

**Essential I: Scientific underpinnings for practice.** Advanced nursing practice utilizes an array of knowledge from a variety of disciplines (AACN, 2006). As a DNP-prepared advanced practice nurse (APRN), an important competency is the ability to translate that vast knowledge quickly and efficiently into the practice environment (AACN, 2006). Within this scholarly project work, knowledge from a variety of disciplines was utilized in order to plan, implement, and evaluate this project. The student enacted this DNP Essential through her ability to utilize knowledge in order to inform best practice in regarding how to best support pediatric residents. Knowledge was utilized from nursing practice, palliative care, and social work. In addition to this, conceptual frameworks from various disciplines were used to guide project planning and implementation.

**Essential II: Organizational and systems leadership for quality improvement and systems thinking.** An important aspect of advanced nursing practice is the ability to assess and
influence the impact that practice change has within an organization and in meeting healthcare needs (AACN, 2006). Proficiency in this Essential requires an understanding of organizational structure, systems leadership, economic strategy, and how each of these contributes to healthcare delivery (AACN, 2006). Proficiencies in these areas enable the DNP to assess organizations, identify system issues, implement changes in practice, and evaluate long-term, organizational outcomes (Chism, 2016). Advanced communication skills were used in enacting Essential II in order for this student to serve as a leader of a quality improvement project within an organization. An effective plan was developed and implemented to evaluate an intervention to improve the provision of support for pediatric residents within an organization.

**Essential III: Clinical scholarship and analytical methods for evidence-based practice.** Essential III, clinical scholarship and analytical methods for evidence-based practice, is, perhaps, the essential that most heavily influenced this scholarly project work. The purpose of the DNP scholarly project is to provide an opportunity for students to practice translating research into practice (AACN, 2006). According to the AACN (2006), “nursing practice epitomizes the scholarship of application through its position where sciences, human caring, and human needs meet and new understanding emerges” (p. 11). This DNP student, through this scholarly project work, was able to critically appraise literature to determine best practice approaches to addressing the problem identified by the organization related to the lack of support for pediatric residents caring for clinically challenging and dying pediatric patients. In addition, relevant findings in literature were applied to develop and implement a process to evaluate a program aimed at addressing the issue of support. It was hoped that outcomes obtained from the project would further inform practice and further delineate evidence-based practice.
**Essential VI: Interprofessional collaboration for improving patient and population health outcomes.** Finally, the AACN (2006) included the competency of interprofessional collaboration, recognizing that interprofessional collaboration is essential in order to provide high quality care. DNP-prepared APRNs are uniquely prepared with an interprofessional perspective, making them skilled in facilitating interprofessional collaboration in order to address concerns and optimize healthcare outcomes. This scholarly project work provided this DNP student an opportunity to take on the role of a leader among an interprofessional group of providers. This intervention has the potential to foster the break down of interprofessional barriers that may exist between physicians and advanced practice nursing, and provide an important example of how the nursing profession can teach and contribute to the development of colleagues in medicine.

**Role discussion.** Overall, involvement in this scholarly project work has given this DNP student an opportunity to enact the *DNP Essentials* and has contributed significantly to her understanding of the DNP role. Even though this project gave me more experience with some of the *DNP Essentials* compared to others, I believe this DNP project allowed me to practice the fundamental goal of the DNP, as identified by Chism (2016), of “developing expertise in the delivery of high-quality, patient-centered care, and…utilizing the necessary avenues to provide that care” (p. 24). One of the roles described by Chism (2016) this DNP student embodied most through this project work was that of a leader and collaborator through serving as the project facilitator and participating in self-discovery related to personal leadership and collaboration styles.

An experience with the process of implementing evidence-based practice and quality improvement work was obtained through participation in this project. This experience increased
this DNP student’s confidence in future quality improvement and evidence-based practice implementation endeavors. In addition, this work gave her an opportunity to share with a group of stakeholders her passion for pediatric palliative care and for providing support to healthcare professionals.

