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Pain Evaluation In Patients with Dementia at Saint Benedict's Senior Community

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### **Abstract**

This project addressed the increased rate of pain levels in a long term care facility in St. Cloud Minnesota. The facility was ranked in the 98th percentile for pain when comparing this site to all other long term care facilities in Minnesota. The facility had implemented a new pain assessment guide within the last five years and had education sessions with staff, yet residents were still ranking their pain high on the 0-10 pain scale. Our project was focusing on a specific group of patients in long term care which include dementia patients. A survey was conducted that asked a variety of questions in regard to their current pain scale and presented new questions that the newest literature found effective when assessing pain levels in dementia patients who are not able to communicate to staff themselves. An education brochure was handed out to RN's and LPN's who conduct pain assessments in this facility. The first brochure included a new type of pain scale- The Abbey Pain Scale and a new advancement of technology is called the Point-of-Care Technology (ePAT). A second brochure was handed out in regard to general information about dementia patients that included behaviors associated with pain and nurses perception on pain assessments with dementia patients. A second survey was conducted to assess the knowledge gained by nurses from this new study of pain scales in comparison to the one this facility is using now. The goal of this project will be to educate nurses in long term care about the more recent research and literature in regard to the advancement and effectiveness of new pain scales and technology for dementia patients.

*Keywords:* pain, dementia, assessments, PAINAD, Abbey Pain Scale

**Focus: Problem Identified and Rational**

Pain is a subjective assessment and is therefore difficult to assess in patients diagnosed with dementia. These patients often have a challenging time accurately expressing their pain level. It is also known that people with dementia face higher pain levels due to common comorbidities and underlying neurological and pathological pain. For this reason, it is important for nursing staff to have a reliable tool to help them assess pain for residents with dementia. Currently, The Saint Benedict's Senior Community is using the PAINAD scale to assess the pain of residents with dementia. After a thorough literature review it was found that the PAINAD is still commonly used, however; there is a lack of research that shows this should be the primary assessment tool when it comes to residents with dementia. After looking into the current pain scale at SCBC, we found that the "Pain Audit Policy" had not been reviewed/revised since December of 2006. In regard to the current policy, they have set a procedure in which they follow when to have a pain audit. A comprehensive pain audit will be initiated when; on admission, "return from hospital stay", onset of new pain, change in pain medication dosage, significant change in condition, PRN, and quarterly. When it comes to assessing patients with dementia, they have a specific step in their procedure which reads, "Residents who are non-verbal, non-communicative, or severely demented are evaluated with the "Pain Audit in Advanced Dementia (PAINAD) Scale" Form. When gathering this information, we began a literature search to find the effectiveness of this specific scale and to look at other pain scales for residents with dementia. After multiple literature reviews, it was found that The Abbey Pain Scale was a modern and advanced version of the pain scale compared to the current pain audit used by The Saint Benedict Senior Community. For this reason, it was decided that education

about the the Abbey Pain scale would be implemented in order to increase accuracy when assessing the pain of residents with dementia.

**Focus: Pain and the Impact on the Residents**

Pain has been a problem at the St. Benedict Community Center for many years. There has been different programs and implementations that have been done within the nursing staff to try and decrease pain levels, however; they still remain high. St. Benedict's Senior Community ranked in the 98th percentile for pain in a national ranking. When we broke down the two types of residents within SBSC, short-term residents and long-term residents, we compared the pain levels of both of them in comparison to the state and national averages. In the short stay unit, the SBSC percentage of residents who report moderate to severe pain was 27.6%, while Minnesota's average was 19.5% and the national average was 12.6%. In this case, based on the quality measures, the lower number of a percentage is better. When you compare SBSC short stay residents to the rest of the nursing homes in the state they are 8.1% higher and 15% higher than the nation. Within the long-stay unit at St. Benedict's Senior Community, the amount of residents who reported moderate to severe pain was 15.9%. Minnesota's average for long term stay residents was 9.7% and the national average was 5.8%. Comparing the long-term stay residents to the rest of the nursing homes in Minnesota, SBSC long term residents ranked 6.2% higher and 10.1% higher than the nation (Medicare, n.d.). On both units, St. Benedict's Senior Community was ranked higher than both the state average and the national average. This is another reason why we wanted to look into pain at this specific facility. There are residents on both units that suffer from dementia, therefore; we could not exclude one or pick one or the other. Within our data, we separated them out and did comparisons between the two as well as combine data for a whole overlook at the facility.

