Standardizing Documentation of Patients’ Measurable Decline to Increase Medicare Compliance in the Hospice Setting

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Standardizing Documentation of Patients’ Measurable Decline to Increase Medicare Compliance in the Hospice Setting

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NURS 660.15: Practicum: Quality Improvement and Outcomes Management

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Jul 8, 2024
Abstract

Problem: Staff nurses have difficulties standardizing documentation of patients’ measurable decline during the admission and recertification process to justify the need for hospice services.

Context: According to Murrin (2016), the average Medicare compliance rate of hospice organizations is 86%. This quality improvement (QI) project aims to increase an outpatient hospice organization’s Medicare compliance rate of 66% to the average, nationwide level through standardization of documentation (Frontz, 2021). Interventions: The proposed intervention is to implement a QI project of the following assessment tools: Palliative Performance Scale (PPS), Functional Assessment Staging Tool (FAST) and Mid-Upper Arm Circumference (MUAC). Clinical nurses will attend a one–hour training class on tool implementation. Measures Post implementation, bi-weekly chart audits were conducted over the course of three months. In addition, bi-weekly check-ins were conducted at staff meetings to answer any questions and provide opportunities for feedback. Results The quality report revealed that of the 84 admission notes audited, 78 notes were found to include the three proposed assessment tools. Thus resulting in a successful implementation rate of 88.6%.

Conclusions Given the actual implementation rate was 2.6% higher than the project goal of 86%, the assessment tool bundle may be useful in thorough, standardized hospice documentation. Moving forward, further research is necessary in other hospice organizations to correlate the assessment tool findings and mortality rates.

Keywords: hospice eligibility, Medicare reimbursement, PPS, FAST, MUAC
Personal Leadership Statement

As a long time student and a new graduate nurse, I have always been committed to learning. As a future nurse leader, I aspire to learn more about ways to improve the nursing field for both its patients and providers. I believe that some of the best leaders are the ones who are adaptable and willing to learn.

Having personal experience of family enrollment in a hospice program, I was inspired to help develop an improvement project in a hospice organization. Although my QI project focuses on Medicare compliance, I was initially drawn to the standardization of patients’ measurable decline. For many nurses, it is difficult to quantify a patients’ current health status. More importantly, as a family member it is difficult to accept that your loved one is enrolled in hospice care. Having a standardized, objective assessment of hospice patients may help the patient and their loved ones process their prognosis.

I believe in the nursing value of beneficence and promoting the best care for my patients. Not only may this QI project help with the patients’ and their loved ones’ emotional processing, but it will also help the healthcare team provide better quality, individualized care. Lastly, increasing Medicare compliance promotes organizational funding. I hope that this project inspires nursing research to focus on improving hospice quality of care.
Standardizing Documentation of Patients’ Measurable Decline to Increase Medicare Compliance in the Hospice

Problem Description

According to the U.S. Centers for Medicare & Medicaid Services (n.d.), patients must have a terminal diagnosis of six months or less to be eligible for hospice care. The average Medicare compliance rate of hospice organizations is 86% (Murrin, 2016). However, staff nurses are having difficulties standardizing documentation of patients’ measurable decline during the admission and recertification process to justify the need for hospice services. According to Frontz (2021), from October 1, 2015 through September 30, 2017, the hospice organization was found to have received $37,329,352 in Medicare reimbursement. Although the hospice organization was found to be 66% compliant, the organization remains below the average Medicare compliance rate of 86% previously mentioned. In addition, the remaining 34% of the hospice organization’s Medicare claims, equating to $10.5 million, were found to lack proper documentation to support the six-month mortality prognosis and justification for hospice services.

The setting is a hospice organization that provides home and outpatient hospice care. The professional team consists of 98 staff members, including nurses, home health aides, and case managers.

