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# Improving Pressure Ulcer Education

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Improving Pressure Ulcer Education
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#### **Abstract**

An educational gap exists at the point of care with regards to pressure ulcer prevention for hospice clients. Medical personnel provide oral instructions, but they do not provide sufficient tools for future reference. This project consists of improving pressure ulcer education at the point of care. The nursing staff consists of ten nurses who act as case managers. They are a big part of client care within the hospice setting, which can vary from home care or care in a designated facility. To improve the current practice of providing just oral instructions to patients, an educational tool was created to increase the clients' understanding about pressure ulcers. The tool's effectiveness will be measured through the use of a post survey. Using this survey will ensure that we obtain valuable feedback from the nurses. Thus far, 92% percent of the nursing staff found the tool to be very effective. The remaining 8% felt as though the tool should include more information. However, they all understand that a need exists to improve education at the point of care and that the tool is a step in the right direction. The next step is to implement the tool system wide.

#### Introduction

Through discussions with quality improvement personnel, we identified the need was identified to reduce the incidents of pressure ulcers for hospice clients. According to the Waters et al. (2014), each organization is responsible for reducing the incidents of healthcare acquired pressure sores. Prevention of healthcare acquired pressure ulcers is important because they are categorized as never events and have an impact on the client's quality of life. Never events are medical conditions that should never happen while in care of a medical team. Since pressure ulcers are never events, insurance companies will not reimburse healthcare providers for the treatment of pressure ulcer acquired during care.

Hospice providers are entrusted to help clients facilitate a peaceful death. If left untreated, pressure ulcers may develop into large painful wounds and further complicate the dying process. For hospice providers, dying is a time of family, friends, and closure of unsettled concerns. Improving prevention of pressure ulcers will further facilitate this goal.

The hospice clients benefit by eliminating out of pocket expenses for treatment of hospital acquired pressure ulcers. Improvement in education is an inexpensive way to prevent high cost medical treatment. The educational improvement will also help the organization meet one of its main goal for clients to be comfortable and treated with dignity on their last days. Most importantly, it will benefit clients because it will help reduce additional pain and suffering at the end of life.

#### **Problem Description**

An educational gap exists at the point of care with regards to pressure ulcer prevention.

Medical personnel provide verbal instructions, but they do not provide sufficient tools for future reference. For example, when clients are identified to be at risk, the staff will give verbal

education to clients and/or caregivers. In addition to this verbal education, the clients/caregivers are given a client handbook. Because the client handbook is supposed to consist of information on the most common complications and solutions, the bulk of the information in the client handbook is on breathing problems and pain management. The unfortunate consequence is that the material on preventing and treating pressure ulcers is insufficient, especially when evaluating the medical impacts.

#### **Literature Review**

During the research phase, I used the PICO strategy: (1) P: hospice clients; (2) I: educating and providing tools to prevent pressure ulcers; (3) C: educational perspective prior to tool implementation; and (4) O: reduce the incidents of pressure ulcers. With the use of this strategy, an upwards of four-hundred articles were generated. The use of key words, such as hospice, end-of-life, pressure ulcers, and elderly helped narrow down the search.

Pressure ulcers are not just an American healthcare problem, thus there are efforts to increase awareness worldwide. Blenman (2017) has identified that the incidents of pressure ulcers has increased in elderly care settings. The estimated figure worldwide is 4.1% to 32.2% (Blenman, 2017). This figure is astonishing because clients in these settings should benefit from the organizations' resources. Even though death is not a strictly elderly issue, they make up a substantial portion of our population in hospice.

A study conducted by Evans (2015) estimated that 20.4 million people worldwide require hospice care. Support during this delicate period is not always optimal. Caregivers are a key component to ensuring that clients have a good experience while on hospice. Caregivers may be hired help, family, or friends. According to Evans, clients benefit immensely from diligent

caregivers who remind clients to rotate or stand when possible (2015). This ensures that pressure is relieved from damaged areas and decreases the occurrence of pressure ulcers.