Summary

In summary, this final scholarly project document highlighted the background and significance; a review of evidence; organizational readiness; conceptual frameworks; a detailed description of the project implementation; a presentation of outcomes; and a discussion of the implications this project work has on practice. Pediatric residents and other pediatric healthcare providers engage in extraordinarily challenging work that, over time, becomes entirely ordinary, and has the potential to cause significant emotional, social, and spiritual distress. This project with its purpose to determine the efficacy and impact of a monthly, multidisciplinary debriefing session on resident emotional, social, and spiritual wellbeing has incredible implications for the pediatric residents and other pediatric healthcare providers within this healthcare organization.
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https://www.surveymonkey.com/mp/take-a-tour/?ut_source=header


https://www.bls.gov/oes/current/oes_nat.htm#39-0000


doi: 10/1097/NJH.00000000000000181


doi: 10.1089/jpm.2010.0314

doi: 10.1-17/S147895150999068X
Appendix A

SWOT Analysis of a Multidisciplinary Debriefing Program within the Pediatric Palliative Care Program and Pediatric Residency Program

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<th>Weaknesses</th>
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<td>• Presence of an in-house pediatric palliative care program</td>
<td>• Small pediatric palliative care team</td>
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<td>• Presence of knowledgeable, experienced palliative care practitioners</td>
<td>• Potentially poor willingness from pediatric residents</td>
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<td>• Pediatric palliative care program’s commitment to providing provider</td>
<td>• Potential lack of support from other pediatric clinicians</td>
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<td>education and support</td>
<td>• Dedicated time of pediatric residency faculty and other</td>
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<td>• Support for the intervention from pediatric residency faculty</td>
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<tr>
<td>• Available time in residency schedule for education</td>
<td>• Lack of pediatric palliative care representation among pediatric</td>
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<tr>
<td>• Informal, current practice of resident debriefing sessions</td>
<td>residency faculty</td>
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<tr>
<td>• Organization staff members trained in critical incident stress</td>
<td>• Overarching pediatric medical culture</td>
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<td>management</td>
<td>• Lack of literature supporting specific intervention</td>
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<td>• Organizational culture that supports staff wellness</td>
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<td></td>
<td>palliative care staff</td>
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<td>• DNP student scholarly project timeframe</td>
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<th>Opportunities</th>
<th>Threats</th>
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<td>• Strong support from organizations such as the AAP, IOM, and WHO</td>
<td>• Overarching pediatric medical culture</td>
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<td>• Access to reaching out to other residency program to assess their current</td>
<td>• Lack of literature supporting specific intervention</td>
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<td>practices</td>
<td>• Sustainability due to time constraints of residency program faculty</td>
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<td>• Research resources from Grand Valley State University and community-</td>
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Appendix B

Six Categories of Losses

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<td>Loss related to identification with the pain experienced by family members</td>
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<td>Loss of unmet goals or expectations and one’s professional self-image</td>
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<td>Loss related to one’s personal system of beliefs about life</td>
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<td>Remembrance of past, unresolved losses or anticipated, future losses</td>
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<td>Realization of the eventual death of self</td>
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Appendix C

Health Professionals’ Grieving Process Model

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Appendix E

Multidisciplinary Debriefing Program Format

Facilitators: DNP student and PICU attending/residency faculty

- Introductions of individuals present at the debriefing session

- Description of Background and Purpose of Multidisciplinary Debriefing Sessions
  
  - These multidisciplinary debriefing sessions were developed in response to pediatric residency faculty’s increased awareness of struggles pediatric residents were facing following their rotations in the intensive care settings during residency. The purpose of these sessions is to provide time and a safe space to discuss challenging clinical situations experienced during intensive care rotations from a psychological, emotional, social, and spiritual perspective. The hope is that through the discussions that ensue, you would feel solidarity with peers, faculty, and interprofessional colleagues while also gaining perspective and tools for promoting coping skills for working with some of the more complicated and distressing clinical situations.