Pain is often a chronic condition experienced by most nursing home residents. In a study done by Chang, David Britten, and Vries it was found that 80% of nursing home residents live with chronic pain, and 52% of these residents have a diagnosis of dementia. (Chang, p.1, 2018). Considering these statistics, it can be said that pain is one of the most universally experienced diagnoses among nursing home residents. For this reason, educating about a newer and more effective pain assessment scale at Saint Benedict's Senior Community will be the most impactful quality improvement project. Pain not only impacts the resident's comfort level, but it also impacts their day to day life. Pain can cause a decrease in range of motion and appetite, increase in depression or anxiety, and an overall change in vital signs. Therefore decreasing the residents' quality of life by limiting their independence (Dogan, 2018, p. 953). These impacts can have lasting effects on residents well-being.

The impact this project will have on the residents will be a more comprehensive assessment of pain. The information that we teach the nursing staff about newer ways to assess pain can then be used to create a more insightful care plan and pain treatment plan for each individual resident. Thus, in the future, this would hopefully decrease the level of pain experienced by residents daily and allow them to be more independent and active in their cares, as well as their daily experiences.

### **Focus: Other Potential Areas for Quality Improvement**

There were various areas in need of quality improvement that we identified at Saint Benedict's Senior Community. Some of these areas included fall prevention, pressure ulcer prevention, limiting polypharmacy, staffing, limiting urinary tract infections (including CAUTI's), and skin assessments. These areas were identified through data review of the residents at Saint Benedict's Senior Community.

After reviewing data in regard to pain audits done per the pain policy, it was determined that Saint Benedict's Senior Community had an overwhelming problem of pain. As mentioned above, SBSC was in the 98th percentile for their ability to control resident pain when compared to state and national averages. This was a low ranking for the facility and this is what made us become more invested in the pain quality improvement.

The impact and prevalence of the possible problems for the residents was the main factor in deciding which quality improvement project to focus on. Pain and dementia are both common diagnoses of nursing home residents and both can greatly impact a person's quality of life, therefore; gaining a greater understanding of the pain experienced by residents with dementia will help to improve how to accurately assess pain and in turn, treat the pain, will result in a better quality of life for each resident that experiences pain.

Along with identifying data and the impact of residents, we also looked into the nurses perceptions of potential problems. This was taken into consideration when determining the most needed quality improvement project at Saint Benedict's Senior Community because they work in this environment everyday, and if they do not anticipate the need for a change, then it will be more difficult to create buy-in for a successful quality improvement project. After considering Saint Benedict's Senior Community low state and national averages, the negative impact that pain has on a majority of the residents, and the staff's perception of the problem, it was concluded that the most needed quality improvement project at Saint Benedict's Senior Community was the education of a new reliable pain scale for residents with dementia which is the Abbey Pain Scale.

#### **Analysis: Statistics on Pain at SBSC**

According to Medicare Nursing Home Profiles, St. Benedict Senior Community falls short when it comes to controlling pain. When breaking down residents into short-stay residents and long-term residents, both were far behind Minnesota's and the nation's averages. For example, in the short term stay at SBSC the residents here compared to the rest of the nursing homes in Minnesota were 8.1% higher on moderate to severe pain and 15% higher in comparison to the rest of the nation. Within long term stay, residents at SBSC were ranking their moderate to severe pain levels 6.2% higher than Minnesota's average and 10.1% higher than the nation. Comparing the long-term stay residents to the rest of the nursing homes in Minnesota, SBSC long term residents ranked 6.2% higher and 10.1% higher than the nation. The baseline for both of these units were much higher than what they should be ranking in regard to pain on both short and long term stays.

