

Implementing a Bereavement Risk Assessment Tool in a Hospital Setting

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Implementing a Bereavement Risk Assessment in a Hospital

Setting: Bereavement Support

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Abstract

Problem: The death of a loved one is a powerful stressor occurring in every person's life.

Bereavement is a unique period of physiologic and psychological adaptation occurring over time after a loved one dies. Grieving is characterized by symptoms of depression, anxiety, anger, and physical alterations in health that may last weeks and months. Providing support to family caregivers, throughout the patient's illness and death, is one core function of palliative care. Furthermore, palliative care guidelines recommend providing grief support to families and caregivers during the bereavement period. While hospice agencies are required to provide grief support to families for a period of 13 months after death and have formalized bereavement support programs, many hospitals do not routinely assess bereavement risk factors or have formalized bereavement support programs. Hospital based bereavement programs tend to be informal with generic interventions. There is a paucity of evidence about methods for assessing bereavement risks in families when patients die in the hospital. There is little evidence in the literature about what grief support interventions are most effective or most needed in the acute care setting.

Project Aim: The purpose of this project was to select a bereavement risk assessment tool and implement its use in a hospital setting. The tool will be used to assess risks for complicated grief in family members experiencing the death of a loved one in the hospital. Ideally, the tool will score bereavement risks in to low, medium, or high-risk categories according to the public health model of bereavement support. Once the risk category is identified, then grief support interventions can be matched to the needs of the individual.

Project Method: This quality improvement project was implemented using a microsystems approach. A literature review was conducted to search for clinical practice guidelines and

existing bereavement risk assessment tools. Institutional criteria were identified for a risk assessment tool and a comparison table was created to evaluate tools reported in the literature. The Palliative Care team was trained in the use of the tool before and during implementation. Additionally, a potential model of grief support applicable to acute care was developed. Grief support interventions were identified and assigned to the specific category of risk.

Findings: Review of the literature supports the use of a bereavement risk assessment tool to assess grief support needs and potential bereavement risks. Risk assessment tools were screened for suitability for use in a hospital setting and then placed into a comparison table. A bereavement risk assessment tool was selected based on the criteria established for the comparison table. The tool was implemented after completing education and data collected regarding efficacy. The selected tool produced similar results to the public health model of bereavement support, however the sample size was limited.

Conclusions: A bereavement risk assessment tool was selected and implemented as a quality improvement project. Barriers were encountered in uptake of the tool and in the process of documenting risk assessments in the medical record. Due to a limited sample size and resources, more data is needed regarding use and effectiveness of the tool. Additional education and training is needed prior to generalizing use of a tool to the unit or institutional level.

Table of Contents

Abstract.....	1
Background.....	5
Clinical Significance.....	6
Statement of Purpose.....	8
Framework	9
Microsystems and Quality.....	9
Description of Organization.....	10
Description of Microsystem	11
Literature Review	14
Databases and Keywords.....	14
Search Criteria.....	15
Article Selection.....	15
Results.....	16
Analysis and Synthesis of Literature Review	16
Use of Risk Assessment Tools.....	17
Risk Factors/Potential Health Outcomes.....	18
Effectiveness of Interventions.....	19
Summary of Findings	20
Methods.....	21
Setting and Sample	22
Selection of Tool.....	22
Crosswalk Results.....	24

Data Collection.....	25
Findings	26
Barriers and Limitations	27
Electronic Medical Record	27
Cost	28
Family Lost to Follow Up.....	30
Effectiveness of Bereavement Support Interventions.....	30
Conclusion	31
References	33
Appendix A	38
Appendix B	39
Appendix C	40
Appendix D	41
Appendix E	43
Appendix F	44
Appendix G.....	45
Appendix H.....	47

Implementing a Bereavement Risk Assessment Tool in a Hospital Setting

Over 2,500,00 deaths occur annually in the United States, meaning between five and nine percent of the population experiences the loss of a close family member each year (Block, 2015). Bereavement spans a period of time after the death of a loved one and presents unique physiologic and psychological challenges for survivors (Sealy, Breen, O'Connor, & Aoun, 2015). It is associated with symptoms of depression, anxiety, anger, and other alterations in health that may persist for weeks and months (Aoun, Breen, Howting, Rumbold, McNamara, & Hegney, 2015; Aranda & Milne, 2000). While the majority of bereaved family and caregivers cope during loss without needing professional intervention, up to 10-20 percent of bereaved individuals are at significant risk of developing adverse physical health and psychosocial problems. (Fauri, Ettner & Kovacs, 2000), (Morris & Block, 2015).

Background

Block (2015) reports the experience of death as the most powerful stressor in everyday life, causing intense somatic and emotional distress that may be long lasting. The loss of close relationships can cause profound suffering and may have untoward effects on the health status of surviving family members and caregivers (Buckley et al., 2015). Bereavement can be a devastating experience for family and caregivers who, in addition to experiencing grief, are often required to deal with disrupted living environments, financial constraints or loss of income, and alterations in social support systems (Buckley, et al., 2010).

Supporting bereaved individuals through loss can reduce the physical and psychological morbidity associated with the bereavement period and grief process (Worden, 2009). Early risk assessments prior to the bereavement period, interventions for grief support pre- and post-death, and referral to appropriate services can prevent or mitigate adverse health effects associated with

grief work after the loss of a loved one (Rumbold & Aoun, 2014). Thus, the focus of this project is to select and implement a bereavement risk assessment tool in a hospital setting. Conducting bereavement risk assessments will assist in identifying family members who are likely to need additional resources for grief support beyond traditional interventions.

Clinical Significance

Palliative care standards and policies recommend providing bereavement support to families and caregivers. Bereavement support is considered one of the core components of a palliative care program (National Consensus Project, 2013). Clinical practice guidelines recommend that grief and bereavement programs should be available to patients and families, based on the assessed needs for services (National Consensus Project, 2013). The guidelines suggest using clinical assessment to identify people at risk of complicated grief, and that grief interventions are provided commensurate to need. The Center to Advance Palliative Care (CAPC, 2007) also endorses implementing a bereavement care plan after the patient's death as a preferred practice. World Health Organization (WHO) guidelines identify the importance of bereavement support and also acknowledge limitations in services and lack of evidence regarding effective interventions (Tol, et al., 2014).

While bereavement risk assessments have been incorporated into hospice practices since the 1970's, they have not been consistently used in palliative care settings (Agnew, Manketlow, Taylor, & Jones, 2009). Referrals to palliative care offer early advantages in that anticipated death is acknowledged and discussed and there is usually time for risk assessment prior to death (Agnew, Manketlow, Taylor, & Jones, 2009). Bereaved family and caregivers are known to be at increased risk for physical and psychological alterations in health due to the stresses of the grief process (LeBlanc, Unger, & McNally, 2016). Nevertheless, there is a lack of evidence

regarding the types of interventions most effective for optimal support (Agnew, Mankelow, Taylor, & Jones, 2009; Garrido & Prigerson, 2014; Hudson, et al., 2012). Hence, most bereavement support strategies tend to be broad in nature without pre-assessment of risk for developing potential grief complications. Support for family caregivers, including bereavement follow up, is a core function of palliative care. Even so, many health care institutions lack formalized bereavement support programs (Morris & Block, 2015). Training and education in differentiating grieving styles and assessing bereavement risks has also been identified as important in improving bereavement care in hospitals (Agnew, Manketlow, Taylor, and Jones, 2009) (Parkes, 2009). Without formalized bereavement support programs, informal and generalized bereavement assistance is more likely to be provided irrespective of the person's need (McAdam & Erickson, 2016).

The public health model of bereavement support matches the appropriate level of intervention across three groups: low (about 60%) , medium (about 30%, and high risk (about 10%). (Sealy, Breen, O'Connor, & Aoun, 2015) (Figure 1).

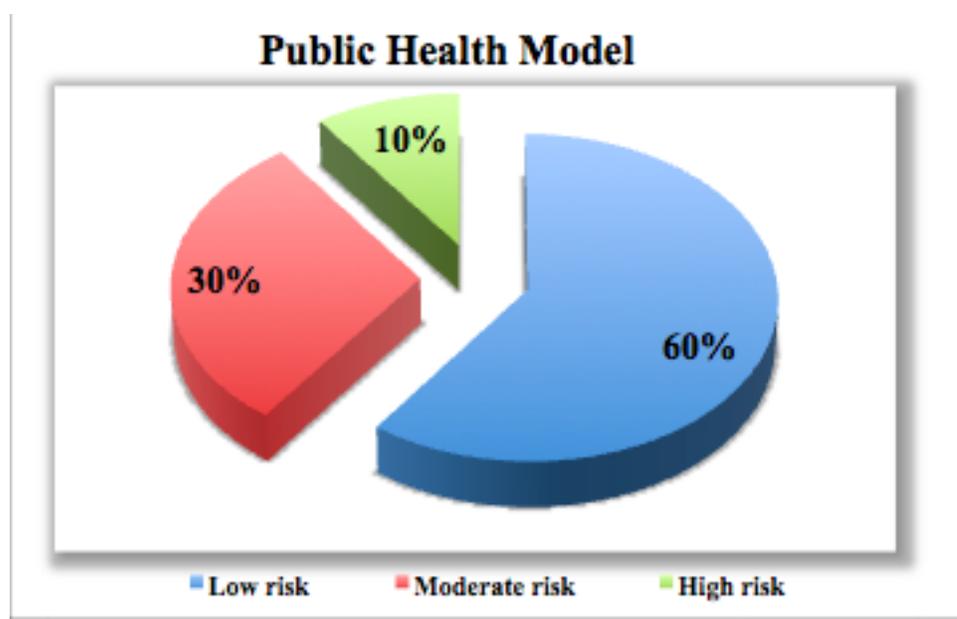


Figure 1

Ideally, a bereavement risk assessment tool would stratify risks and match the support needs of bereaved persons to the most appropriate services (Aoun, Breen, O'Connor, Rumbold, & Nordstrom, 2012). Therefore, implementing a bereavement risk assessment tool in the hospital would help identify those persons potentially in need of additional support and assist the health care team in recommending appropriate services for ongoing support once the hospital encounter concludes. Those persons identified as being in moderate to high-risk categories can be directed to additional resources for grief support. Additional health surveillance may also lessen or prevent potentially detrimental cycles of maladaptive coping. Few health care institutions offer bereavement support services to all patients and those bereavement interventions offered tend to be non-specific (Morris & Block, 2015).