  - As many of you know, these sessions have been occurring since August 2016. In order to gain a better perspective of the efficacy and value of this multidisciplinary debriefing session, we will be collecting data around these sessions for the next few months. As many of you are aware, you received a pre-survey attached to the invitation to attend this meeting. Two weeks following this session, you will receive a follow-up email with a similar survey. In addition to the survey data, I will be recording themes of conversation discussed in this session while omitting any individual identifiers or patient identifiers. If this concerns you, please let me know and I will refrain from note taking during this session. All notes taken will remain secure and will only be used for data analysis purposes in order to inform the process of debriefing.

- Provide opportunity for residents to share and discuss challenging cases and experience during their PICU/NICU rotations.

- Discuss challenges in coping with difficult experiences.

- Discuss how challenging cases and experience affect other areas of life outside of the professional work environment.

- Discuss different strategies in promoting professional self-care

- Discuss resources available within the organization should residents feel as though they need additional support.
Appendix F

Professional Quality of Life Scale (ProQOL)

Compassion Satisfaction and Compassion Fatigue (ProQOL) Version 5 (2009)

When you [help] people you have direct contact with their lives. As you may have found, your compassion for those you [help] can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a [helper]. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1. I am happy.

<table>
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<tr>
<th></th>
<th>1=Never</th>
<th>2=Rarely</th>
<th>3=Sometimes</th>
<th>4=Often</th>
<th>5=Very Often</th>
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<tbody>
<tr>
<td>2. I am preoccupied with more than one person I [help].</td>
<td></td>
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<td>3. I get satisfaction from being able to [help] people.</td>
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<td>4. I feel connected to others.</td>
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<tr>
<td>5. I jump or am startled by unexpected sounds.</td>
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<tr>
<td>6. I feel invigorated after working with those I [help].</td>
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<tr>
<td>7. I find it difficult to separate my personal life from my life as a [helper].</td>
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<tr>
<td>8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].</td>
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<tr>
<td>9. I think that I might have been affected by the traumatic stress of those I [help].</td>
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<tr>
<td>10. I feel trapped by my job as a [helper].</td>
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<tr>
<td>11. Because of my [helping], I have felt &quot;on edge&quot; about various things.</td>
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<tr>
<td>12. I like my work as a [helper].</td>
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<tr>
<td>13. I feel depressed because of the traumatic experiences of the people I [help].</td>
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<tr>
<td>14. I feel as though I am experiencing the trauma of someone I have [helped].</td>
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<td>15. I have beliefs that sustain me.</td>
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<tr>
<td>16. I am pleased with how I am able to keep up with [helping] techniques and protocols.</td>
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<tr>
<td>17. I am the person I always wanted to be.</td>
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</tbody>
</table>
18. My work makes me feel satisfied.
19. I feel worn out because of my work as a helper.
20. I have happy thoughts and feelings about those I help and how I could help them.
21. I feel overwhelmed because my case load seems endless.
22. I believe I can make a difference through my work.
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.
24. I am proud of what I can do to help.
25. As a result of my helping, I have intrusive, frightening thoughts.
26. I feel "bogged down" by the system.
27. I have thoughts that I am a "success" as a helper.
28. I can't recall important parts of my work with trauma victims.
29. I am a very caring person.
30. I am happy that I chose to do this work.

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- Examples of media outlets we can generally give permission for reprint without any special permission:
  - Print Media: newspapers, newsletters, books, journals and similar venues
  - Electronic Media: non-commercial online use that does not return data to the end user, podcast, webinars, books on tape, news media and similar venues

- Examples of media outlets that require special negotiated permission:
  - Films, videos, website forms other than research program, particularly if they return automated scoring, commercial online training courses, commercial training programs in which the ProQOL could be interpreted as adding to the monetary value of the class and other similar uses.

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You need to verify that you are using the most current version of the ProQOL. We require that some type of statement be made directing people to the website for current information. Here is an example:

Please see www.ProQOL.org for the most current information.