Interestingly, when utilizing Dartmouth's 5 P’s and Institute for Healthcare Improvement (IHI) Microsystem Assessment Tool (MAT) to assess the hospice microsystem, the performance results section revealed that the organization does not have a standardized method to record assessment data during the admissions and recertification process. According to Berry (2013),
the proposed assessment tools include the Palliative Performance Scale (PPS) for functional decline in activities of daily living, Functional Assessment Staging Tool (FAST) for assessing severity of dementia, and Mid-Upper Arm Circumference (MUAC) for understanding nutritional status. Given that avoidable costs are a metric that matters, an increased rate of Medicare compliance will serve as performance targets. Baseline data will be gathered pre- and post-implementation to determine an increase in consistent documentation was achieved.

**Specific Project Aim**

The aim of the QI project is to increase Medicare compliance from 66% to 86% by July 2024 in the hospice microsystem by standardizing documentation of patients’ measurable decline.

**Available Knowledge**

**PICOT Question**

In the hospice organization (P), how does a standardized documentation tool (I), compared to none (C), during the hospice admission affect Medicare compliance (O) over two months? (T)

**Search Strategy**

A systematic electronic search was conducted of articles from different databases: CINAHL, PubMed, and Scopus. Search terms included: hospice eligibility, Medicare reimbursement, PPS, FAST, and MUAC. There were 19 articles that were gathered from various databases. An initial review of these articles was performed by reading the title, the abstract, design, and methodology. By the process of elimination, the list was narrowed down to six articles. Critical appraisal of the evidence in the articles using the Johns Hopkins Nursing
Evidence-Based Practice and Non Research Evidence Appraisal Tools were applied (see Appendix A).

**Critique of the Evidence**

A retrospective cohort study evaluated the correlation of PPS scores and mortality rate of 126,620 patients from ten hospice organizations (Harris et al., 2014). The study found that 77.2% of patients with a PPS score of 50 died within six months. In addition, a retrospective cohort study calculated PPS scores of 78 patients in an inpatient hospice center (Jansen et al., 2015). 83% of patients had a PPS score of 50 or less and all of these patients passed within forty one days.

A prospective cohort study of 464 patients in Korea sought to compare FAST with other assessment and prognostic tools for Alzheimer’s dementia (Na et al., 2010). This study found that FAST had high correlative results with other assessment tools. Most importantly, FAST has a high reliability and validity in evaluating the functional status of patients with dementia. In addition, a systematic literature review of six studies sought to validate prognostic tools, including FAST, for end-of-life dementia stages (Brown et al., 2013). This study analyzed that six out of seven studies found that the FAST 7c criterion were reliable predictors of six-month mortality.

A prospective cohort study analyzed the relationship between MUAC and mortality risk of 52,159 participants over 11 years (Hou et al., 2023). This study divided the participants into four groups and found that the group with the lowest MUAC below 29.3 cm had the highest mortality risk. In addition, a prospective cohort study evaluated the relationship between MUAC
and mortality risk of 1,307 participants over 23 years (Schaap et al., 2018). This study found that an initial lower MUAC that decreases overtime is a more reliable indicator of mortality risk.

After thorough analysis of the literature, PPS scores less than 50, FAST scores less than 7c, and MUAC scores less than 29.3 centimeters and decreased overtime are strong indicators for six-month mortality and hospice eligibility. Overall, consistent use of these objective assessment tools, supported by high-quality evidence, can strengthen hospice patients’ documentation for Medicare compliance and reimbursement.

**Rationale**

Everett Rogers’ Diffusion of Innovation Model is a framework for change that was developed in 1962 (Pelletier & Beaudin, 2022). This change theory has several essential elements used to describe and implement this QI project: innovation, setting, and innovativeness affecting length of time for adoption. First, the consistent use of the assessment tools during the hospice admission and recertification process would serve as the innovation. This QI project would take six months to implement and its setting would consist of the hospice microsystem. The innovativeness would depend on the characteristics of the hospice staff nurses and their readiness to implement and consistently use the assessment tools in practice. Overall, application of this change theory’s essential elements and using it to guide a QI project could promote Medicare compliance and reimbursement.