Pressure ulcers have an immense impact on overall healthcare costs. It is estimated that pressure ulcer treatment makes up \$11 billion of spending per year in worldwide. The average amount for each case is between \$500 and \$70,000, depending on type and grade (Blenman, 2017). This adds to the (already high) medical cost and, more importantly, to a client's suffering at the end of life.

A hospice stay varies from case to case. One may stay in hospice care for as little as a few hours to as long as six months. When dealing with pressure ulcers, the hospice goal is to prevent the incidents of wounds, manage symptoms, and try to heal the wound as much as possible (Langemo, 2015). The author identified that by decreasing incidents and improving quality of client wounds, we can help facilitate a more comfortable end of life experience. Even though clients are reaching the end of life, reduction of pressure ulcer and risk factors are important to manage their symptoms.

Loi identified that pressure ulcer prevention is complex and an ever-changing effort (2017). The interventions that may be appropriate for a particular client may not be ideal for the next. Effective risk prevention requires staff communication and an evaluation of current situations. Language and educational barriers must also be considered, when providing education. Education has been found to be one of the most important tools for preventing pressure ulcers. And while there is a benefit behind providing education at the initial consult, reenforcement is equally important (Reece, 2017). Providing education is a long-term commitment and should be provided at each encounter with the client. Education should be provided verbally and written to ensure positive results.

Lastly, according to Graves and Sun, when wound principles are provided early in care, they are more efficient in improving client comfort (2013). As hospice providers, our ultimate goal is to improve comfort and facilitate a peaceful death. Improving our care around pressure ulcers is a crucial intervention.

#### **Rationale**

Pressure ulcer prevention is a big issue at the end of life, and it pushed me to improve our current standards. Written materials are equally as important as all other forms of teaching. End of life is a stressful time for all family members and the stress may impede their ability to recall important information. The PDSA Cycle was used to improving pressure ulcer education. The PDSA Cycle provided a guide for implementing a project of this sort and is explained in detail in Appendix A.

# **Specific Project Aim**

The aim of the project is to provide an educational tool regarding prevention of pressure ulcers at the point of care to patients, caregivers, and family members, and at the same time, reduce the incidents of healthcare acquired pressure ulcers (see Appendix B).

#### **Methods**

## Context

My hospice clinical setting is composed of three sub-groups, including Oakland,
Sunnyvale, and San Francisco. I am part of the Oakland office and in this office we have ten
clients with pressure ulcers. When combined with the other two sub-groups, there are forty-eight
cases of pressure ulcers. Clients' setting changes with each patient. Some hospice clients choose
to go through the dying process at home and others are in nursing facilities. Teams of nurses are
in charge of providing client care and, depending on client condition, a nurse may visit once

every two weeks. Some client's may benefit from support, but others may go through the dying process alone. The dynamic behind the setting is complex and care requires adjusting to each client.

Pressure ulcers are a big problem in health care because they lead to an increase in healthcare costs. According to the Agency for Healthcare Research and Quality, the cost for treatment of pressure ulcers varies from \$20,900 to \$151,700 per hospital stay (2014). Because individuals who are in hospice facilities often suffer from malnourishment, under hydration, limited mobility, and compromised immune systems, this population is especially susceptible to developing pressure ulcers (see Appendices C and D, for Root Cause Analysis, and SWOT Analysis, respectively).

Estimating the cost of pressure ulcer treatment is difficult to determine because each case is different. However, if we approximate that each client's treatment for pressure ulcers will cost \$43,000, we may benefit significantly from increased education. In contrast, the business plan proposed only requires us to spend money on printing materials and training for nurses. The total cost would be around \$2,000, so if only one pressure ulcer is prevented from occurring, savings would be \$41,000. This savings would directly affect the hospice organization because they are paying this cost out of pocket, as it is not covered by medical insurance.

#### Intervention

The need for this plan was developed through multiple meetings with quality improvement personnel. During these meetings, we evaluated the current improvement plans in place and ensured that our time was spent in an area of dire need. An EPIC electronic patient computer report data analysis was launched to obtain pressure ulcer statistics. Currently, there are ten pressure ulcer cases in the East Bay office and forty-nine cases when combined with the other

two areas, San Francisco and Sunnyvale. The data showed that the San Francisco area accounts for more pressure ulcer incidents than East Bay and Sunnyvale.