When looking at the overall pain ranking for St. Benedict Senior Community, they were ranked within the 98th percentile for the state. Breaking this down, SBSC was ranked 285 out of 352, which means that 285 other nursing homes are doing better than them in regard to moderate to severe pain audits. This is a concerning number when compared to how pain relates directly to how residents live their everyday lives, another big reason why we are doing a quality improvement project for pain. When taking the state comparisons to the St. Benedict Senior Community facility, it is clear than pain continues to be a impactful problem.

### **Analysis: Data Collection**

During our time at St. Benedict Community Center we provided each of the eleven participants with a pre-survey in order for us to gain further insight about how they use their pain scale, if they found this pain scale effective, how they intervene when it comes to pain management, and if they were using some of the newer techniques already that were found

within the literature of the Abbey Pain Scale. From the pre-survey questions, we were able to assess that the variation in pain management did not come from the implementation and intervention stage, but rather within the assessment piece.

From here, we moved on with our project to create two types of education brochures for our eleven participants to read and learn from. The first brochure included general information about dementia, the relevance of pain in dementia patients, how pain can differ in this population, as well as the nurses perception on pain assessments within dementia patients in long term care. The second brochure that was handed out was about the Abbey Pain Scale and ePAT technology. It was within this brochure that we touched on the importance of the newest literature out there which points to using a new form of advanced technology such as the ePAT. The ePAT is an app that utilizes facial recognition technology to detect facial micro-expressions that can be indicative to pain. It also can record the presence of pain-related behaviors under five additional domains (Voice, Movement, Behavior, Activity, and Body) (Atee, 137). These five domains are derived from the Abbey Pain Scale, which gives this pain scale even more credibility on how it works differently in this population. After the pre-survey, we found that 6/11 are already “Always” using the patient's behavior to assess their pain level, 5/11 are “Always” assessing the patient’s physical changes, and 4/11 are “Always” assessing a patient’s vitals when they are assessing pain. These three questions were what differed from their current pain scale, the PAINAD from the Abbey Pain Scale which was educated on. There could be a number of different reasons as to why nurses are already assessing these types of thing, but based on their policy, these are not mandatory questions to be asking nor assessing.

The post-survey was created to gain an understanding of what the nurses who participated in the education session found. There were three main questions that we wanted to

analyze when it came to the post survey. The first one was “Do you see the benefit of adding behavior changes, physiological changes, and physical changes to a pain assessment?”, all 11 of the participants stated “Yes”. The next question that was analyzed was “Could you see the facility implementing something with advanced technology such as ePAT?”. There was mixed responses but the general basis of the answers were “Yes”, “It would be possible”, or “It could be maybe used in the future”. The last question that was analyzed was “Which scale could you potentially see being more effective, The Abbey Pain Scale or the PAINAD?”, 5 of the 11 stated the Abbey Pain Scale while 7 out of the 11 stated the PAINAD. The reasoning for picking the Abbey Pain Scale was people found the assessment was more inclusive and took the pain to the next level of including vitals, behavior, and other current statuses of residents into account. The reasoning varied as why nurses were picking the PAINAD. Some of the responses included this scale is better for the short stay unit while they felt the Abbey Pain Scale could be better used for a long term care unit. Another one stated they did not see that of a difference between the two and felt more comfortable using the PAINAD because they had always been using that one. One wrote that there could be other contributing factors as to why a behavior was occurring besides pain and it should not be subjective based on that. The last person stated that the PAINAD seemed to have more basic descriptions that were easier to follow. Even though not every person felt the need to switch to the Abbey Pain Scale after this education session, all eleven of the participants recognized and agreed the differing information between the two pain scales would be helpful when looking into pain assessments for dementia patients.

The goal of the education brochures for both the Abbey Pain Scale and ePAT tool was that nursing staff at Saint Benedict’s Senior Community would see the latest research for pain assessments in dementia patients. By having this new information, they may be able to update

their pain policy which could lead them to be able to more accurately assess pain in residents with dementia. Thus, the nursing staff will be able to better manage the resident's pain and provide a higher quality of life.