In most cases, publishers will have their own forms for us to sign. Take this document and talk with your media publisher and they will guide you as to how to proceed.

Again, thank you for helping us make the ProQOL available to others. If you need additional assistance in your reprint process, please do write to us at proqolorg@gmail.com.

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Author, ProQOL
ProQOL.org
proqol.org@gmail.com

Help us help all of us. Please consider donating a copy of your raw data to the data bank. You can find more about the data bank and how you can donate at www.proqol.org and www.proqol.org/Donate_Data.html. Data donated to the ProQOL Data Bank allow us to advance the theory of compassion satisfaction and compassion fatigue and to improve and norm the measure itself.
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Prior to beginning your project and at the time of any publications, please verify that you are using the latest version by checking the website. All revisions are posted there. If you began project with an earlier version, please reference both to avoid confusion for readers of your work.

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info@proqol.org

*Help us help all of us. Please consider donating a copy of your raw data to the data bank. You can find more about the data bank and how you can donate at www.proqol.org and www.proqol.org/Donate_Data.html. Data donated to the ProQOL Data Bank allow us to advance the theory of compassion satisfaction and compassion fatigue and to improve and norm the measure itself.*
Appendix G

Professional Quality of Life Scale Domain Definitions

<table>
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<tr>
<th>Domain</th>
<th>Description</th>
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<tr>
<td>Compassion Satisfaction</td>
<td>Having a sense of satisfaction in one’s profession and from the action of caring and helping.</td>
</tr>
<tr>
<td>Compassion Fatigue</td>
<td>Having negative feelings towards one’s profession characterized by the negative aspects of proving care and experience traumatic and extreme stressors.</td>
</tr>
<tr>
<td>Burnout</td>
<td>An aspect of compassion fatigue that is associated with feelings of unhappiness, disassociation, and insensitivity towards the caring aspects of the work.</td>
</tr>
<tr>
<td>Secondary Traumatization</td>
<td>An aspect of compassion fatigue that is associated with preoccupation with people for whom one has provided care. Feelings associated include exhaustion, inability to sleep, obsessive thoughts, overwhelm, anxiousness, and avoidance.</td>
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</tbody>
</table>

Professional Quality of Life Scale Model

![Professional Quality of Life Scale Model](http://www.proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf)

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- **Examples of media outlets we can generally give permission for reprint without any special permission:**
  - Print Media: newspapers, newsletters, books, journals and similar venues
  - Electronic Media: non-commercial online use that does not return data to the end user, podcast, webinars, books on tape, news media and similar venues

- **Examples of media outlets that require special negotiated permission:**
  - Films, videos, website forms other than research program, particularly if they return automated scoring, commercial online training courses, commercial training programs in which the ProQOL could be interpreted as adding to the monetary value of the class and other similar uses.

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Help us help all of us. Please consider donating a copy of your raw data to the data bank. You can find more about the data bank and how you can donate at www.proqol.org and www.proqol.org/Donate_Data.html. Data donated to the ProQOL Data Bank allow us to advance the theory of compassion satisfaction and compassion fatigue and to improve and norm the measure itself.
This quality improvement project seeks to determine the efficacy of multidisciplinary debriefing program for pediatric residents following their PICU and NICU rotations. A Grand Valley State University Doctor of Nursing Practice (DNP) student and H/DVCH/G/RMEP residency program leadership are conducting this program evaluation.

Your participation in this program evaluation survey is completely voluntary, and is not a requirement of your residency program. You may choose not to participate, at no cost or penalty to you. This survey will take approximately 10-15 minutes of your time. Survey questions will be assessing your wellbeing and feelings about caring for critically ill and dying children. This project team is committed to keeping all survey data anonymous and strictly confidential, although risks are associated with the possible compromising of the anonymity and confidentiality of electronic data. You can be assured that all possible measures have been taken to ensure this risk has been mitigated. Data will be collected for three months, and all data will only be kept long enough to complete data analysis and will be promptly and securely destroyed.