Early bereavement risk assessment is a crucial step in determining persons who are most at risk of needing grief support intervention above and beyond the support of family, friends, faith, and community. Implementing a reliable and valid bereavement risk assessment tool is also cited as integral to a larger commitment of developing formalized standards of effective bereavement care. (Aoun, Breen, Howting, Rumbold, McNamara, & Hegney. 2015).

Public health models of bereavement support identify needs by risk category and match the appropriate interventions to the needs of the individual. Using the public health model of bereavement support can assist in bridging gaps between policy and practice in acute care settings regarding the provision of bereavement support (Sealey, Breen, O'Connor, & Aoun, 2015).

Statement of Purpose

There are gaps in palliative care policy and practice for assessing potential health risks of bereavement for the family prior to a patient's death, and in providing bereavement support

services after death. While bereavement risk assessment is routine in hospice care, bereavement risk assessments and formalized grief support interventions are not as well organized in hospitals.

Hence, the purpose of this project was to select and implement a bereavement risk assessment tool for use in an adult population of patients receiving end-of-life (EOL) care in a hospital setting. The tool will assist in identifying potential bereavement support needs by risk category in the period prior to a patient's death in the hospital. Use of a bereavement risk assessment tool is an important step in identifying potential physical and psychological health risks related to the bereavement period and in matching support services to individual need (McAdam & Erickson, 2016).

Framework

This quality improvement project was conducted using a microsystems approach. This systems approach is designed to maximize the safety, quality, and performance of clinical care in the health system.

Microsystems and Quality

Clinical microsystems are considered key components of a learning organization (Nelson, Batalden, & Godfrey, 2007). A clinical microsystem consists of small interdependent teams who regularly work together to provide quality care at the bedside (Dartmouth Clinical Microsystems, 2015). Some teams may be established and relatively stable, such as a team assigned to a unit. Other teams may need to form and disperse rapidly, such as a rapid response team, in order to meet the needs of the patient. Clinical microsystems intersect at multiple points of care, working with patients, families, and healthcare providers with the goal of organizational improvement (Nelson, Batalden, & Godfrey, 2007). Microsystems are embedded in larger systems (macro

systems) and drive changes leading to improved practices (Nelson, Batalden & Godfrey, 2007). Clinical microsystems need to interact seamlessly with other systems, give and receive resources from the environment, and respond to changes in the environment for peak functioning (Nelson, Batalden, & Godfrey, 2007). Microsystem assessment tools, analytical techniques, and performance measures will be used to select and implement a bereavement risk assessment tool. Measures for guiding process improvement will include process maps, flow diagrams, and a meeting plan.

Description of Organization

The project was conducted at an academic medical center, The University of Kansas Health System (TUKHS), located in a Midwestern urban setting. TUKHS is a not-for-profit tertiary medical center providing comprehensive inpatient and outpatient care. Key health services include critical care services, cardiac services, comprehensive cancer care, neonatal critical care, newborn and pediatric services, emergency services, general medical and surgical services, transplant programs, and other specialties (TUKHS, 2017). Additionally, TUKHS is the primary Level 1 trauma and comprehensive burn center for a large region. Outpatient services have expanded to include oncology partnerships, urgent care clinics, sports medicine partnerships, surgical centers, and mental health services.

The hospital serves as a primary teaching site for the University of Kansas Medical Center Campus and welcomes students from the Schools of Medicine, Nursing, Allied Health Professions, and Clinical Pastoral Education, as well as students from other schools in the area. TUKHS is extensively involved in the community and has expanded local, regional, and national partnerships in providing quality patient care services.

Today, TUKHS has 775 beds with completion of the newest addition, the Cambridge Tower, opening in late 2017. The Cambridge Tower is dedicated to the care of patients requiring neurology, neuro-oncology, and neurosurgical services. In the past year, TUKHS recorded over 44,000 inpatient discharges, greater than 67,000 emergency room visits, and over one million hospital-based outpatient encounters from all sites (TUKHS, 2017).

The hospital system employs well over 8,000 people on multiple sites in the Kansas City area and other locations. TUKHS has gained recognition as a national leader in health care by ranking among top hospitals in the country since 2007. TUKHS is one of 33 hospitals in the country with top rankings in eight or more specialties (TUKHS, 2017). TUKHS was awarded ANCC's Magnet designation for excellence in nursing in 2006, 2011, and 2016 (TUKHS, 2017). Magnet designation reflects the highest levels of patient care quality, safety and satisfaction. About 8% of hospitals nationwide achieve Magnet designation, and far fewer have attained designation three times consecutively (TUKHS, 2017).

Description of Microsystem

The microsystem chosen for the project was the Palliative Care (PC) team at TUKHS. The PC team was formed in 1999 as part of growing national trend to deliver specialized care to seriously ill patients along the continuum of illness. The initial team was designed as a physician-led consultation team and consisted of a part-time Advanced Practice Registered Nurse (APRN) and two oncology physicians, also part time. The demand for consultation services has grown very steadily since the inception of the team. Initially, the PC consult service received 200-400 consults per year. With steady rises in numbers of consultation, staffing has increased to provide three full teams on service. The PC division receives upwards of 1700

consultations per year to date. PC physicians see patients in dedicated outpatient cancer clinics at the Richard and Annette Bloch Cancer Pavilion and at the north location.

Current PC staffing includes seven full-time physicians, four part-time physicians, five APRN's (four full time, one prn), three full time social workers, and two dedicated administrative assistants. All APRN's have achieved and maintain Advanced Hospice and Palliative Nursing certification (ACHPN) in addition to their core certifications. A medical fellowship program was developed in 2007 and has grown from accepting one fellow per year to four fellows per year. The PC team provides education and clinical experience for undergraduate and graduate nursing students, nurse residents, medical students, residents, and fellows, as well as providing community education and services. The PC team works with nurse navigators, outpatient cancer clinics, heart failure clinics, and inpatient units to teach foundational skills in providing primary palliative care services to patients.

The hallmarks of PC team interventions include: 1) assessing and treating complex, refractory symptoms affecting quality of life and functioning, 2) assisting patients and families with clarifying goals of care and medical decisions based on their health status and options, 3) coordinating communication across interdisciplinary teams, and 4) identifying appropriate resources for continued care outside the hospital (National Consensus Project, 2013).

Additionally, palliative care practitioners are cross-trained in hospice and manage end of life (EOL) care in the hospital for patients who may be too sick or unstable to transition to home, care facility, or an inpatient hospice facility (National Consensus Project, 2013). Providing EOL care in acute care settings requires a high level of skill in managing critically ill patients who will transition off life supporting technologies, when indicated. Core palliative care competencies include assessing and managing refractory symptoms, supporting families and caregivers

throughout the continuum of illness, coordinating complex discussions regarding medical options, and managing the complex care needed at end of life (HPNA, 2014). The PC team assists in managing EOL care in the hospital for approximately 15-35 patients per month who are too unstable for other options (Figure 2).