### **Analysis: Influencing Factors and Root Cause**

Inadequate pain control in residents with dementia can be influenced by a variety of factors. Some of these include inadequate pain treatment, other underlying chronic diagnoses, and the inability for staff to accurately measure pain status in residents with dementia. In order to accurately identify the quality improvement project needed at Saint Benedict's Senior Community it is important to consider all influencing factors.

The first element considered was how high pain scores were being treated. Research suggests that non-pharmacological treatment options should be used instead of, or in-conjunction with, pharmacological treatment options in order to achieve the most optimal pain control results (Turk, 2005, pg 22). We evaluated to determine if Saint Benedict's Senior Community was using this method, as it is stated in their facility protocol by procedure step 8 and 9. Number 8 in the facility's protocol states that "Residents will receive interventions to manage pain. Select and implement a variety of measures (pharmacological, non-pharmacological, and interpersonal) to facilitate pain relief. Number 9 in the facility's protocol states "Reduce or eliminate factors that precipitate or increase the pain experience. Analgesia will be used in a manner that allows for effective pain management". Although it was found that the staff at this facility were aware of the protocol of using non-pharmacological pain treatments in conjunction with pharmacological pain medication, the protocol was not always carried out to its full potential. Therefore this factor was considered as a potential for quality improvement, but in the end another factor was more influential as a way to improve resident's pain scores at Saint Benedict's Senior Community.

Secondly the treatment of underlying chronic conditions was considered when deciding how to best control resident's pain. According to Crowley, majority of residents living in long term care facilities have at least one or more underlying chronic conditions, and these chronic conditions increase the risk of the person becoming disabled and decrease life expectancy (Crowley, 2018, p. 3). Examples of chronic conditions that these residents include, but are not limited to, Alzheimer's, arthritis, cancer, chronic obstructive pulmonary disease (COPD), chronic kidney disease, diabetes, heart disease, and Parkinson's. Many of these diseases can be exceptionally painful with the pain being difficult to control. The treatment of these diagnoses can be quite complex and difficult to manage. Furthermore it can be difficult to determine which disease is causing pain for the resident. Therefore, it was decided that this improvement project would need to be far too individualized and complex in order to encompass all that treating chronic diagnoses entails.

Lastly, the pain scale in use for residents with dementia at Saint Benedict's Senior Community was researched and determined to be not as effective in assessing pain for patients with dementia. The process for evaluating pain in these residents had not been updated since 2006, which could be contributing to the high pain levels at SBCS. Currently, the pain scale in use at Saint Benedict's Senior Community is Pain Assessment In Advanced Dementia (PAINAD) scale. This scale rated the resident's breathing pattern, vocalization, facial expression, body language, and consolability on a scale of 0-2. Residents scoring higher were determined to be in more pain. (Warden, 2003, p.1) Although this scale is adequate in rating pain in residents with dementia, it was determined that there is a more effective assessment tool, the Abbey pain scale and ePAT, which showed to be more in-depth and accurate in determining a resident's pain level. (Atee, 2017, p149).

Pain evaluation was then determined to be the root cause of poor pain control ratings at Saint Benedict's Senior Community. If the staff can more accurately assess the level of pain that residents with dementia are experiencing, then they will be better able to treat that pain. The staff will also be able to use an initial assessment of the resident as a baseline for future pain assessments. It was decided to create a quality improvement project centered around the pain evaluation of residents with dementia because the current pain scale in use at Saint Benedict's Senior Community is not as effective and there is new research suggesting the the Abbey Pain Scale is a more inclusive alternative to the PAINAD scale.

#### **Analyze: PAINAD Scale Currently in Use at SBSC**

The PAINAD Scale has been in use at Saint Benedict Senior Community since 2006, which was the last time it was revised, to assess pain in residents with dementia. At the time, the PAINAD was semi-new and was showing effective accuracy about pain management which therefore led it be being a good fit for the facility. As research progresses and literature was reviewed, there is now newer and more effective pain scales which are shown to more accurately assess pain in residents with dementia.