**Context**

The IHI MAT revealed that in the population of the hospice organization with its nursing staff, there is a lack of standardized documentation for patients’ measurable decline in the admission and recertification process. The SWOT analysis factors in strengths, weaknesses,
opportunities, and threats (see Appendix B). One of the strengths that would support this project involves the internal desire by staff nurses to implement the project to promote patient care. In addition, a favorable factor or external opportunity of this project is partnering with academic organizations to promote project funding to lower the financial gap.

However, one negative attribute or weakness of this project could consist of understaffing at the hospice organization (see Appendix B). Lastly, according to the hospice organization, an external threat to the project may be that the organization depends on proper documentation for insurance reimbursement, primarily from Medicare. Therefore, if documentation becomes more inconsistent, insurance reimbursement and funding may decrease. Overall, these positive and negative factors can be utilized to strengthen the outcomes of the QI project.

In order to promote the success of this project, a project timeline and communication plan with the interprofessional team will be implemented (see Appendix C). This includes biweekly scheduled check-in and evaluation during the beginning of shift huddle with nursing staff. In addition, the power interest grid will be utilized to assess the power and interest of various stakeholders (see Appendix D). Nursing administration has the highest level of power and interest, and therefore will need regular updates to ensure satisfaction. On the other hand, nursing staff have high power, but low interest as key implementers of the assessment tools. Therefore, nursing staff will need explanation of the benefits of project implementation and biweekly scheduled check ins for areas of improvement.

**Intervention**

The proposed intervention is to implement a QI project of the following assessment tools: PPS, FAST, and MUAC. Clinical nurses will attend a one-hour training class on tool
implementation. This training will include a brief presentation of the assessment tools, their importance, how to implement them, and examples (see Appendix F). After implementation, bi-weekly check-ins will be conducted at staff meetings to answer any questions and provide opportunities for feedback.

With the increase in Medicare compliance rate from sixty six to 86%, the anticipated cost avoidance is $5,304,361 (see Appendix E). The initial expenditures are designated for education and preparation of clinical nurses with an anticipated total cost of $4,297 during the first year. Therefore, total project net savings is estimated to be $5,300,064. This project is expected to increase Medicare reimbursement and ensure all members of the healthcare team have a mutual understanding of patients’ health status.

**Study of the Intervention**

The measurement strategy for this QI project consists of bi-weekly chart audits for implementation of assessment tools. The project goal is 86% of hospice admission notes will include the three proposed assessment tools.

To better articulate improvement changes, the Plan-Do-Study-Act (PDSA) toolkit will be utilized (see Appendix G). The first stage, “Plan”, is to propose the QI project to the nursing team, how it will be tested through chart audits, and how it can improve Medicare compliance. This stage helped refine the intervention by emphasizing the importance of these assessment tools to nursing staff to ensure proper implementation. The second stage, “Do”, will include the training and bi-weekly check-ins for constructive feedback. The third stage, study, will include chart audits for implementation of assessment tools and teach back amongst nurses to capture learning. The last stage, “Act”, will share final reflections with the nursing team and key
stakeholders and conclude whether changes need to be made. If improvements can be made, the PDSA cycle will restart at the first stage.

**Ethical Considerations**

The Jesuit value of providing service to others is visible in this project. According to Antonacci et al. (2020), although the demand for hospice and palliative care is growing with the increase in the older adult population, there is a lack of research and financial support. More specifically, there is a lack of research on ways to improve palliative care.

According to the American Nurses Association (2015), their ethical standards are also visible in this project through Provision 7: to advance the profession through research and scholarly inquiry and continue to develop professional standards. QI projects, such as this one, could improve the quality of care and lessen the financial burden on many hospice organizations. This project has been approved as a QI project by faculty using QI review guidelines and does not require IRB approval.