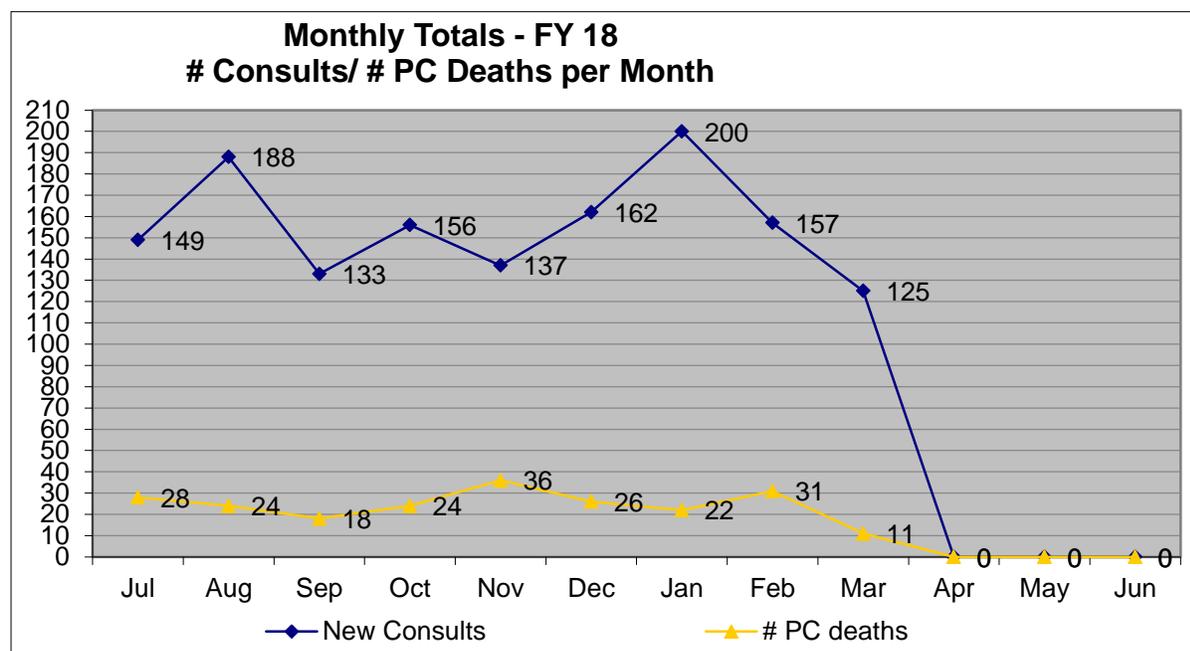


Figure 2

The PC team clearly functions as a microsystem and must interact effectively with other microsystems, and in the macro system, to achieve high quality patient care. Interactions between teams may be brief or sustained over periods of time. Because TUKHS does not have a unit specifically dedicated for palliative care or hospice, the PC team travels to the patient's location in the hospital. Patients who require EOL care in the hospital typically remain in their assigned rooms. Patients in intensive care units maybe transferred to a more comfortable room, if possible. Several nursing units have redesigned rooms with amenities to assist families staying with their loved one while providing a more private, comfortable space. The nursing units where patients commonly receive EOL care include Units 41, 42, 45, 46; the Medical Intensive Care

Units (61, 63, 65), the Surgical Intensive Care Unit, the Cardiac Intensive Care Units, and the Neuroscience Intensive Care Unit. All adult inpatient units, excluding Maternal/Child, Psychiatry, and the Emergency Department, are potential sub-microsystems interacting with the PC team.

The PC team, under the direction of the project coordinator, implemented a bereavement risk assessment tool to identify families of adult patients who die in the hospital as low, moderate, or high-risk of needing additional grief support interventions. Existing data were collected and analyzed regarding the interventions currently provided to the family unit of the deceased patient during the immediate post-death period.

Literature Review

A systematic review of the literature was undertaken using an evidence-based practice approach (Hall & Roussel, 2014). Articles were organized into a matrix by subject heading and hierarchy of evidence (Melnyck & Fineout-Overholt, 2015). Three goals were identified for the literature search regarding bereavement risk assessment in the pre-death period: 1) predicting family and/or caregivers at risk (low, medium, or high) of needing grief support beyond usual supports, 2) recommendations for grief support interventions prioritized for the safety and support of the family in the immediate post-death period, and 3) matching the appropriate support services for ongoing bereavement support according to a risk category.

Databases and Keywords

A literature search was conducted in four tiers with multiple passes in three of the four tiers. In the first tier, current clinical practice guidelines and professional standards for providing care to the bereaved population were reviewed. In the second tier, PubMed, CINAHL, Psych INFO, and Medline databases were searched and results screened for relevance to the topic. The

third tier included searches of the Cochrane Database, National Guideline Clearing House and Up to Date for supporting literature and recommendations. A search of the grey literature was done as a fourth tier, including Google Scholar, and other Internet resources not represented in major databases. Interestingly, a grey literature search engine (CARESEARCH®) exists and is specific to palliative care literature and information in Australia. CARESEARCH® contains guidelines and links to maximize grey literature searches pertaining to palliative care (Retrieved from: www.caresearch.com.au). As discussed by Fink (2014), this proved useful in refining previous search efforts. Lastly, article reference lists were reviewed for additional citations relevant to the topic.

Search Criteria

Literature search key words and MESH terms included bereavement risk, bereavement risk programs, bereavement risk assessment, bereavement risk + acute care, acute care and bereavement support, bereavement risk + management, bereavement risk + nursing, bereavement risk + hospital, and grief support.

Searching the term “grief support” yielded very broad results with approximately 1, 200,000 articles (using no limitations). Searching the terms “bereavement” and “treatment of bereavement” yielded over 5000 articles (using no limitations). Due to the broad nature of grief literature, searches were limited to publication years between 2000 and 2017, bereavement and palliative care, yielding approximately 2500 articles. All other categories searched returned between 16 and 240 results.

Article Selection

Criteria for inclusion in the literature review included: primary research, systematic review or scoping review specific to the topic of bereavement risk assessment or bereavement

support. Articles were excluded if not related to bereavement risk assessment, bereavement support, not pertaining to adults, outside the range of publication years, and not meeting the qualifications of primary research or scoping/systematic review. The selected articles were grouped by topic: bereavement support interventions, hospital focus (9), public health model/risk factors (12), health outcomes (4), acute care examples (3), supportive literature (18), and nursing implications (2). Major guidelines (5) pertaining to bereavement support and risk assessment were also reviewed for content expertise.

Results

Articles were organized by strength of evidence from strongest to weakest (Hall & Roussel, 2014). Articles were categorized and logged in to a matrix format, again from strongest to weakest (Garrard, 2014). Given the paucity of robust studies available on the topic of bereavement risk assessment in acute care, literature review results were found to be widely variable despite multiple search attempts. The stronger studies were critiqued for evidence that could contribute to practice changes, while the weaker studies and articles containing supportive information were analyzed for emerging themes, recommendations for further review, or other considerations.

Analysis and Synthesis of Literature Review

While the topic of grief is vast and has been published widely in the literature for decades, there is a lack of evidence-based guidelines to address potential health outcomes related to bereavement. Furthermore, there is little evidence to support the effectiveness of current interventions used for bereavement support. The literature does contain evidence to support the use of a structured tool to assess bereavement risks, although the majority of tools have been developed for research purposes or specific areas of need, then adapted to clinical use. The

public health model of bereavement support, with interventions matched to risk category, is recognized as a viable option to improve the consistency of care in the bereaved population.

Use of Risk Assessment Tools

The strongest evidence in the literature supported using bereavement risk instruments, and supported the public health model of bereavement support. To date, all available instruments have been examined and reported in two scoping reviews. Sealy, et al. (2015) performed a systematic scoping literature review to identify bereavement risk assessment measures used and to assess psychometric properties for feasibility of use in palliative care. Although 70 grief measures were identified, only 19 measures met acceptable psychometric properties (Sealy, et al., 2015). The authors noted a great deal of variability in measures due to unique variables related to palliative care. There was lack of consistency in reliability and validity of the acceptable measures.

Agnew, Manketlow, Taylor, and Jones (2009) performed a scoping review of available instruments for specialist palliative care use in the United Kingdom. They identified 73 instruments that were separated into two categories: point of patient's admission, and continuing through early bereavement. Reliability and validity of tools were examined closely. They reported ten measures with very good psychometric characteristics as used in hospice care. Of these ten measures, five tools were reported to have excellent psychometric properties for potential use in acute care. Even though five tools had excellent qualities, issues with over-predicting risk were noted.

Hudson, et al. (2010) performed a systematic review of instruments with similar results. They reported 14 of 62 instruments as meeting acceptable parameters. The majority of the instruments were not specific to palliative care. They found a lack of evidence-based strategies

and advocated targeting higher risk family caregivers for interventions. Interestingly, the authors noted many tools appeared to have been developed for specific research purposes rather than clinical use (Hudson, et al., 2010). There was evidence of support for using risk categories to stratify interventions. Furthermore, the authors introduced the concept of a “triage” type of tool as possibly the most effective means of assessing risk in acute care (p. 664). A triage tool for risk assessment has not been developed to date.

The Bereavement Risk Assessment tool (BRAT) was tested specifically based on results of case studies of actual patients and families in a hospice and palliative care program (Rose, Wainwright, Downing, & Esperance, 2011). It is designed to predict the risk for complicated grief after death based on assessments performed prior to death. The BRAT showed fair agreement in identification of levels of risk and greater consistency in identifying low and high-risk categories. The major difference in this study came from the conclusion that some combination of clinical judgment and use of a tool could be more effective than either alone.

Risk Factors/Potential Health Outcomes

There is moderate evidence linking health care outcomes to the bereavement period and refractory grief. For example, Ghesquiere, Park, Bogner, Greenburg, & Bruce (2014) conducted a randomized control trial (RCT) to determine if standard interventions for depressed patients (60 years or older) in primary care practices were as effective for bereaved versus non-bereaved patients. Outcomes of the study showed higher rates of response and remission of depression in bereaved older adults in the intervention group over the usual care group. In this study, depression was found to be a common adverse health outcome related to bereavement although small sample sizes were noted as a limiting factor. The researchers concluded that recent

bereavement should be an important consideration in the primary care of older adults (Ghesquiere, et al, 2014).

Buckley et al. (2010) investigated the impact of bereavement on cardiovascular risk by conducting a controlled cohort study (CARBER study). The researchers concluded cardiovascular risks increase for the acutely bereaved due to physiologic and psychological stressors and recommended heightened surveillance for cardiovascular symptoms during the acute bereavement period.

Buckley et al. (2015) followed the CARBER study with a controlled cohort study describing the relationships between the intensity of bereavement and the experience of death in the critical care area. The subjects of this study were bereaved spouses of participants in the CARBER study. As with the CARBER study, the authors confirmed findings that preparedness for death is one of the most important predictors of psychological adjustment and health outcomes in bereavement, although there was concern for bias.