The PAINAD Scale works by scoring residents in a variety of categories based on a 0-2 scale with 0 being no change and 2 being the greatest change from baseline. These categories include breathing, negative vocalization, facial expression, body language, and consolability. The scores are then added together to determine what level of pain the resident is experiencing. According to the PAINAD Scale, 1-3=mild pain, 4-6=moderate pain, and 7-10=severe pain. In regard to the literature, there is a better "point system" that will help nursing staff better understand and manage pain levels. According to Leong, the PAINAD scale provided similar results as a nursing reported pain scale, but resulted differed when patients were asked to self

report their pain (Leong, 2006, p.255). This suggests that more information is needed in addition to the PAINAD scale in order to provide the most accurate representation of pain in residents with dementia who are unable to self report their pain.

### **Develop: Creativity**

After receiving our topic of pain for this quality improve project, we reached out to the nursing librarian at St. Ben's to help us research the latest literature regarding the newest and most effective pain scales for assessing patients with dementia. After working with him, we found from numerous literature searches there was one pain scale showing the best outcomes for assessing pain, as well as being the most up to date, which was the Abbey Pain Scale. After continuing on with the literature searches, we also found that there has been an app created, which is the ePAT, and that can help nurses get more valid responses when it comes to pain assessments. By introducing a new pain scale, this could spark new ideas for the nurses at SBSC for different ways to assess pain in dementia patients.

### **Selection: Why Abbey Pain Scale and ePAT**

From numerous literature reviews, The Abbey Pain Scale is shown to be the newest and most up to date with its effect of assessing pain. This pain scale is one of the newest pain scales specifically for Dementia patients. In the article, "Pain Assessment in Dementia: Evaluation of a Point-of-Care Technological Solution" by Atee (2017), it is explained that the Abbey Pain scale was a comparator in the study because it is used frequently in clinical practice, it is endorsed by the Australian Pain Society, and is in recommended management strategies (p. 138). Atee (2017) states, "The instrument has good psychometric properties in older adults with dementia as reported in a number of systematic reviews in the literature" (p.138). With the Abbey Pain scale being so efficient and because it only takes a short time to complete, it is a favorable

assessment tool for staff in long term care facilities in Australia (Takai, 2014, p. 440). With this pain scale being used in Australia, there is also a literature review conducted in Japan. In the article, “Feasibility and Clinical Utility of the Japanese Version of the Abbey Pain Scale in Japanese Aged Care” by, Takai (2014), its explained the Abbey Pain scale has been tested for validity and reliability, as well as “shown excellent interrater agreement between research and test-retest reliability” (p. 441). Takai (2014) explains, “ The Abbey Pain Scale (APS) was developed as a simple and easy-to-use scale for nurses and care workers to observe cognitively impaired residents” (p.440). The APS scores are used to provide a complete assessment of pain intensity, ranging from “no pain” to “sever pain”. This holistic marker was developed because of the “unavailability of a biochemical marker of pain and participants who were not able to report their pain” (p.440). Overall, numerous different studied completed regarding the reliabilities of this scale conducted between numerous literature and nurses produced results that concluded the same outcome (Takai, 2014). Takai (2014) states, “Our data and earlier studies on the APS suggest that this pain measurement scale is acceptable for daily use among nurses and care workers for residents in aged-care settings”. (p.446). The Abbey Pain Scale combined with ePAT technology offers an additional level of information that the PAINAD scale currently in place at Saint Benedict Senior Community did not provide. As pictured below, the Abbey Pain Scale evaluates 6 areas to determine the resident’s pain level. These areas include vocalization, facial expression, change in body language, change in behavior, physiological changes, and physical changes. These six areas are scored on a 0-3 scale, 0=absent 1=mild 2=moderate, and 3=Severe. These six scores are then added together and if the total is 0-2=no pain, 3-7=mild pain 7-13=moderate pain, and >14=severe pain. The nurse is then asked to determine if the resident is

experiencing acute, chronic, or acute on chronic pain. From there it is suggested how the resident's pain should be managed. (Ruth, 2006, p.7).