The results of this program evaluation will be used for scholarly and informative purposes for quality improvement within the organization only. By continuing with the remainder of the survey, you are indicating your consent to participate. If while you are completing the survey you decide to withdraw from this quality improvement evaluation you may do so at any time by closing out your browser, which will terminate your survey session.

If you have any questions, please contact Allison Reynolds via the email provided below:

Thank you for your participation!

**Demographic Questions**

1. Please provide a memorable date that is unique to you and that will be easy to remember for use on a follow-up survey (eg. birthdate of a loved one or anniversary):

   XX/XX/XXXX

2. Please provide your age in years:

3. Please choose your gender:
   - Male
   - Female
4. Please select your year of training:
   o PGY 1
   o PGY 2
   o PGY 3
   o PGY 4

5. What program track are you in?
   o Critical Care / Emergency Medicine
   o Primary Care / Underserved / Academic Medicine
   o Global Health
   o Subspecialty
   o Hospitalist
   o Undecided

6. Please provide an approximate number of patients you have cared for during your pediatric residency who have died:

7. Please provide an approximate number of patients you have cared for during your past NICU/PICU rotation who have died:

Professional Quality of Life Scale
Appendix I

Post-debriefing Survey
Survey Participation Information

This survey is a follow-up to your participation in a multidisciplinary debriefing session following your PICU or NICU rotation as a part of your residency at Helen DeVos Children's Hospital (HDVCH). This quality improvement project seeks to determine the efficacy of HDVCH’s multidisciplinary debriefing program for pediatric residents following their PICU and NICU rotations. The effects of these sessions on your wellbeing and feelings about caring for critically ill and dying children are the focus of our evaluation. A Grand Valley State University Doctor of Nursing Practice (DNP) student and HDVCH/GRMEP residency program leadership are conducting this program evaluation.

Your participation in this program evaluation is completely voluntary, and is not a requirement of your residency program. You may choose not to participate, at no cost to you. This survey will take approximately 10-15 minutes of your time. Survey questions will be assessing your experience with the multidisciplinary debriefing session and changes in your levels of compassion fatigue as a result of the debriefing. This project team is committed to keeping all survey data anonymous and strictly confidential, although risks are associated with the possible compromising of the anonymity and confidentiality of electronic data. You can be assured that all possible measures have been taken to ensure this risk has been mitigated. Data will be collected for three months of debriefing sessions, and all data will only be kept long enough to complete data analysis and will be promptly and securely destroyed.

The results of this program evaluation will be used for scholarly and informative purposes for quality improvement within the organization only. By continuing with the remainder of the survey, you are indicating your consent to participate. If while you are completing the survey you decide to withdraw from the quality improvement evaluation, you may do so at any time by closing out your browser, which will terminate your survey session.

If you have any questions, please contact Allison Reynolds via the email provided below:

allison.reynolds@spectrumhealth.org

Thank you for your participation!

Demographic Questions

1. Please provide the memorable date that is unique to you and easy to remember that you provided on the previous survey (eg. birthdate of a loved one or anniversary):

   XX/XX/XXXX

2. Please choose your gender:
   o Male
   o Female
3. Please select your year of training:
   o PGY 1
   o PGY 2
   o PGY 3
   o PGY 4

4. Was this your first debriefing experience:
   o Yes
   o No

5. Did you find the debriefing experience valuable?
   o Yes
   o No

6. Did you find the debriefing experience meaningful?
   o Yes
   o No

7. What was the most positive aspect of the debriefing session experience?

8. Do you have any suggestions for improving the debriefing experience?

9. Do you believe that regular debriefing sessions with peers, resident faculty, and the multidisciplinary team is an important aspect of your residency program?

10. Do you have any other comments related to the debriefing session experience?

Professional Quality of Life Scale
Appendix J

Semi-structured Interview Topic Guide

1. Describe aspects of residency that are most challenging to you (these may be clinical challenges or personal challenges).
   a. How do these challenging situations affect you emotionally/socially/spiritually?
   b. Are these challenging situations different than you anticipated going into residency?