**Outcome Measure Results**

Of the 84 admission notes audited, 78 notes were found to include the three proposed assessment tools. Therefore, the successful implementation rate of 88.6% was 2.6% higher than the project goal of 86%.

The results were not expected given that the hospice organization was in the process of merging with another organization throughout this QI project. Throughout implementation of this QI project, there were administrative and electronic health record platform changes. The quantity, quality, and time it took to meet and assess potential hospice patients may have been hindered due to the organizational merger. However, the genuine interest and commitment to QI
by nursing staff may have played a significant role in successful implementation of the
assessment bundle despite organizational barriers.

**Summary**

One key finding is that it can be very difficult to objectively and quantitatively assess
patients for hospice admission. Although a majority of the hospice admission notes included the
three assessment tools, the qualitative notes provided by the nurses and providers gave a greater
picture of each individual patient’s health. However, these tools help standardize the analysis of
all patients’ health and provide a quick, measurable assessment for hospice admission.

A lesson learned from this QI project is that nursing staff were the most effective
stakeholders (see Appendix D). As previously mentioned, given the organizational merger, the
successful implementation of the assessment tools was due to the efforts of the nursing staff.
With administrative changes, there was not as much bandwidth to encourage adaptation of the
assessment tools. However, explaining the importance of the assessment tools and how it may
positively impact patients was the driving factor for nursing change.

A factor that contributed to successful change was using examples during the training
class to demonstrate how the assessment tools would be utilized (see Appendix F). Not only did
it provide an opportunity for nursing staff to learn, but it also demonstrated areas to improve
personal knowledge of the assessment tools usage. Lastly, the bi weekly check ins with nursing
staff revealed that it was helpful to have a completed reference during their own patient
assessments.

**Conclusions**
This QI project is sustainable given that it utilized one training class and did not require extensive materials (see Appendix E). Given that the potential benefits from increased Medicare reimbursement far outweighs the cost of implementation, this QI project has a high potential to spread to other hospice settings. However, considering that many hospice organizations have limited funding and resources, it may be difficult to implement this project in practice. Another implication for practice in regards to this QI project is that it can help increase the quality of nursing practice. A more thorough, objective, and quantitative assessment of patients’ measurable decline can provide a more extensive analysis of patients’ overall health. Thus, more individualized assessments can be applied to promote patients’ quality of life. Overall, this QI project may considered useful considering the extensive literature analysis of the assessment tools validity for hospice admission. However, it is important to note that the results, although exceeding the project goal, this QI project used a small sample size for analysis. Therefore, further research of the assessment tools is recommended in other hospice settings.

Lastly, an implication for other hospice organizations who may face the same issues regarding documentation and Medicare reimbursement, is to assess the understanding of nursing staff. Considering that there are multiple criteria necessary for hospice admission, not just the three proposed assessment tools, nursing staff may need further education on the purpose of certain documentation, its effectiveness, and how to properly implement them. This may increase the quality of documentation of patients’ measurable decline, Medicare reimbursement, and understanding of patients’ current health status.
References