Another concept based off the Abbey Pain Scale that was introduced and educated on was the Electronic Pain Assessment Tool (ePAT). According to Atee this “tool utilizes facial recognition technology to detect facial micro-expressions indicative of pain. ePAT also records the presence of pain-related behaviors under five additional domains (Voice, Movement, Behavior, Activity, and Body).” (Atee, 2017, p.137). This new technology evaluates changes from the resident's baseline that are indicative of pain. The reason why ePAT was included in the education at SBCS was because this advancement of technology specifically pulls criteria from the Abbey Pain Scale. It was shown that the outlined criteria in that scale were significant enough to include in this technological advancement in regard to its micro-expressions of pain.

Some factors that impacted the decision to use the Abbey Pain scale is because it takes a short time to complete, it is simple for staff to use, and it is proven to be efficient in assessing a patient's pain. In the article, “Emergency nurses’ evaluation of observational pain assessment tools for older people with cognitive impairment” by Fry (2017), it states, “The Abbey pain score is out of 18. It’s easy to fill out, boxes made clear, easier scoring. The Abbey is consistently used in residential aged care, and practitioners are familiar with this and this makes pain scoring more consistent” (p.1286). That literature explains a few factors as to why the Abbey Pain scale is the best solution to the problem. In another article, “An Evidence-Based Program to Improve Analgesic Practice and Pain Outcomes in Residential Aged Care Facilities” by Savvas (2014), a study was completed and “Pain scores improved in residents who were in pain at baseline, and with evidence showing improved adherence to APS guidelines and improved staff self-efficacy, research shows that the program was successful in embedding evidence-based pain management

recommendations into routine care” (p. 1588). The literature demonstrates reasoning behind why a facility should choose the Abbey Pain Scale for assessing pain for Dementia Patients in long-term care facilities.

### **Develop: Planning**

After speaking with the Director of Nursing at St. Bens Senior Community, we all agreed the best way of improving the pain problem would be to educate staff about the Abbey pain scale. First, we conducted a Pre-Survey for the nursing staff to complete. We implemented this both on the short term floors, long term floor, and memory care. The implementation of the educational brochure occurred over three weeks, each week had a different step. The first week was handing out and analyzing the pre-survey. The second week we focused on education and handed out the education brochures. The last week we handed out the post-survey in order to analyze what was gained from the nurses who participated. When planning on how to create an impactful education session at the facility, based on time and resources, we wanted to have an individualized brochure for each nurse to have for themselves that they could read and refer back too. We also wanted the nurses who were participating in the session to do this on their own time so we did not have to take time away from the flow of their day to listen to an education session. Another reason we did it this way was to reach more people. Each day there was a new nurse that we could give the information to and if we held one session, we might not have reached the same amount of people. The goal of the education brochures for both the Abbey Pain Scale and ePAT tool was that nursing staff at Saint Benedict’s Senior Community would see the latest research for pain assessments in dementia patients. By having this new information, they may be able to update their pain policy which could lead them to be able to more accurately assess pain in

residents with dementia. Thus, the nursing staff will be able to better manage the resident's pain and provide a higher quality of life.

### **Disseminate: Learner Readiness, Objectives, and Evaluation of Learners**

Our project took place at Saint Benedict's Senior Community. We completed this study on the short stay, long term stay, and memory care floors. Our target audience was the Director of Nursing, case managers, floor nurses, and LPN's. These were the 11 participants in this study. For our objectives, we first stated that the nurses will become educated about the Abbey Pain Scale based on the literature reviews at the end of three weeks. Our second objective was that the nurses will understand the plan that was implemented at Saint Benedict Senior Community at the end of three weeks. Lastly, nurses will analyze data that was collected throughout the education sessions about Abbey Pain Scale at the end of the three week study. In terms of evaluating the learners, we conducted a post-survey after giving out the education brochures. The data we collected showed that the participants understood the benefits of the information that was given. After we presented our project at our facility, the Director of Nursing and numerous case managers explained that they could see this scale being implemented, as it is easy to use, as well as the benefits that were presented from literature about the new pain scale.