An evaluation of the current education material turned up only two small paragraphs in the client handbook. Additionally, 65% of the staff was unaware of the existing material. This demonstrated that the staff is relying on verbal instructions and not using the small amount of available resources. The problem with verbal instructions is that patients and family members may forget key components. Therefore, education is more successful when medical personnel combine verbal instructions, demonstrations, and written information.

The tool is a flyer with written and visual information (see Appendix E). It consists of three paragraphs explaining what a pressure ulcer is, the risk factors associated with pressure ulcers, and the ways to improve the condition. The initial phase will be conducted at the East Bay office. The tool will be presented to nurses and managers so they could offer suggestions and feedback. Once the tool is approved, it will be provided to nursing case managers. They will provide the tool to clients at risk of developing pressure ulcers and those who have already developed them.

The tool is meant to improve the teaching efforts of case managers. It is not meant to replace verbal instructions. Case managers are expected to provide instructions through verbal instruction, written materials, and through demonstrations. The tool will be provided to clients and caregivers to ensure they can reference information once the case manager is gone. In addition, I will personally go out with the case managers and provide client education. Lastly, if there is evidence of a benefit, the measure will be implemented system wide.

#### **Study of the Intervention**

The effectiveness of the tool will be evaluated by using a post implementation survey (see Appendix F). The aim behind the survey is to evaluate the effectiveness of the educational

material. The goal is to prove that the tool is beneficial to educating at the point of care and reducing the incidents of pressure ulcers. The education will be provided in a flyer with paragraphs accompanied with a visual aid. For example, there is a paragraph about pressure point and two small pictures next to the paragraph illustrating the common pressure points. The next paragraph expresses the importance of barrier creams to maintain skin integrity. Next to that paragraph, there are two pictures of the actual products we provide. This will ensure that clients use the appropriate product and improve outcome.

#### Measures

After the tool was introduced the nursing staff, they had a chance to review the tool and complete an evaluation survey. The data was grouped into two categories, those who found the tool to be beneficial as is and those who felt the tool needed more information. In addition, the tool asked for suggestions for areas of improvement.

#### **Results**

The staff responded positively to the tool and considered it to be a contributing educational tool. The survey results revealed that 92% of nurses agreed that the tool is beneficial to improving client care. In contrast, 8% of the nurses felt that the tool needed additional information to capture other areas of risk prevention. For example, some nurses felt that the tool should include a section regarding adult briefs and others felt it should include a section on the importance of nutrition.

The vast majority of the nurses expressed positive reactions to the tool. For instance, in the section of the survey that encouraged feedback, one nurse wrote the following: "the tool did a great job at capturing the importance of pressure ulcer prevention and combining it with products the organization has at hand." Another nurse noted that, "the tool is important because end of life

can be a stressful time, and [the] client or family may not be completely present when we provide verbal education."

The nurses' feedback indicated that the educational tool would have a positive impact on the organization, staff, and clients. First, the organization will be able to decrease some of the out-of-pocket expenses associated with pressure ulcer care. As a result, it could allocate those savings to obtaining resources for other areas of need. Second, the tool will be useful to staff because it will reinforce the verbal education they provide to their clients. Having this tool will allow the nurses to verbally educate their clients on pressure ulcers *and* provide them with a written document that the clients can use to refresh their memories. Using both verbal and written education may lead to a decrease in pressure ulcer cases and an improvement in the overall treatment of pressure ulcers. Finally, clients will benefit because they will likely experience an increase in comfort during the dying process, ultimately ensuring that their last moments of life are of the highest quality. All aspect of nursing care will benefit through the system-wide implementation of the tool.

#### **Discussion**

#### **Summary**

The tool revealed that many nurses were aware that a gap in education existed but did not feel as though they were in a position to create change through increased education. Instead, the general understand among the nurses was that they had to allow the quality improvement department to do their job. The specific aim statement identified the need to improve education on pressure ulcers and survey results of the tool demonstrated accomplishment of this goal.