2. Describe the clinical environments (eg. rotations/units) that are most challenging emotionally/socially/spiritually.
   a. What makes these environments most challenging?
   b. Do you feel like you get adequate support in these environments?

3. Do you feel like you are able to process through emotional/social/spiritual challenges you face during your residency?
   a. What does this processing look like for you?
   b. What are the barriers to being able to do so and do so well?

4. Tell me about your experience with the debriefing session.
   a. Which month/months did you attend a debriefing session?
   b. What were your biggest take-aways from the session?
   c. What were the most positive aspects of the debriefing session?
   d. What were the negative aspects of the debriefing session?
   e. What could have made the debriefing session better?

5. What other methods of support could be provided during your residency experience that are not or are not readily available that might help you process through some of these challenges you experience during residency?
Appendix K

Project Timeline

March
- 3/22/2017: Proposal defense
- 3/24/2017: IRB application submissions
- 3/31/2017: Create online versions of pre-and post-surveys

April
- 4/7/2017: Email pre-survey to pediatric residents
- 4/13/2017: April debriefing session
- 4/27/2017: Email post-survey to pediatric residents

May
- 5/1/2017: Email invitations to participate in semi-structured interviews
- 5/12/2017: Email pre-survey to pediatric residents
- 5/18/2017: May debriefing session

June
- 6/1/2017: Email post-survey to pediatric residents
- 6/9/2017: Email pre-survey to pediatric residents
- 6/15/2017: June debriefing session
- 6/29/2017: Email post survey

July
- 7/1/2017: Finish 5-10 semi-structured interviews
- 7/31/2017: Present findings and recommendations to residency faculty

August
- 8/2/2017: Final scholarly project defense
Appendix L

Semi-Structured Interview for Multidisciplinary Debriefing Informative Letter

Thank you for agreeing to participate in this quality improvement project, which is taking place between April 2017-July 2017. This evaluation is led by Allison Reynolds BSN, RN, CCRN, a Doctor of Nursing Practice (DNP) student at Grand Valley State University working with Helen DeVos Children's Hospital (HDEVCH) residency faculty. The purpose of this letter is to highlight the purpose of the project, a description of your anticipated involvement, and associated information for you, concerning your participation.

This quality improvement project seeks to evaluate the efficacy and value of HDEVCH's monthly multidisciplinary debriefing session program for pediatric residents following their PICU and NICU rotations. The specific purpose of this portion of the quality improvement project is to gain insights into the perceptions of need and value for the monthly, multidisciplinary debriefing sessions from the perspective of the pediatric residents. The data collected from these interviews will further inform and improve the practice of multidisciplinary debriefing. We appreciate your giving us some of your time, and want to assure you that the information you provide will be kept confidential. To reduce the risk of a breach in confidentiality, these interviews will not be audio or video recorded, and the interviewer will refrain from providing any identifiable information in any notes taken by pen and paper.

Following the interview, notes taken by pen and paper will be immediately transcribed into an encrypted, electronic file that will be stored on an encrypted, external drive, and then notes will be immediately shredded. Electronic data will be kept until the completion of the data analysis and then will be promptly and securely destroyed.

This interview is expected to take approximately 30 minutes. Questions have been developed prior to the interview session. Again, the interviewer will take notes during the conversation, but no identifying information will be associated with the notes and all data obtained will remain strictly confidential. We will also follow these guidelines:

- At any time, you may choose to end the interview. In the event you choose to end the interview, all information you have provided will be destroyed and omitted from the quality improvement data analysis.
- You may decide to not answer any of the questions. If you feel uncomfortable in any way during the interview, you may indicate that you wish to not answer the question or end the interview completely.
- You will not be identified in any way using the information obtained through this session, and your confidentiality as a participant will remain secure.
- This project will undergo an Institutional Review Board ethics review to confirm that it meets definitions of quality improvement that is not research.