Garrido and Prigerson (2013) conducted an uncontrolled cohort study to determine the best predictors of adverse psychological health outcomes among bereaved caregivers of cancer patients. Better mental health prior to the death of the patient, better patient quality of death, and completion of do-not-resuscitate orders were found to predict improved psychological health outcomes before and after the patient's death. The authors concluded that reducing caregiver distress, encouraging advanced care planning, and improving the patient's quality of death appeared to be promising interventions.

Effectiveness of Interventions

Although variability in the strength of evidence exists, there is additional literature contributing supportive documentation to the project despite limitations. For example, Thomas,

Hudson, Trauer, Remedios, & Clarke (2014) conducted a longitudinal study of caregivers of palliative care patients revealing a positive correlation between pre-death assessment and development of symptoms. The findings also showed a correlation between prolonged grief symptoms and poor health outcomes. Ling, et al. (2013) conducted a nursing centered study exploring depressive symptoms in family caregivers of cancer patients after the death of the patient. The authors reported depressive symptoms peaking at one month after death, and decreasing over the next 13 months. Health outcomes were influenced by the availability of social support, the age and health status of the caregiver, and the degree of caregiver burden prior to death. Lebus, Parker, Morrison, Fraser, & Fuld (2014) used a descriptive study to assess the impact of bereavement services in a large secondary institution in the United Kingdom. The authors reported that unresolved questions impacted grief, and that the quality of communication with families impacted the severity of grief reactions.

Aoun, et al. (2015) used a population based study to describe bereavement risk and support needs in an Australian community with a goal of testing the fit of the three-tiered public health model for bereavement support. They used a novel approach by inviting funeral directors as research partners in recruiting subjects. The study supported the ability to match appropriate interventions to the level of assessed risk.

Summary of Findings

The provision of bereavement support is recommended per palliative care guidelines. The topic of grief and bereavement support is complex and widely published. In contrast, there is a dearth of evidence about best practices in managing bereavement, and very little evidence about what interventions are needed or effective for immediate grief support in acute care. Furthermore, little evidence exists about the overall effectiveness of bereavement support

programs. However, there is evidence in the literature to support using the public health model of bereavement support. This model would appear to adapt well to the hospital setting. There is strong evidence to support early risk assessments and using a tool to assess risks. There is evidence of more rigorous testing to determine adequate psychometric properties of risk assessment tools, however these would need further testing in the acute care setting.

Emerging evidence addresses the topic of assessing bereavement risks and implementing formalized bereavement support services in acute care settings, particularly in intensive care units. Further research is needed regarding the efficacy and effectiveness of bereavement support interventions in meeting the needs of families and caregivers who experience the death of their patient in the hospital. Rather than adapting an existing tool, the development of a triage type of tool may be a better fit for assessing bereavement risks in acute care (Hudson, et.al, 2010).

Methods

The project was designed using a microsystems approach to quality improvement. (Nelson, Batalden, & Godfrey, 2009). The microsystem approach uses process mapping, quality measurement tools, and meeting plans to create lasting change (Senge, Kleiner, Roberts, Ross, & Smith, 1994). Using these tools allowed us to: 1) define goals, 2) fully understand the need for change, 3) examine and develop interfaces between the microsystem and sub microsystems (PC team and units), 3) identify barriers and limitations in advance to prevent the project from stalling, 4) identifying, measuring, analyzing, and reporting the appropriate data and 5) disseminating findings to others (Dartmouth Clinical Microsystems, 2015). In the initial phases of project planning a detailed process map (Appendix A) and project goals (Appendix B) were

developed. Next, an estimated project timelines and meeting plans were constructed (Appendix C).

Setting and Sample

The project setting included all adult inpatient units at TUKHS, with the exceptions of maternal/child units, pediatrics, psychiatric units, and the emergency department. The rationale for this strategy is explained by microsystem functioning. The hospital system has no dedicated PC unit; therefore the PC team travels to provide care wherever the patient is located. As discussed earlier (Figure 1), the PC team typically assists in managing EOL care for up to 20-30 patients per month. In contrast, if one unit were chosen, the sample size would be potentially limited. A single unit would not be as likely to experience as many deaths per month as the PC team, who travels to the location of the patient. Patients who die in the hospital without having received a PC consultation may also limit the sample size.

Those eligible for bereavement risk assessment included adult family members, caregivers, or significant others (family unit) of adult patients who die in the hospital. Adult patients who did not have family, significant others, or concerned others present in the hospital were not screened.

The closest family member or caregiver to the patient was assessed. They were offered standard grief support interventions currently consisting of support at the bedside, comfort cart, resource list, and a parking pass. In addition to the universal interventions, subjects scoring in the moderate risk category received information about community grief support groups. Subjects scoring in the high-risk category received information about community grief support groups plus recommendation to follow up with their health care provider within 2-4 weeks.

Selection of Tool

Over 70 bereavement risk assessment tools have been reported in the literature (Agnew, Manketlow, Taylor, & Jones, 2009; Sealy, Breen, O'Connor, & Aoun, 2015). These generally fall into two categories: 1) measures developed for specialist palliative care, and 2) measures used by bereavement services based on self-referrals (Agnew, Manketlow, Taylor, & Jones, 2009). The purpose of doing the risk assessment in the pre-death period is to identify risk factors that may predispose an individual to potentially develop a complicated pattern of grief. Assessing risks in the pre-death to acute post-death period helps differentiate grief responses typical of normal grief or of potentially complicated grief. In both scenarios, the goal is to direct people to the appropriate level of resources.

Agnew, Manketlow, Taylor, & Jones, (2009), performed a scoping review to identify risk assessment tools for use in bereavement services and hospice settings. After exclusions, fourteen tools were reviewed rigorously and found to have adequate psychometric properties (pages 6-9). Further examination revealed five tools with high marks for reliability, validity, and good content (p.11).

Sealey, Breen, O'Connor, & Aoun, (2015) published a scoping review of bereavement risk assessment measures specific to bereavement trajectories and feasibility of use in palliative care. Seventy grief measures were identified and evaluated. After exclusions, nineteen measures were reviewed (p. 579). The measures were categorized into three groups: 1) use with caregivers prior to death of patient, 2) use in the post-death period, and 3) use for assessing complicated grief (p. 579). Adequate psychometric data were reported for these nineteen measures.

Hudson, et al., (2010) conducted a systematic review classifying instruments into three main categories: those focused on the family carer and family functioning, instruments focused on satisfaction with service, and those were geared toward more general family issues.

Interestingly, the researchers noted that while most tools are administered by self-report there is value in the provider assessment as well, as the caregiver may not perceive their needs given the circumstances (Hudson, et al., 2010). Hence, further exploration of the person's experience and needs could be possible. The findings also showed a preponderance of lengthy tools and recommended further research to develop shorter tools, as multiple tools may be needed to assess needs over the span of bereavement (Hudson, et al., 2010).

Based on the literature review findings and the clinical setting for the project, additional criteria for the practical implementation of a tool were developed for screening and selection of a tool. Above all, it was felt that the risk assessment process should not add burden to grieving persons. To that end, we desired a tool that was shorter in length, and had adequate psychometric properties. The risk assessment would be completed by the health care professional versus using a survey or tool that required the family to complete. Our goal was to prevent any added burden for the stressed or grieving person. It was strongly preferred for the tool to have public access. Finally, the tool should score results in low, moderate, and high-risk categories consistent with the public health model of grief support. Extra consideration was also given if the tool had a theoretical background.

The following crosswalk was designed to compare and contrast risk assessment tools according to the above priorities (Figure 3). Risk assessment tools were limited to those suitable for use in the pre-death period.

Bereavement Risk Assessment Tool Crosswalk

Name of Tool	Author/Year	# Items	Provider Assessment? (Y/N)	Reliability/Validity Established? (Y/N)	Low, Mod. High-risk categories? (Y/N)	Public Access?	Theory Based? (Y/N)

Figure 3

Crosswalk Results

After completing the crosswalk, the Bereavement Risk Index (BRI) was selected for implementation in the hospital (Parkes, 2009). The BRI met the previously desired qualities: 1) containing fewer items, 2) assessment done by the professional, 3) scoring low-mod-high risk categories, 4) having public access, 5) theory based, and 6) some reporting of reliability and validity (Appendix D). The BRI consists of eight items with subcategories that are scored numerically. The total score for all items then indicates a low, moderate, or high-risk category. It requires minimal training to complete and is easy to use. While the eight-item version had marginal scores in reliability, a modified four-item version showed acceptable reliability scores (Kristjanson, Cousins, Smith, & Lewin, 2005). It appeared all previous tests had been conducted in hospice settings. The modified four-item version was not publically available at the time of implementation. While there were other tools with higher scores in reliability, they did not meet the crosswalk criteria or were not suitable for use in acute care based on clinical judgment.

It was decided to implement the full version as the best option for use in acute care and compare our results with the public health model (Appendix E). Once a process is in firmly in place, and issues have been resolved, we plan to transition to the modified four-item scale when available. More formal testing will be needed in the acute care environment.

Prior to implementation, an institutional review board application for exempt classification was completed. Approval was granted for exempt status from the Human Research Protection Program prior at TUKHS (Appendix F). Collected data was de-identified and stored on a secure drive. Data are reported in aggregate form to maintain confidentiality. All project records will be stored per institutional requirements.