A lesson learned is that improving the quality of care does not have to be a costly. For example, the materials used to create and implement the tool are readily available in any office

or healthcare organization. Also, it was learned that a person can obtain vital information regarding areas of concern by merely taking the time to sit and talk to the nurses and staff.

During interprofessional meetings, discussion ensued regarding topics and issues of what was working and what was not. This demonstrated that a good relationship between the field nurses and the quality improvement department is imperative. Because field nurses are dealing with client issues on a daily basis, they are in a better position to spot the first warning signs of any risks to the client population.

A contributing factor to the success of the tool was the overall acceptance and support by the microsystems nurses. They made themselves readily available to me, always willing to talk about my project, and to provide valuable feedback at each step of the process. This was important because my vision was to create a tool that would help the nurses improve care and, in order to do so, I needed their input.

#### **Conclusions**

In conclusion, the tool will be successful at reducing the incidences, treatment, and cost of pressure ulcers. The tool is ready for implementation in all three division of the organization and is useful in both hospice and home health. However, the sustainability of the tool largely depends on how often the field nurses use the tool and on whether the managing nurses make it part of the nursing process. With successful implementation, client care will be improved. Therefore, my recommendation is for the organization to implement the tool system-wide and to make it a part of new hire education. The tool is cost effective and, most importantly, useful for improving quality of life.

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#### Appendix A

#### **PDSA Cycle**

<u>BACKGROUND:</u> After speaking with some staff members within my hospice care clinical setting, I identified that a gap in pressure ulcer education existed. Addressing this gap was important because proper education has the ability to help decrease clients' pain and suffering at end of life.

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#### PLAN:

# **Aim/Objective Statement**

My objective is to improve pressure ulcer education among hospice clients and caregivers.

**Predictions/Hypotheses** I believe that my project will improve the pressure ulcer education process and, as a result, improve the care hospice clients receive.

#### Plan for change/test/intervention

Who (target population): Hospice clients and caregivers

What (change/test): Improving education When (dates of test): 2/01/2018 - 4/01/2018 Where (location): Hospice organization East Bay

How (description of plan): By implementing an easy-to-understand pressure ulcer tool.

#### **Measures**

To gage whether I have reached my aim and goal, I will give the field nurses a survey after introducing them to the tool. The survey will ask the nurses for their opinions regarding the effectiveness of the tool and for any feedback on ways to improve the tool.

#### Plan for <u>data collection</u>

Who (will collect): Nursing Student will collect the data

What (measures): Nurses' opinions of the tool When (time period): 4/02/2018 – 4/28/2018 Where (location): Hospice organization East Bay

How (method): Conducting surveys during in-person meetings with the nurses

**DO:** Carry out the change/test. Collect data.

For approximately three weeks, I met with nurses on an individual basis. During these meetings, I explained to the nurses that I had identified a gap in the written, educational materials available to the nurses and then presented them with the tool I created. While the nurses reviewed the material, I explained what I hoped to accomplish through the tool. At that point, I stepped away so the nurses could fill out the survey.

**STUDY:** Summarize and Analyze data (quantitative and qualitative).

The data I collected revealed that 92% of nursing staff believed the educational tool would improve the current pressure ulcer education. The other 8% believed that the tool required additional information in order to completely capture the importance of pressure ulcers.

\_\_\_\_\_\_

**ACT:** Document/summarize what was learned.

I do believe that I met my aims and goals. From my analysis of the data, I am confident that the tool will be valuable for improving client/caregiver education.

Define next steps. Now that I have tested the tool on a small scale and received positive feedback, my clinical setting should implement the educational tool in all three sections of the hospice organization: East Bay, South Bay, and San Francisco.

#### Appendix B

#### **Statement of Determination**

**Title of Project:** Improving pressure ulcer education

# **Brief Description of Project**

My project is going to consist of improving education of clients with risk of pressure ulcers. I plan to review the existing process and provide resources to improve assessment.