You may keep this letter for your records. If you have any questions regarding any of the information above or other questions concerning this evaluation, please contact the interviewer and coordinator of the quality improvement project. That contact information is as follows:
Thank-you for your willing participation.

Sincerely,

Allison Reynolds, BSN, RN, CCRN
Appendix M

University Institutional Review Board Determination Letter

DATE: April 4, 2017

TO: Allison Reynolds
FROM: Grand Valley State University Human Research Review Committee
STUDY TITLE: [1023320-1] Evaluation of a Pilot Multidisciplinary Debriefing Program: Promoting Pediatric Provider Emotional, Social, and Spiritual Wellbeing
REFERENCE #: 17-195-H
SUBMISSION TYPE: Non-Human Subjects Determination Form
ACTION: Not Research
EFFECTIVE DATE: April 4, 2017
REVIEW TYPE: Administrative Review

Thank you for your submission of materials for your planned research study. Upon review of the aims and description of your study, it has been determined that this project DOES NOT meet the definition of covered human subjects research* according to current federal regulations. The project, therefore, DOES NOT require further review and approval by the HRRC.

According to your study description, you are conducting a quality improvement study to determine the efficacy and impact of a multidisciplinary debriefing program at a specific healthcare facility. Therefore, this study does meet 45 CFR 46.102(d) because the activities are not designed to develop or contribute to generalizable knowledge.

Should you change the aims and activities of your project such that it would then meet the definition of human subjects research, please cease any contacts with potential human subjects until such time as you submit the project protocol to the HRRC and receive the committee’s approval to proceed.

Should you change the aims and activities of your project such that you are unsure if it meets the definition of human subjects research, please submit a new Non-Human Research Determination Form for review by the Office of Research Compliance and Integrity.

If you have any questions, please contact the Office of Research Integrity and Compliance at (616) 331-3197 or rci@gvsu.edu. Please include your study title and reference number in all correspondence with our office.

*Research is a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge (45 CFR 46.102 (d)).
March 30, 2017

Allison Reynolds BSN, RN

NON HUMAN RESEARCH DETERMINATION

IRB#: 2017-091  PROTOCOL TITLE: Evaluation of a Pilot Multidisciplinary Debriefing Program: Promoting Pediatric Provider Emotional, Social, and Spiritual Wellbeing

Dear Ms. Reynolds,

On March 30, 2017, the above referenced project was reviewed. It was determined that the proposed activity does not meet the definition of research as defined by DHHS or FDA.

Therefore, approval by [REDACTED] IRB is not required. This determination applies only to the activities described in the IRB submission and does not apply if changes are made. If changes are made and there are questions about whether these activities are research involving human subjects, please submit a new request to the IRB for a determination.

A quality improvement project may seek publication. Intent to publish alone is insufficient criterion for determining whether a quality improvement activity involves human subject research. However, please be aware when presenting or publishing the collected data that it is presented as a quality improvement project and not as research.
Please be advised, this determination letter is limited to IRB review. It is your responsibility to ensure all necessary institutional permissions are obtained prior to beginning this project. This includes, but is not limited to, ensuring all contracts have been executed, any necessary Data Use Agreements and Material Transfer Agreements have been signed, documentation of support from the Department Chief has been obtained, and any other outstanding items are completed (i.e. CMS device coverage approval letters, material shipment arrangements, etc.).

Your project will remain on file with the Office of the IRB, but only for purposes of tracking research efforts within the Spectrum Health system. If you should have questions regarding the status of your project, please contact the Office of the IRB at 616-486-2031 or email irb@spectrumhealth.org.