## Appendix A

### Evidence Table

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Outcome/Feasibility</th>
<th>Evidence rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown, M. A., Sampson, E. L, Jones, L., Barron, A. M. (2013).</td>
<td>Systematic literature review</td>
<td>7 studies</td>
<td>Only 1 out of 7 studies found that the FAST 7c criterion was not a reliable predictor of 6 month mortality. However, FAST may only be applicable to linear disease progression of Alzheimer's disease.</td>
<td>V A</td>
</tr>
<tr>
<td>Prognostic indicators of 6-month mortality in elderly people with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advanced dementia: A systematic review. <em>Palliative Medicine</em>,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27(5), 389-400. <a href="https://doi.org/10.1177/0269216312465649">https://doi.org/10.1177/0269216312465649</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harris, P. S., Stalam, T., Ache, K. A., Harrold, J. E., Craig, T.,</td>
<td>Retrospective cohort study</td>
<td>126,620 patients</td>
<td>77.2% of patients with a PPS score of 50 died within 6 months. 80.2% of patients with a PPS score of 40 died within 6 months.</td>
<td>III A</td>
</tr>
<tr>
<td>hospices predict which patients will die within six months?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Journal of Palliative Medicine</em>, 17(8), 894–898. <a href="https://doi.org/10.1089/jpm.2013.0631">https://doi.org/10.1089/jpm.2013.0631</a></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Author(s)</td>
<td>Study Design</td>
<td>Participants</td>
<td>Key Findings</td>
<td>Section</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>---------</td>
</tr>
</tbody>
</table>
Four groups: Q1 (≤ 29.3), Q2 (29.4, 32.5), Q3 (32.6, 36.0), and Q4 (≥ 36.1)
Lowest MUAC group had highest mortality risk | III B |
All patients with a PPS score of 50 or less passed within 41 days | III A |
FAST is reliable and valid assessment technique for evaluating functional status throughout course of dementia | III B |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospective cohort study</td>
<td>1307 participants</td>
<td>Mean baseline MUAC was 30.5 cm</td>
<td></td>
</tr>
<tr>
<td>Measurements over 23 years</td>
<td></td>
<td>Participants w/ higher initial MUAC (&gt;31 cm) that decrease overtime did not have a higher mortality risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Participants w lower initial MUAC and a decrease in MUAC of &lt;2.15cm was associate w increased mortality risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A low MUAC that decreases overtime may indicate higher</td>
<td></td>
</tr>
</tbody>
</table>

**III B**
## Appendix B

SWOT Analysis

<table>
<thead>
<tr>
<th>Internal (attributes of the organization)</th>
<th>Favorable/Helpful</th>
<th>Unfavorable/Harmful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Strengths</strong></td>
<td><strong>Weaknesses</strong></td>
</tr>
<tr>
<td></td>
<td>● Better quality of patient care</td>
<td>● Nonprofit institution has limited funding for implementation</td>
</tr>
<tr>
<td></td>
<td>● Internal desire by staff nurses to promote patient care</td>
<td>● Understaffing due to increasing competition for new hires</td>
</tr>
<tr>
<td></td>
<td>● Previous research articles on Palliative Performance Scale use</td>
<td>● Standardized documentation of measurable decline necessary for patient care,</td>
</tr>
<tr>
<td></td>
<td>● Other hospice microsystems implementing the Palliative performance Scale</td>
<td></td>
</tr>
<tr>
<td>External (attributes of the organization)</td>
<td><strong>Opportunities</strong></td>
<td><strong>Threats</strong></td>
</tr>
<tr>
<td></td>
<td>● Increase of standardization of documentation in medical field</td>
<td>● Non profit institution may not have solid, external financial support</td>
</tr>
<tr>
<td></td>
<td>● Philanthropy partnerships with academic organizations promote project funding to lower the financial gap</td>
<td>● Insurance reimbursement for services dependent on proper documentation</td>
</tr>
</tbody>
</table>
## Appendix C