Data Collection

As part of comprehensive patient care, the PC teams assist in managing the care of approximately 20-30 patients per month who die in the hospital (see figure 1). This population of PC patients was identified as the test population for implementation of the risk assessment tool. A data collection tool was developed for tracking completed risk assessments (Figure 4).

Gender (Pt)	Age (Pt)	LOS (Hospital)	Date PC consult/Date of death	Unit/ Major Dx	Person Closest to Pt	Assessed by: P/N/SW/C	Score	Risk Category: L-M-H

Figure 4

Findings

Bereavement risk assessments were completed for a sample size of 20 patients. The majority of the patients in the sample were men (65%) versus women (35%). The average age of the patient sample was 64.5 years, with a range of 22 to 90 years of age. The major diagnoses of patients in the sample were cancer related. The time from the initial PC consult until the patient's death ranged from 0-20 days, with an average of 5 days from consult until death (Appendix G)

Data related to the use of the tool was also examined (Figure 5). For the sample population, risk categories scored in the three categories as low risk (70%), moderate risk (25%), and high risk (5%). By comparison, the public health model predicts a 60-30-10 type of distribution.

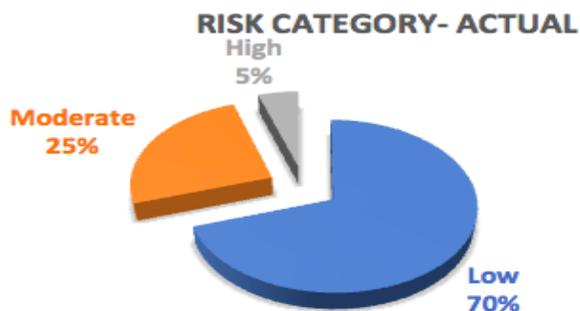


Figure 5

The APRN and/or SW completed the majority of the assessments. In reviewing scoring categories, the APRN and SW assessments consistently resulted in low or moderate risk scores. The number of risk assessments performed compared to the number of PC patients who died in the hospital showed a capture rate of about 40 %. Risk assessments were completed Monday-Friday when full teams were present (Appendix H).

While the sample size was smaller than anticipated, the BRI produced similar results to the public health model predictions in early use. Uptake of the tool was slower than initially expected, although improved after re-education, resolving documentation problems, and with the use of a pocket reference card. We also used the daily huddle to identify potential cases or barriers to completing the risk assessment. It was recognized that assessment might not be possible or appropriate in some cases, depending on the clinical judgment of the PC team. The sample size was insufficient for any statistical inferences about the efficacy of the tool. More data is needed, however early results show similarities with the public health model.

Barriers and Limitations

As a benefit of using the microsystems approach, potential barriers and limitations are identified prior to implementing system changes (Nelson, Batalden, & Godfrey 2007). Hence, interventions can be put in place to keep projects from stalling or falling off track. Despite identifying potential barriers prior to implementation, the project was delayed in two instances by unforeseen issues. These issues were able to be resolved as the project progressed and are summarized as follows.

Electronic Medical Record

The potential bereavement risk assessment tools in the crosswalk table were all paper tools. A “smart phrase” was created for the electronic medical record (EMR) for insertion into a note. Smart phrases can be created for many specific uses as templates for note writing, however the smart phrase structure may not contain HIPAA protected information per institutional requirements. The smart phrase contained instructions for use (not part of the record) and the scoring categories in a grid formation. A specific note type, Care Coordination, was used, to designate the risk assessment and facilitate searches for data collection. We consulted the EMR liaison for feedback prior to inserting the smart phrase. Since the definition of family can include many types of relationships and potentially large groups of people, it was decided to perform the assessment on the person closest to the patient and to identify only the relationship on the tool.

Upon Health and Information Management Systems (HIMS) review, it was recommended to remove the full grid and only include reference to the risk assessment tool, the total score, and recommendations. The concern regarding the full grid was that category attributes could be linked to possibly identify a person. The second issue centered on the process of documenting an assessment of a family member in the patient’s chart and is currently under review for other some other types of tools in the institution. These issues created a delay and required re-formatting the tool and re-educating staff on completing the assessment. Pocket cards were developed for easy access to the full scoring tool and instructions for completion/scoring the assessment templates. No further action was required from a HIMS standpoint once the full scoring grid was removed from the smart phrase.

Cost

Three cost centers were addressed for implementation: training, supplies, and educational material. Training costs were broken down into PC team costs (physicians, APRNs, SWs), and

costs for printing and mailing the bereavement follow up education sheets. Training costs for nursing unit inservices will be a future consideration, however were not addressed at this stage of implementation. Our training costs were lower than originally estimated, as the risk assessment tool chosen did not require significant upfront training to use.

Figure 6 shows a breakdown of training costs.

Practitioner	Cost/Hour	# Hours	# Employees	Estimated Total
APRN Development	\$45	2	1	\$90
APRN Teaching	\$45	2	1	\$90
APRN Learning	\$45	1	18 **	\$270
Totals	----	5	20	\$450

Figure 6

* No travel was required for initial training. ** Physicians (9) and Social Workers (3) included in APRN group.

A printed education series was developed by a previous social work intern to help family members understand what to expect over time in dealing with loss. This series was intended to provide follow up support and resources for family members. We planned to mail these to those scoring in low, moderate or high-risk categories at three, six, and nine-month intervals. Due to a lack of funding for printing, paper, and mailing costs, the bereavement follow up mailings are on hold. A pre-printed packet of resources is already in use to assist families during the acute grief period, including a parking pass and list of community resources. Formatting and printing costs for the education sheets has been estimated at approximately two thousand dollars, not including mailing costs and manpower to prepare envelopes and get packets mailed. The PC team is exploring other options as a substitute for traditional mailings, however logistical issues remain

to be worked out. The PC team social workers are continuing to develop a process for mailing and investigating funding sources for printing and supply costs.

Family Lost to Follow Up

Obtaining the correct addresses of a family member or designated contact has been a barrier in planning bereavement follow up. It is difficult for several reasons: 1) contact addresses are often absent or incorrect in the medical record, 2) the patient's address may be no longer valid after death, 3) it may be difficult for the family to cope with receiving mailings or other forms of contact, especially from the medical institution, 4) families tend to leave the hospital quickly once death occurs, and 5) some families or caregivers may not wish to be contacted.

Effectiveness of Bereavement Support Interventions

As summarized in the literature review, there is little evidence about the effectiveness of bereavement interventions in facilitating adaptation during the grieving process. Physical and psychological alterations are common in the bereavement period; however there are not clear guidelines for the effective use of grief support interventions. There is a paucity of evidence to indicate grief support interventions that are the most helpful in minimizing adverse health outcomes, especially in acute care settings. While using the public health model for bereavement support encourages providing interventions by risk category, it is difficult to determine the most effective approach (Aoun, Breen, O'Connor, & Bruce Rumbold, 2012).

As a result of this project, we identified opportunities to prioritize interventions per risk category and to provide recommendations for bereavement follow up. An example of scripting was developed, and a focused assessment example from crisis grief management was also introduced (Kirby, 2018). It is possible to develop and test a model of bereavement care for the hospital setting to include provisions for immediate safety and information needs, education

about basic health needs during grief, what to expect in the coming days/weeks, and in accessing community resources or a primary care provider, if needed.

Grief is recognized as a highly individual experience with numerous cultural, social, religious, and personal influences (Parkes & Prigerson, 2010). While most individuals manage this complex transition by using inner strengths, family and community supports, some individuals are at risk of developing lasting adverse health outcomes. In contrast, providing intensive bereavement services to all individuals is an ineffective use of resources, and in some cases may cause negative outcomes (Agnew, Manketlow, Taylor, & Jones, 2009). The literature reflects a great deal of variability about the types and effectiveness of bereavement support interventions. More research is needed to establish best practices for assessing bereavement needs in the acute care setting and identifying effective grief support interventions for the period after death in the hospital.

Conclusion

There are known gaps in palliative care policy and practice for the assessment of bereavement risk and in the provision of bereavement support in the hospital. The assessment of bereavement risks in the pre-death period and providing bereavement support in the post-death period are identified as preferred practices in palliative care. A literature search revealed a paucity of evidence for best practices in the care of individuals during the bereavement experience. The public health model of bereavement support appears to be a viable model in building bereavement support services in the acute care setting. The implementation of a bereavement risk assessment is a key step in improving care to the patient and family. While the level of evidence for bereavement support interventions in acute care is inconsistent, there is strong evidence to support using a bereavement risk assessment tool to assess risks for

complicated grief. A specific tool for use in acute care has not been developed to date. There appears to be good evidence regarding efforts to match appropriate interventions to the category of risk by using the public health model of bereavement support.

Structured bereavement risk assessment and supportive follow up care extends optimal care of the patient and family unit by addressing health promotion and disease prevention (National Consensus Project, 2013; Institute of Medicine, 2011). Furthermore, structured bereavement risk assessments and formalized bereavement support programs lessen the burdens of the negative aspects of care and enhance nurse/healthcare staff satisfaction while decreasing stressors contributing to compassion fatigue (Morris & Block, 2015). With the ability to provide bereavement follow up, or ensuring that families and caregivers are receiving support, nurses will also benefit from the opportunity to conclude relationships with patients and families in a healing and rewarding way (Morris & Block, 2015).