Sincerely,

[Redacted] MD  Chair, [Redacted] IRB

c: Quality Specialist

Human Research Protection Program

Office of the Institutional Review Board  [Redacted] irb@spectrumhealth.org

Page 1 of 1

HRP-524
Appendix O

Project Budget and Associated Cost Projections

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<th>Quantity/Hrs</th>
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### Project Debriefing Labor Expenses

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**PROJECT TOTAL**

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<table>
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All information related to wages retrieved through the United States Department of Labor Bureau (2015).
Appendix P
Enactment of the DNP Essentials

<table>
<thead>
<tr>
<th>DNP Essential</th>
<th>Evidence of DNP Essential Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Scientific Underpinnings for Practice</td>
<td>• Applied conceptual frameworks in the planning, implementation, and evaluation of the program evaluation</td>
</tr>
<tr>
<td></td>
<td>• Integrated knowledge of palliative care principles to develop and implement a successful multidisciplinary debriefing program</td>
</tr>
<tr>
<td></td>
<td>• Attended a conference related to exploring complicated mourning due to sudden and traumatic death experiences in order to help inform scholarly project work</td>
</tr>
<tr>
<td></td>
<td>• Attended and presented at the End-of-Life Nursing Education Consortium: pediatric palliative care conference. Presentation topic related to caring for a pediatric patient at the time of death</td>
</tr>
<tr>
<td>II. Organizational and Systems Leadership for Quality Improvement and Systems Thinking</td>
<td>• Utilized the Causal Model for Organizational Performance and Change to conduct an organizational assessment to determine organizational propensity for change</td>
</tr>
<tr>
<td></td>
<td>• Developed a program evaluation budget and analyzed cost projection for program sustainability</td>
</tr>
<tr>
<td></td>
<td>• Utilized communication skills to lead and coordinate a quality improvement process within an organization</td>
</tr>
<tr>
<td></td>
<td>• Engaged in a shadow experience with the Director of Nursing at ************* in order to gain insight into the role of executive leadership as it relates to quality improvement and systems thinking</td>
</tr>
</tbody>
</table>
### III. Clinical Scholarship and Analytical Methods for Evidence-based Practice

- Utilized analytical methods to critically appraise existing literature related to the provision of support for healthcare providers in order to determine and implement evidence-based practice
- Utilizing findings from the literature review, a structure for debriefing to improve the provision of support for pediatric residents was developed
- Developed a process for determine efficacy of the multidisciplinary debriefing sessions through collection pre-and post-survey data
- Utilized outcomes of the pilot program evaluation to provide the organization with recommendations from program improvement
- Engaged in dissemination activities to share evidence-based practice outcomes with the greater healthcare community

### IV. Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Healthcare

- Engaged in NEXUS and EPIC building events at ******** in order to gain insight into the development and implementation of a new electronic health record
- Engaged in conference sessions and lectures related to the role and influence telemedicine has within the pediatric population

### V. Healthcare Policy for Advocacy in Healthcare

- Examined policy related to the provision of support and promotion of wellbeing among pediatric residents
- Involvement as a student representative on the Michigan chapter of the National Association of Pediatric Nurse Practitioners (NAPNAP) board
- Assisted and presented in an advocacy day event hosting Michigan legislators at Grand Valley State University to disseminate information regarding the role of nurse practitioners in the current healthcare delivery system

### VI. Interprofessional Collaboration for Improving Patient and Population Health Outcomes

- Employed communication and collaboration skills in developing and implementing a pilot program evaluation
- Served as a leader of an interprofessional team that implemented and evaluated a pilot multidisciplinary debriefing program
### VII. Clinical Prevention and Population Health for Improving the Nation’s Health

- Analyzed data related to healthcare professional wellbeing
- Participated in the planning and implementation of a campus-wide influenza vaccination initiative at Grand Valley State University
- Attended the 2016 Michigan Nursing Summit addressing issues of health equity within the state of Michigan
- Authored an article published in the Grand Rapids Press discussing the importance of pulse oximetry screening for the identification of critical congenital heart defects in newborns

### VIII. Advanced Nursing Practice

- Completed 600 clinical hours in various pediatric primary care, pediatric palliative care, and mental health settings to develop advanced skills of clinical judgment; comprehensive assessment of health and illness parameters; and the design, implementation, and evaluation of therapeutic interventions
- Attended the NAPNAP 2017 national conference