### Gantt Chart: Project Timeline and Communication Plan

<table>
<thead>
<tr>
<th>Task #</th>
<th>Description of Tasks and Communication Interventions</th>
<th>2023</th>
<th>2024</th>
<th>Responsible Party/Stakeholder</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Microsystem assessment and gain baseline data</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Completed</td>
</tr>
<tr>
<td>2</td>
<td>Define project goal</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Completed</td>
</tr>
<tr>
<td>3</td>
<td>Identify and engage stakeholder</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4</td>
<td>Create project budget</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Completed</td>
</tr>
<tr>
<td>5</td>
<td>Develop curriculum for training program</td>
<td></td>
<td></td>
<td>CNL &amp; Nurse Educator</td>
<td>Pending</td>
</tr>
<tr>
<td>6</td>
<td>1 hour training class</td>
<td></td>
<td></td>
<td>CNL &amp; Nurse Educator</td>
<td>Pending</td>
</tr>
<tr>
<td>7</td>
<td>Implement assessment tools in hospice setting</td>
<td></td>
<td></td>
<td>Staff</td>
<td>Pending</td>
</tr>
<tr>
<td>8</td>
<td>Bi-weekly scheduled check-in during huddle</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Pending</td>
</tr>
<tr>
<td>9</td>
<td>Collect data and evaluate project outcomes</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Pending</td>
</tr>
<tr>
<td>10</td>
<td>Finalize quality improvement project to standardize documentation of measurable decline</td>
<td></td>
<td></td>
<td>CNL</td>
<td>Pending</td>
</tr>
</tbody>
</table>
## Appendix D

### Power Interest Grid

<table>
<thead>
<tr>
<th>Power of Stakeholder</th>
<th>Keep Satisfied with Nursing Staff</th>
<th>Manage Closely with Administration</th>
<th>Keep Informed with Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Increase level of staff interest by showing benefits of project</td>
<td>Stay in regular communication with nursing administration and education to ensure satisfaction with project’s aims and progress at all</td>
<td>Inform hospice patients about current project and how it may improve their care</td>
</tr>
<tr>
<td>-</td>
<td>Biweekly scheduled check ins to identify any problems and ask for feedback</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Monitor with Hospice Staff
- Provide explanation of project at initial stage
- Provide final project results to stay informed
## Appendix E

### Budget and Cost Avoidance

### Standardizing Documentation of Patients’ Measurable Decline to Increase Medicare Compliance in the Hospice Setting

#### Current State of Medicare Reimbursement

<table>
<thead>
<tr>
<th>Medicare Claims</th>
<th>Number of Claims</th>
<th>Percentage</th>
<th>Value of Claims (Percentage x Total Value of Medicare Claims)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims NOT in Compliance with Medicare</td>
<td>34</td>
<td>34%</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>Claims in Compliance with Medicare</td>
<td>66</td>
<td>66%</td>
<td>$26,011,706</td>
</tr>
</tbody>
</table>

Total Medicare Claims in Sample Size for Audit (34%: 2023)

| Total Medicare Claims | 100 | 100% | $37,111,706 |

#### Improved State of Medicare Reimbursement

- 15% increase in acquire Medicare compliance rate of hospice organizations (Martin, 2018)

<table>
<thead>
<tr>
<th>Medicare Claims</th>
<th>Percentage</th>
<th>Value of Claims (Percentage x Total Value of Medicare Claims)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Claims NOT in Compliance with Medicare</td>
<td>14%</td>
<td>$5,709,430</td>
</tr>
<tr>
<td>Claims in Compliance with Medicare</td>
<td>86%</td>
<td>$31,312,267</td>
</tr>
</tbody>
</table>

Total Medicare Claims

| Total Medicare Claims | 100% | $37,111,706 |

#### Total Cost Avoidance in Compliant Medicare Claims

- (Improved Value State of $31,312,267 - Current Value State of $26,011,706) = $5,300,501

### Year 1 Improvement Cost (Cost Implementation for Education)

<table>
<thead>
<tr>
<th>FTE(s)</th>
<th>Current Staff Nurses</th>
<th>Number</th>
<th>Hourly Wage + 35% Benefit</th>
<th>Annual Cost (Number x Hourly Wage + 35% Benefit) x 1 Hour Class</th>
<th>Total Cost for Year 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Registered Nurse (RN)</td>
<td>22</td>
<td>$74</td>
<td>$1,650</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff Licensed Vocational Nurse (LVN)</td>
<td>15</td>
<td>$46</td>
<td>$663</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nurse Educator</td>
<td>1</td>
<td>$85</td>
<td>$85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Nurse Leader (CNL) for Project Development, Implementation, &amp; Evaluation ($4200 x 40 Years)</td>
<td></td>
<td></td>
<td></td>
<td>$168,000</td>
<td></td>
</tr>
<tr>
<td>Materials &amp; Supplies</td>
<td></td>
<td></td>
<td></td>
<td>$100</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost for Year 1</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$4,297</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Year 2 Improvement Cost (Cost Implementation)