Palliative care teams and APRNs are well positioned for leadership roles in developing and testing models to improve the care of the bereaved population. Using a standardized approach to assessing risks early and providing structured recommendations for bereavement support improves the care of the patient and family by proactively identifying needs and by using resources effectively. While more research is needed to establish best practices for bereavement care, the implementation of a bereavement risk assessment is an important and necessary step in addressing the gap between policy and practice in hospital settings and a step towards formalizing bereavement support programs in the hospital setting.

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Appendix A

Process Map

The University of Kansas Health System

Microsystem – The Palliative Care Team

Purpose: to implement a bereavement risk assessment tool in a hospital setting

Patients who require OL care in hospital. Families receive support and resources in acute grief phase.



Family Assessment	Bereavement Risks	Acute Grief Support Interventions	Bereavement Follow Up
<ul style="list-style-type: none"> • Patient comfort • Family coping • Family stressors • Support systems 	<ul style="list-style-type: none"> • Pre-existing risk factors • Risk Assessment in hospital • SW referral 	<ul style="list-style-type: none"> • Comfort Cart • Parking Pass • Resource Lists • Assist with funeral or cremation questions 	<ul style="list-style-type: none"> • Condolence cards • Educational sheets "What to expect" • Referral to support group (moderate risk) • Referral to PCP (high risk)

Professionals:

- RN
- Palliative Care Team
- Unit Coordinator
- Physicians
- SW

Sub-microsystems

- Adult Inpatient Units
- Education Department
- Volunteer Department
- EMR Liaison

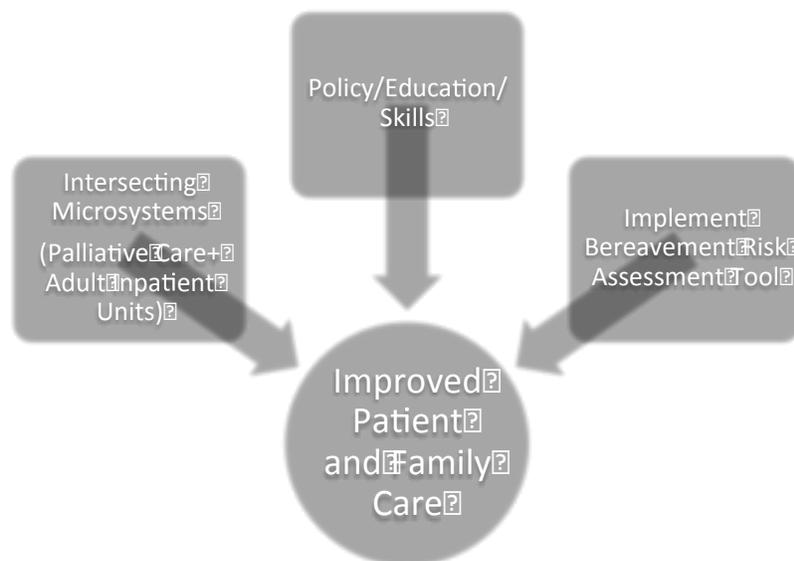
Patterns

- ✓ Policy
- ✓ EMR documentation
- ✓ Family satisfaction
- ✓ Staff satisfaction
- ✓ APRN/RN bereavement assessment competency

Dartmouth Clinical Microsystems (2015).

Appendix B

Project Goals

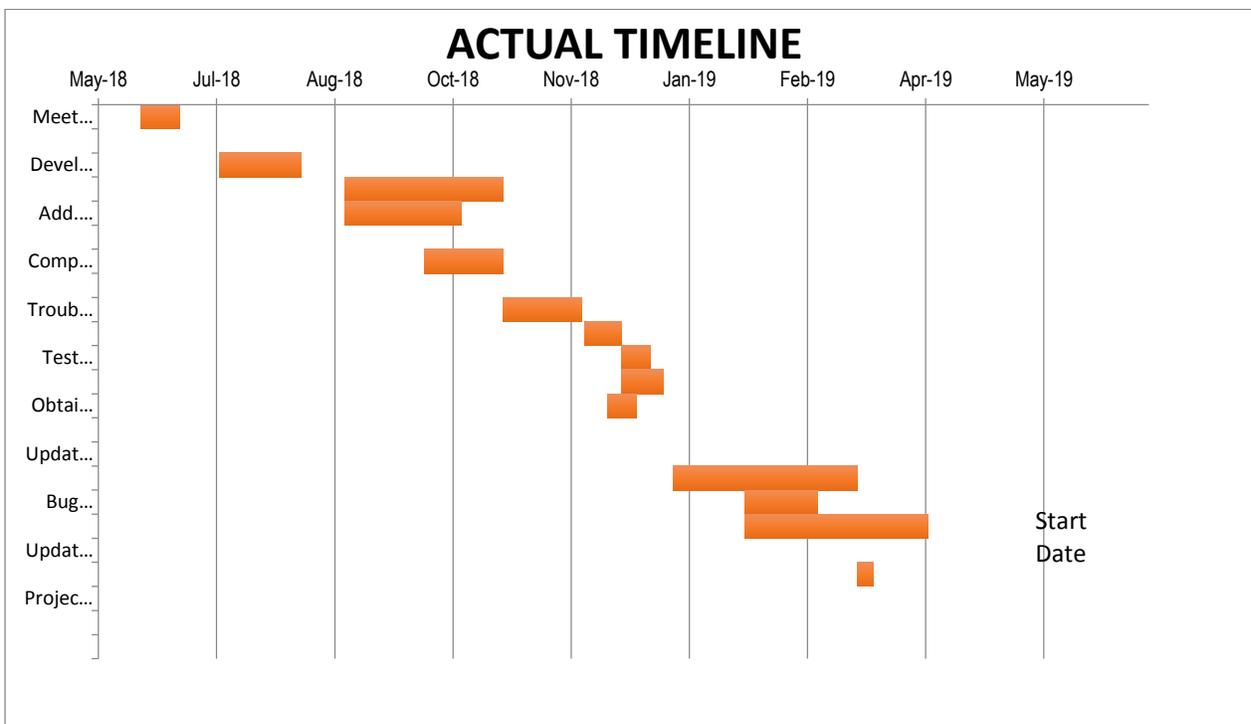
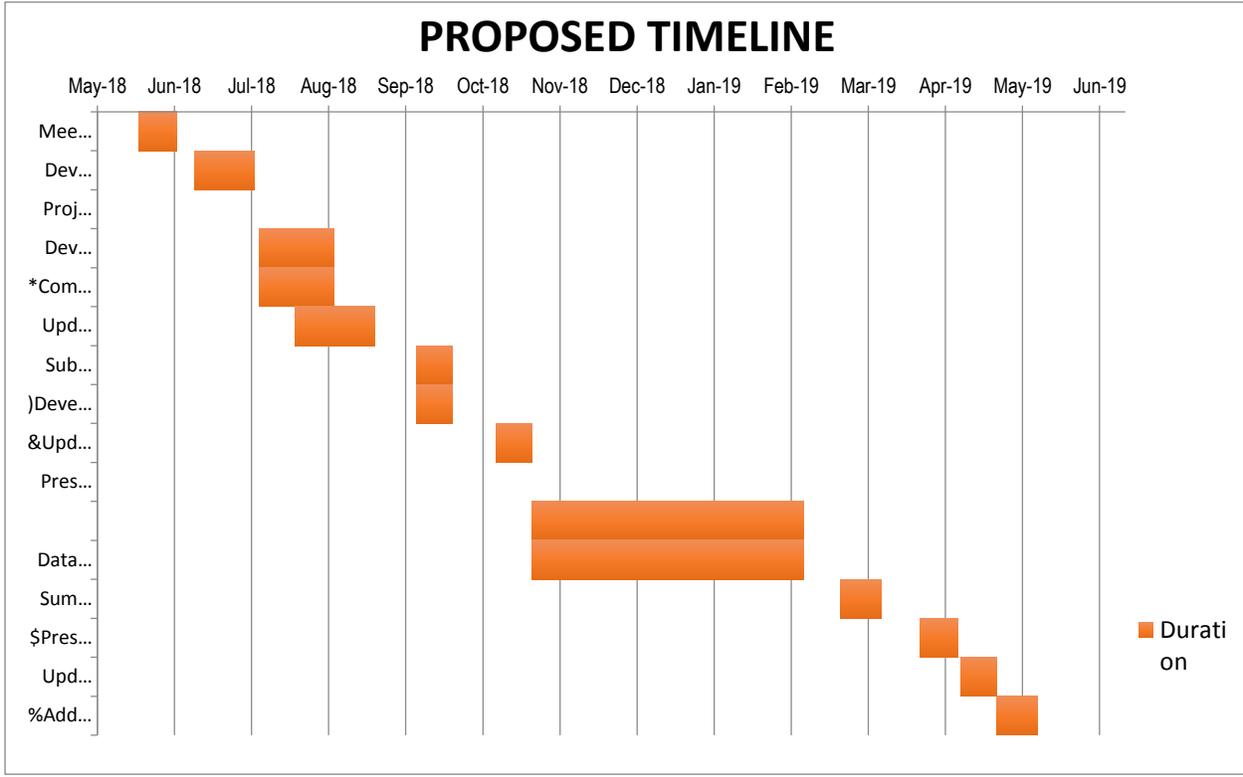


Our goal:

- 1) Create a process to identify families needing acute grief support
- 2) Implement bereavement risk assessment in test population
- 3) Provide grief support measures according to level of risk
- 4) Generalize findings to institution, as appropriate
- 5) Formalize bereavement support program

Dartmouth Clinical Microsystems (2015).