### **Execute: Commitment**

The first step in creating buy-in from the staff at the facility is creating awareness that there is a problem at the facility. Organizational commitment was originally established prior to our first visit to Saint Benedict's Senior Community. The facility contacted us inquiring if we would be willing to do a quality improvement project centered around pain. After visiting the facility we met with the director of nursing as well as multiple other staff including registered nurses, licensed practical nurses, and nursing assistants. Majority of these staff concluded that

there was a problem with pain, specifically the pain scale for residents with dementia at Saint Benedict's Senior Community.

The next step that we took to ensure there was organizational commitment to our quality improvement project was to establish the credibility of our research and resources. We needed staff to be confident that the Abbey Pain Scale would benefit them, the residents, and the facility as a whole. By using current and credible sources and evidence based practice we were able to create staff buy-in and educate staff on the new, more inclusive Abbey Pain Scale.

Although there was staff support there was also resistance from staff to actually implement the new Abbey Pain Scale into their daily practice. We recognize that this resistance stemmed from the fact that the staff was very busy and our time frame for implementation was relatively short. Those who were opposed to the project were mostly the floor nurses on the dementia units who actually had to learn and use this new pain scale. These nurses were opposed to the implementation of the new pain scale because it is time consuming to learn and use a new scale.

Our recommendations would be that the facility uses the staff buy-in that we created to move to a new pain scale. They would be able to keep staff motivated by making the Abbey pain scale easy to use and access. The old pain scale should be replaced in all locations with the Abbey pain scale. This way it will be intuitive for the nurses to use. By removing the old PAINAD scale from practice at the facility, the nurses will not be tempted to revert back to their old practice.

### **Execute: Implementation**

When figuring out how we were going to implement our plan for education on how to assess pain on patients with dementia, there was different ideas that came to mind. The facility is

broken down into three bigger units which included a short-term stay, a long-term unit, and a memory care unit. Being that dementia patients could potentially be on all of these floors, we opened up the education and pre-survey's to the case managers and nurses on all of these units. We knew that we wanted to include a pre-survey into our plan, not only to assess which part of the pain assessment was lacking at this facility, but to get a baseline that we could analyze and refer back to when we were evaluating our data. After getting these surveys back, we found the assessment piece to be lacking and that is where we focused our attention and education on. At first, we were going to hold an education session on one day that include the DON, case managers, and floor RN's and LPN's, but after looking at everyone's schedules and time frames, it became clear that it would be hard to have everyone in the same place and at the same time. After looking into other options, we decided we were going to make two different brochures to cover the education that we were going to present in person. This way, we would be able to reach a larger audience and be able to have more people participate and gain new knowledge about an updated pain scale that is out there for dementia patient. While there was changes in how we were going to implement our plan, ultimately the choice of handing out multiple brochures to cover the information reached a larger target audience throughout the facility.

**Execute: Evaluate**

Our plan was effective in terms of the target audience understanding the benefits and importance of updating their pain scale. The data that was collected from the post-surveys demonstrated knowledge gained and they were responsive to the new information given. After presenting our project at St. Benedict Senior Community, we got very positive feedback in regard to this new pain scale and their willingness to update their pain policy. Numerous staff who watched our presentation were very interested and saw the benefits from the literature we

presented. For the objectives stated above, our group met these for our plan based off of the post-surveys and data we collected demonstrated positive knowledge gained, as well as the in-person discussions that was held after presenting our plan to the facility. To improve the effectiveness of this plan, one change that could be made is that the facility could actually use the scale and implement it when assessing pain, in comparison to just being educated about it. Our study could have been longer in time, as we only developed this over three short weeks. Having a longer timeframe of the plan means more data collected and more participants being involved, overall enriching our study. Regardless of the short time frame, we were able to reach everyone in our target audience and based on in person feedback and responses on the post-survey, the nurses at St. Benedict's Senior Community gained new and useful insight on how to assess patients with dementia.

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