## Data that Shows the Need for the Project

According to the Medicare data, there is a need for the hospice field to address pressure ulcers. Pressure ulcer prevention has become an important concept because any ulcer obtained during our care does not qualify for reimbursement. Any treatment related to hospital-acquired pressure ulcers fall under the organizations responsibility.

#### **Aim Statement**

I plan to improve the process of pressure ulcer education. I will evaluate the current measures adopted by my clinical setting and research literature regarding current evidence-based measures.

#### **Description of Intervention(s)**

Create and implement a client friendly pressure ulcer educational tool.

#### **Desired Change in Practice**

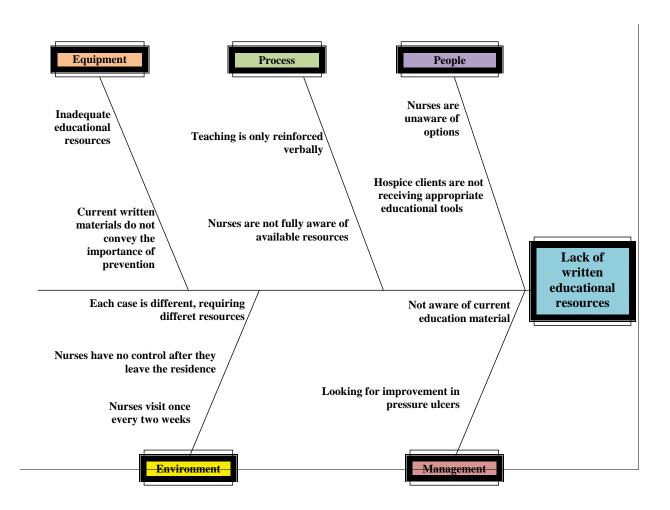
My desired change is to improve the pressure ulcer risk prevention process. If my clinical setting adopts my measure, I will consider the plan a success.

### **Outcome measurement(s)**

The outcome will be measured by comparing data from my project to that of previous years. Lastly, I plan to survey staff and clients to obtain valuable feedback on the benefits of my measure.

# Appendix C

## **ROOT CAUSE ANALYSIS**



# Appendix D

# **Swot Analysis**

Strengths

Data available
in number of
pressure ulcers

Weaknesses
49 clients with
pressure ulcers.
No current
prevention tool

Threats
Acceptance and
usability by
nursing staff

Opportunities
Improve
education and
quality of life

#### Appendix E

#### **Educational Tool**

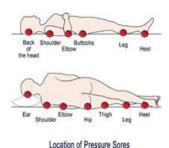
#### **Pressure Ulcers**

A pressure ulcer is an area of damage to the skin. In the early stages, pressure ulcers appear as a red spot superficially on the skin. If left untreated, however, it may develop into a bigger wound, with the potential to reach bones and tendons. A contributing factor to the development of pressure ulcers is remaining in the same position for an extended period of time while in a bed or chair. The ulcers develop when the skin is no longer able to withstand the continued pressure against the bone.

One of the best preventative measures is to rotate a client's position every two to four hours. The idea is to relieve pressure from bony areas of the body and to give the skin a break from constant pressure. Pillows may be used to prop up a client and relieve discomfort from pressure points. Draw-sheets can also help reposition a patient. The picture on the right demonstrates common areas where a patient may develop pressure sores.

Barrier creams are products you can apply to help protect the skin when a patient is incontinent. Skin begins to breakdown when it is in constant contact with feces and/or urine. As the name implies, barrier creams create a barrier between the skin and waste products, thus protecting the skin from damage.

If you suspect a pressure ulcer is developing, please contact the client's (organization) nurse as soon as possible. Tel: (\*\*\*) \*\*\*-\*\*\*







# Appendix F

# Survey

# Pressure Ulcer Tool Survey

1.	The information presented in the pressure ulcer tool is easy to understand and follow.				
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
2.	The tool reinforces the importance of pressure ulcers.				
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
3.	The tool may be a valuable at the point of care.				
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
	Suggestions				
1.	Do you have any suggestion of areas of improvement?				