Appendix C



Appendix D

Bereavement Risk Assessment Tool Crosswalk*

Tool	Author/ Year	# Items	Provider Assessment Y/N	Reliability/ Validity Established Y/N	Score = Low, Mod. High-risk Y/N	Public Access Y/N/U	Theory Based Y/N/U
BRAT	Rose (as cited in Agnew, et al., 2009; Sealy, et al., 2015)	40	Y	Y	N	Y	U
MM-CGI	Marwit (as cited in Sealy, et al., 2015)	50	N	Y	N	Y	–
MM-CGI (Short version)	Marwit (as cited in Sealy, et al., 2015)	18	N	Y	N	Y	–
PG-12	Keely (as cited in Sealy, et al., 2015) Lai (as cited in Sealy, et al., 2015)	12	N	Y**	N	U	–
BRI (Revised)	Parkes (as cited in Agnew, et al., 2009; Hudson, et al., 2010; Sealy, et al., 2015)	8	Y	Y**	Y	Y	Y
CBSP	Worden (as cited in Sealy, et al., 2009)	20/23	Y/N	Y**	Y	N	Y
FRI	Moos (as cited in Agnew, et al., 2009; Hudson, et al., 2010)	12	N	Y**	N (rules out risk)	N	Y
MRRL	Relf (as cited in Agnew, et al., 2009)	15	Y	N	N	U	Y
RAB	Worden & Parkes (as cited in Agnew, et al., 2009)	11	Y (nursing)	N	N	Y	Y
AAG	Machin (as cited in Agnew, et al., 2009)	9	Y/N	Y	N	U	Y
CBI	Burnett (as cited in Agnew, et al., 2009)	17	N	Y**	N	U	Y
GEM	Jordan (as cited in Agnew, et al., 2009;	58	N	Y	N	U	N

	Sealy, et al., 2015)						
ITG	Prigerson (as cited in Hudson, et al., 2010; Sealy, et al., 2015)	30	N	Y	N	U	N
TRIG	Fasching-bauer (as cited in Hudson, et al., 2010; Sealy, et al., 2015)	21	N	Y	N	U	Y

*Pre-death measures of risk

** Cronbach's Alpha < 0.9

Appendix E
Bereavement Risk Index: Full version
 Parkes, CM. 2009. Permission to use obtained from author 12/21/17

A	Children under 14 at home	None One Two Three Four Five +	0 1 2 3 4 5
B	Occupation of principal wage earner (this may be the person deceased). Record if retired	Professional/executive Semi-professional Office/clerical Skilled manual Semi-skilled manual Unskilled manual	1 2 3 4 5 6
C	Anticipated employment of bereaved person	Works FT Works PT Retired Homemaker/home duties Unemployed	1 2 3 4 5
D	Clinging or pining (resistance to reality of patient's death)	Never Seldom Moderate Constant Constant Intense	1 2 3 4 5
E	Anger	None (or normal) Mild irritation Moderate (occasional outbursts) Severe (preoccupied with self blame) Extreme (major problem)	1 2 3 4 5
F	Self Reproach (self blame, guilt, feeling bad and/or responsible)	None Mild (vague and general) Moderate (some clear self reproach) Severe (pre-occupied with self blame) Extreme (major problem)	1 2 3 4 5
G	Current Relationships	Close intimate relationships Warm supportive family permitting expression of feeling Family supportive but at a distance Doubtful (unsure if family members are supportive/unsupportive) Unsupportive	1 2 3 4 5
H	How will person cope?	Well (normal grief and recovery without special help) Fair (probably get by w/o extra help) Doubtful (may need special help) Badly (requires special help) Very badly (requires urgent help)	1 2 3 4 5

Appendix F

The University of Kansas Medical Center

Human Research Protection Program

November 14, 2017

Project Title: Implementing a Benchmark Risk Assessment Tool in a Hospital Setting

Institutional Contacts: Marilyn Parker (DNP candidate)
Jill Zeltzer, PhD

Sponsoring Department: School of Nursing
Quality Improvement Determination

Thank you for your submission. The KUMC Human Research Protection Program (HRPP) has conducted a review of the above referenced project.

The current proposed project plan falls under one or more of the following quality improvement activities:

- Determine if a previously-implemented clinical practice improved the quality of patient care
- Evaluate or improve the local implementation of widely-accepted clinical or educational standards that have been proven effective at other locations
- Gather data on hospital or provider performance for clinical, practical or administrative uses
- Conduct a needs assessment to guide future changes in local health care delivery or to support other improvements at KUMC
- Perform an analysis to characterize our patient population/offerts to improve quality of services
- Implement programs to enhance professional development for providers and trainees
- Measure local efficiency, cost or satisfaction related to standard clinical practices
- Develop interventions or educational strategies that improve the utilization of recognized best practices
- Implement strategies to improve communication within our local healthcare environment
- Improve tools for patients that promote education, health literacy or treatment plan compliance

The BRB confirmed that the primary intent of this project was to evaluate implementation of this program at our local hospital. Any presentation or publication resulting from this project should explicitly state that it was undertaken as quality improvement.

At this time, IRB review is not required. If a quality improvement protocol is revised with the intent to answer a research question or produce knowledge that would be generalizable beyond the local setting, the HRPP will re-evaluate your project's regulatory status. More information about distinguishing quality improvement from research is available on the OIRP website at: <http://www.ihhs.gov/ohrp/policies/qaquality-improvement-activities/index.html>

Very truly yours,


Katon Blackwell, MS, CIP

Director, Human Research Protection Program

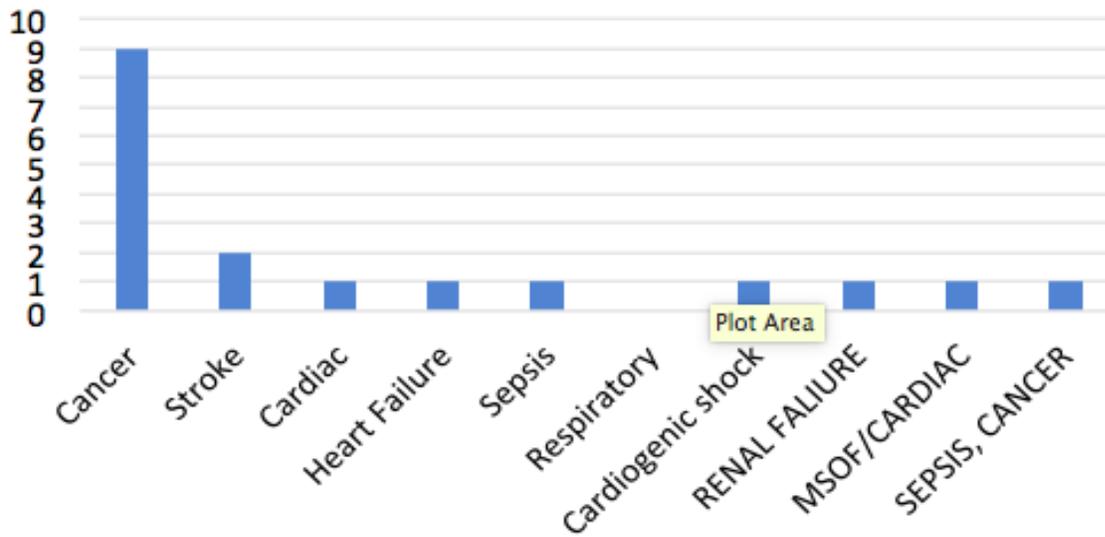
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Appendix G

Major Diagnosis



GENDER (PT)