| Materials/Supplies (For Replacement/Updates) | $190 |
| Staff Training to be Added to Yearly Competency | $0 |
| **Total Cost for Year 2** | **$190** |

### Financial Analysis: Projected Net Savings

- (Annual Cost Increase - Yearly Total Cost) = $5,300,504 - $5,300,501 = $3,003,003
Appendix F

Materials for Implementation and Evaluation

Project Aim

Project Intention: To increase Medicare compliance from 66 to 80% in the hospice microsystem by standardizing documentation of patients' measurable decline

PICO(T) Question: In the hospice organization (P), how does a standardized documentation bundle (O) compared to none (C), during the hospice admission affect Medicare compliance (T)?

Assessment Tool Bundle

- Palliative Performance Scale (PPS)
- Functional Assessment Staging Tool (FAST)
- Mid-Upper Arm Circumference (MUAC)

Palliative Performance Scale (PPS)

- Measures functional decline in activities of daily living (Berry, 2013)
- Score of 0-10; lower indicates hospice eligibility

Recent Evidence
- Harris P. M. et al. (2014)
  - Evaluated 206,000 patients from 10 hospice organizations
  - 77.2% of patients w/ PPS score of 50 died within 6 months

Current Evidence
  - Measured 2,000 patients over 2 year period
  - Patients with non-ordinal/linear dementia had 80% median survival time

- Xa et al. (2013)
  - 464 patients in Korea compared FAST to other prognostic tools for Alzheimer's dementia
  - FAST has high correlation, reliability, and validity

- Brown et al. (2013)
  - Systematic literature review of seven studies
  - 8 out of 9 studies found FAST to be a reliable predictor of mortality

Functional Assessment Staging Tool (FAST)

- Developed by Dr. Berry Weisinger to quantify severity of dementia (Berry, 2001)
- Score of 8-10 indicates hospice eligibility (Math et al., 2021)

Recent Evidence
- Harris P. M. et al. (2014)
  - Evaluated 206,000 patients from 10 hospice organizations
  - 77.2% of patients w/ PPS score of 50 died within 6 months

Mid-Upper Arm Circumference (MUAC)

- Helps quantify and understand nutritional status (Berry, 2013)
- MUAC <29.5cm & decreasing over time indicates hospice eligibility

Current Evidence
- Reus et al. (2013)
  - 51.50% patients over 7 years
  - MUAC <29.5cm had the highest mortality risk

- Sobolik et al. (2006)
  - Prospective cohort study of 1,370 participants
  - MUAC <29.5cm is a more reliable indicator of mortality risk

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Example #1

Patient Assessment:
- General: 70yrs Female
- Neuro: Fully conscious
- History of traumatic brain injury
- Intact memory, but unable to fully smile due to nerve damage
- Genitourinary & Gastrointestinal: Fully continent
- Mobility: Spends majority time in bed due to fatigue from advanced disease
- Needs assistance to ambulate
- Nutrition: Initial MUAC Score: 28cm, Recent MUAC Score: 21cm

Recommendation for Hospice: Yes

References


Appendix G

PDSA Toolkit

**Plan**
- Propose QI project to nursing team
- Tested through chart audits
- Improve Medicare

**Do**
- Training and bi-weekly check ins for constructive feedback

**Act**
- Share final reflections
- Conclude whether improvements need to be made

**Study**
- Bi-weekly chart audits
- Teach back amongst nurses to capture learning