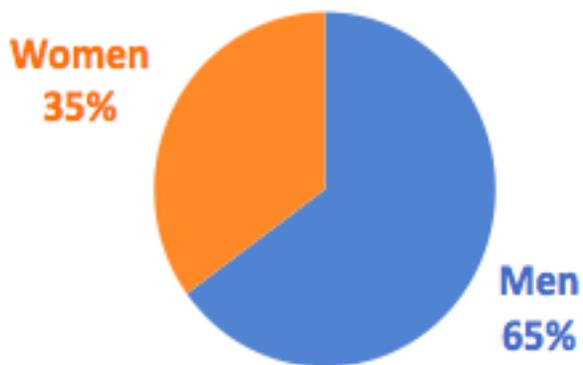
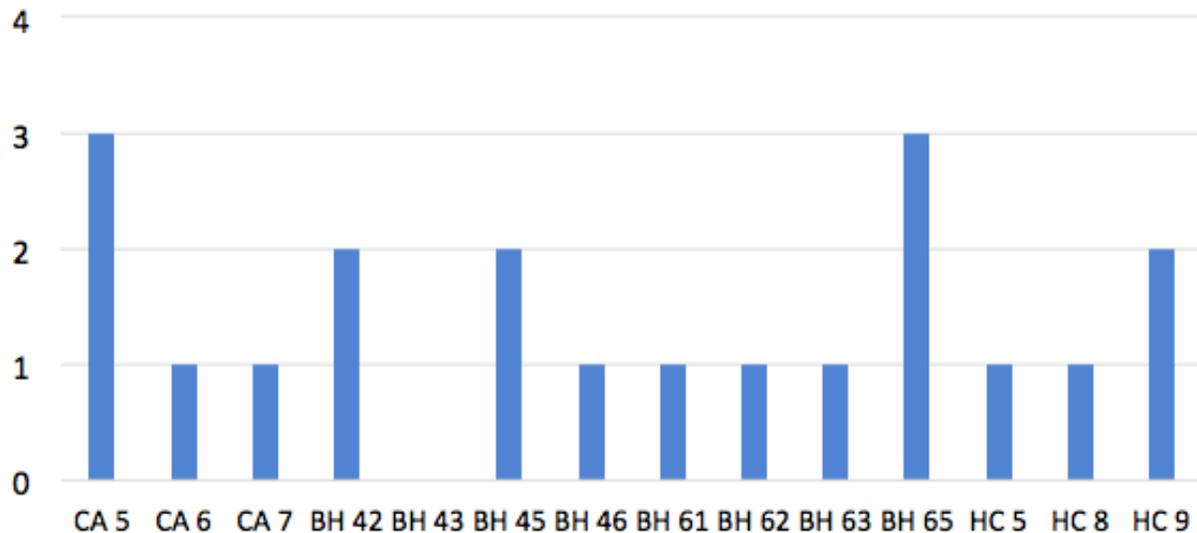
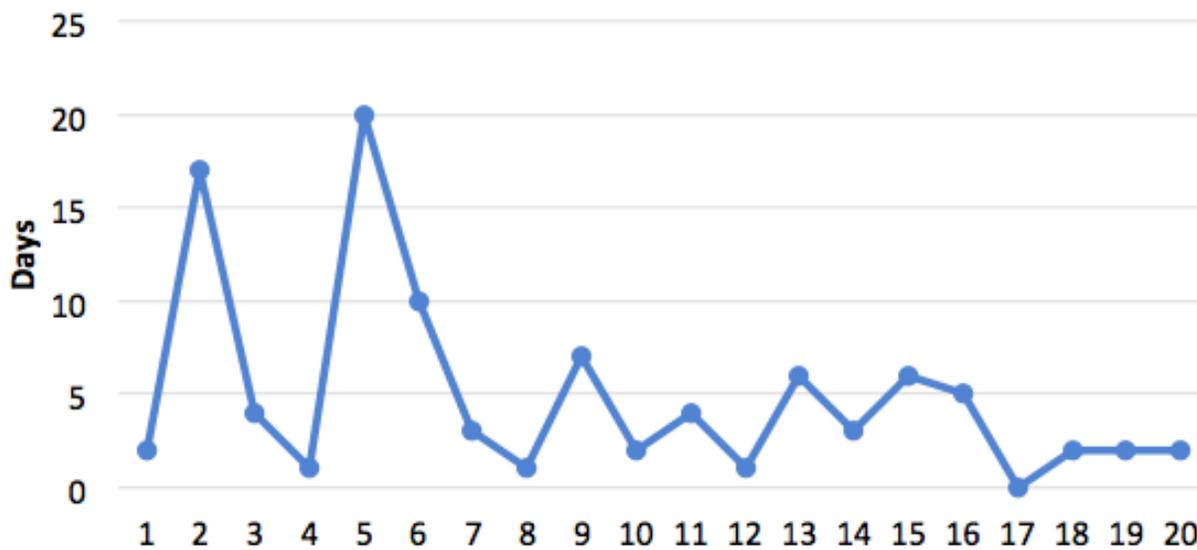


Chart Area

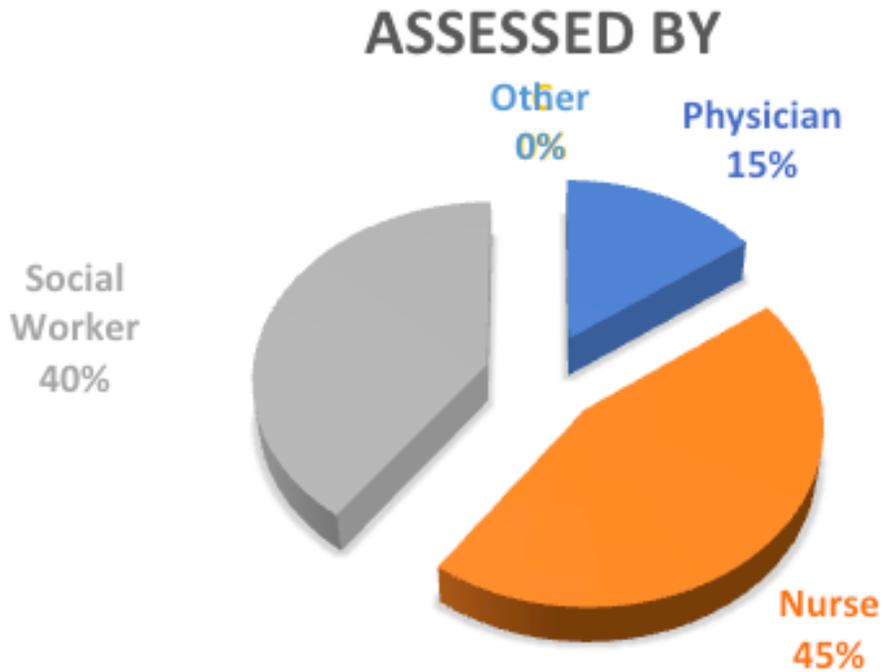
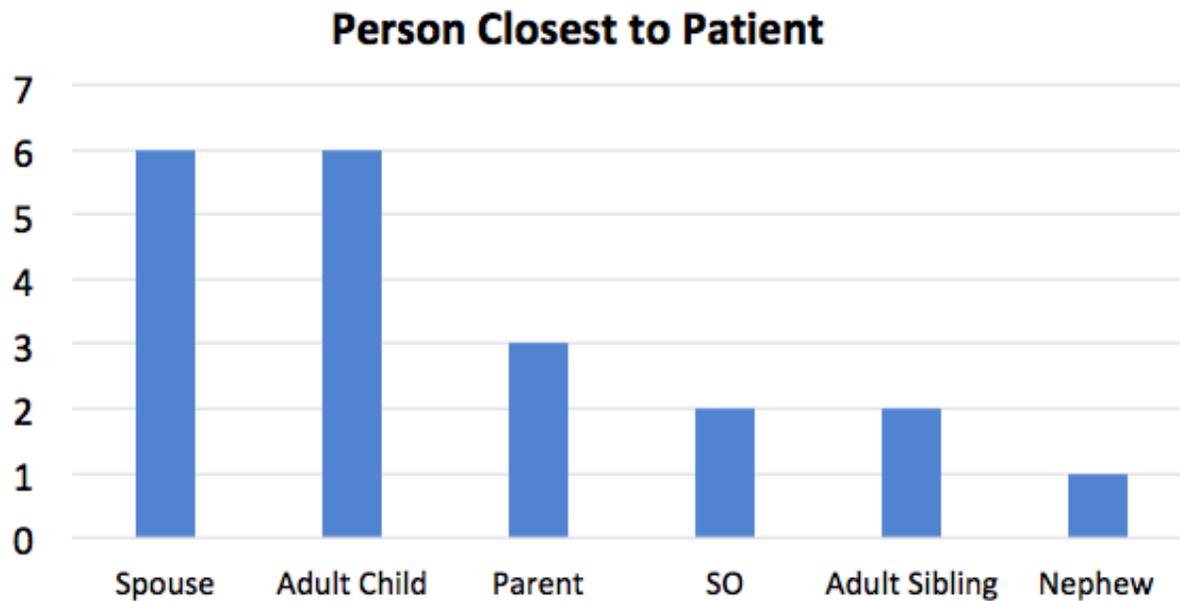
Location by Unit



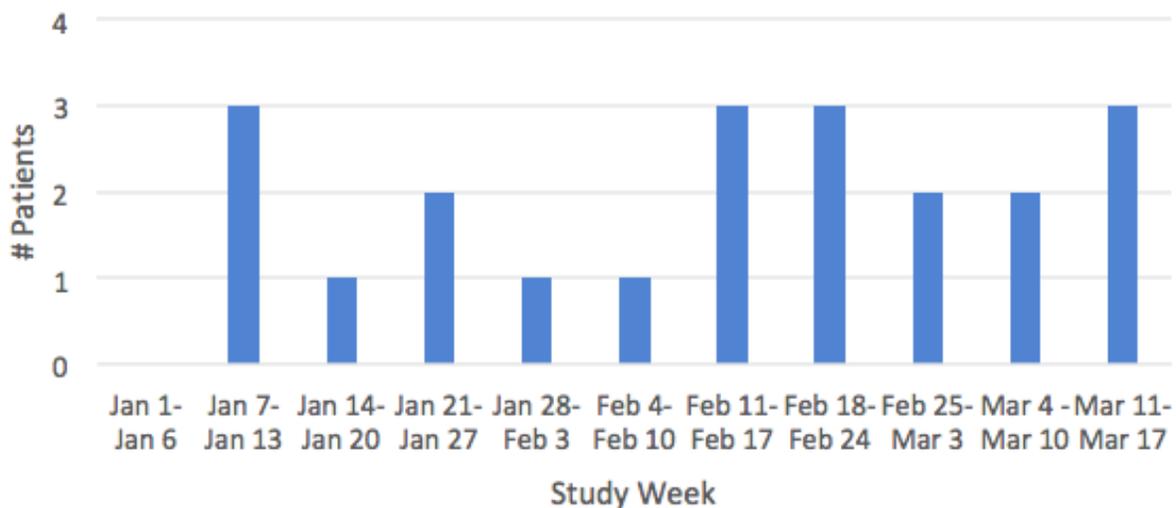
Time from PC Consult to Death (days)



Appendix H



Number of BRI Completed by Study Week



Tool Use and Number of PC Patients Who Died in Hospital (DIH) by Study Week

