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Reducing Patient Incidents Through an Improved Nursing Documentation in Elderly Care

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Abstract

Falls, unplanned hospital visits, and pressure injuries are common occurrence in elderly home care facilities. To reduce these incidences, we aimed for 100% compliance of care home staff using an improved nursing documentation. The main intervention of this proposed quality improvement project is the implementation of SOAP (Subjective, Objective, Assessment, Plan) method of documentation in the resident's electronic medical records for care home staff to utilize per shift with proper teaching and training.

The model for improvement framework and PDSA (Plan, Do, Study, Act) cycle will be used in testing, developing, and evaluating the proposed interventions to see if ideas will work in accomplishing our aim. Care home resident and staff will benefit in utilizing SOAP method of documentation in recognizing impending harm to elderly as well as assisting staff in a structured and organize way of writing nursing documentation respectively.

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1 Introduction

1.1 Problem statement

Nursing documentation practices that we have observed in most elderly home care, particularly in long-term residential care settings, are not timely done and unstructured leading to serious incidents that can potentially cause harm to aged population. We have encountered a delayed treatment for a hip fracture sustained by an elderly resident after an unwitnessed fall. It was only realized that something is wrong with the elderly during a routine hygiene care where the resident endures excruciating pain during the whole procedure, which is unusual. During the investigation, no documentation of the resident's daily report was found, nor any incident report filed as to when the fall took place. When the resident was brought to the hospital, a surgical intervention was required as soon as possible. It was pitiful for an elderly resident to suffer for days until the pain was unbearable. Writing reports on a resident's electronic medical record is not taken into consideration. If a daily report of a resident's general condition had been written, the fall might have been prevented. Moreover, we believed that writing down their overall daily status, nutrition, cognition, and medication compliance can aid and prompt care home staff in identifying potential issues that can lead to serious incidences.

Proper and improved documentation can provide correct treatment, and evaluation, and ensure patient safety. The elderly has a complex care need that often requires support for their activity of daily living (ADL), health conditions and behaviors. However, in several elderly care setting, specifically in a long-term institutionalized care, staff members are already familiar with elderly residents and know them quite well and find documentation as redundant. (Ostensen et al. 2019: 2708.) Moreover, several factors have also been identified that negatively affect the documentation practices in elderly care. The individual attitudes of the staff involved in providing care for the elderly in home care include a lack of motivation to appropriately comply with documentation procedures. Insufficient time spent in documenting and postponing documentation particularly when manpower or nurses' shortage occur which is quite common at present. A negative attitude towards documentation was also shown whereby avoidance behavior unveils when staff perceive documentation as meaningless, and more time should be spent on direct patient care rather than spending on a computer.

Lack of training was also regarded as an individual issue imposing the staff's competence in documentation procedures. (Bjerkan et al. 2021: 3.)
Comorbidities in the elderly require more complex and rigorous routines for their treatment and care. Safety issues are the main concerns among the elderly due to their degenerating functions physically and mentally. High-quality nursing care should be imposed to meet this demand in elderly patients. A link between patient safety and inadequate documentation practices has been previously reported by studies examining documentation and safety incidents. For several years, the quality nursing documentation has been reported as inadequate and unstructured (Hellesø and Ruland 2001; Blair and Smith 2012; Akhu-Zaheya et al. 2018) because of poorer care rendered to patients (Meißner and Schnepp 2014).

1.2 Background

Nursing documentation is a significant part of the nurses' professional skills requirements and responsibilities and is one of the critical aspects of providing safe care to the patient (Kaihlanen et al. 2021: 2). It supports nurses and their capability to continuously reflect and critically think to develop an individual plan of care that will improve patient health outcomes (Kelly et al. 2011). Additionally, proper documentation supports accuracy in reflection of nursing assessments, provides evidence of care rendered and vital for nurses in the professional, medicolegal aspects of nursing practice (RHC 2019).

There are numerous studies that have examined the quality criteria of nursing documentation describing its context and the internal alignment with the phases of nursing process. A systematic review done by (de Groot et al. 2018) concluded that aligning documentation procedures with the nursing process along with using standard terminologies and user-friendly formats are important for high quality nursing documentation. On the other hand, a mixed study by (Tuinman et al. 2017: 579) examines the accuracy of nursing documentation in long-term institutionalized facilities using the D-Catch instruments which quantifies the accuracy on the record structure, nursing diagnosis, nursing interventions, progress, and evaluation of outcome, thus legibility proves the accuracy and coherence of documentation.

Quality nursing documentation upholds many complexities thus, accuracy in carrying out reports to patient's medical records must be centered on 3 main concepts which

are the reflection of care rendered, a comprehensive and detailed report on the patient's journey and lastly, the clarity of the terms used. Moreover, continuity and quality through communication, legal processes for evidence, outcomes of care delivered, and evaluation on efficiency and effectiveness of patient care must be shown in nursing records. (Scruth 2014.)

As elderly population is expected to grow exponentially in both European and American countries which will then demand for elderly healthcare services. Studies show that 1 in every 6 people will be aged 60-65 years by 2030 which will eventually double by the year 2050. (UN 2022.) In Finland, older people are placed in long-term institutional care if the 24-hour care required by an older person can no longer be arranged at home or in sheltered housing. The decision is assessed and supported by medical reasons or grounds related to customer safety or patient security. (ESPN 2018.) Nursing staff, particularly those working in a long-term institutionalized care, attend to their residents with an increasing number of physical, mental and cognition problems therefore accurate nursing documentation is important to the safety of the residents (Tuinman et al. 2017: 579).

Geriatric patients are particularly vulnerable to incidences such as falls as they have multiple chronic diseases, numerous medications, and musculoskeletal pain, which contributes to decreased mobility and muscle strength (Cederbom & Arkkukangas 2019: 724). Additionally, the frail condition in the elderly population along with physical and mental health issues requires specific and prompt medical and nursing care when any lapses occur. In fact, inadequate nursing documentation practice increases the risk of elderly care incidents that convey a nursing liability and malpractice lawsuits (Kluwer 2018). Furthermore, one study conducted in Swedish nursing homes and found that a "lack of competence" and "incomplete or lack of documentation" were the two most common factors that contributed to adverse events (Andersson et al. 2018).

2 Review of Literature

The aim of our literature review was (1) to describe the association between poor nursing documentation and increased patient incidents in elderly residential care and (2) to examine different approaches or interventions of nursing documentation and strategies for improvement. A database search from CINAHL and PubMed was conducted after identifying the main concepts using FACET/PEO analysis (Table 1).

Table 1. FACET/PEO analysis

P- Population *Elderly in residential home care*	**AND**	**E- Exposure** *nursing documentation*	**AND**	**O- Outcome** *patient incidents*
OR		**OR**		**OR**
elderly		documentation		inciden*
OR		**OR**		**OR**
aged		electronic medical records		patient incidents
OR		**OR**		**OR**
home for the aged		nursing reports		incident reports

Key terms that were used included the following: aged, elderly, homes for the aged, documentation, electronic medical records, nursing reports, incident report and patient incidents and recorded yields were tabulated (Table 2). Boolean operators were utilized in combining key terms into search phrases.

Table 2. Record results from database search

DATABASE/DATE/ LIMITS	**SEARCH PHRASES**	**TOTAL NUMBER OF HITS**	**RECORDS BASED ON TITLE**	**RECORDS BASED ON ABSTRACT**	**RECORDS BASED ON FULL TEXT**
CINAHL 21.11.2022 LIMITS: Abstract	Aged OR Elderly OR “homes for the aged” AND documentation OR “electronic medical records” OR “nursing reports” AND inciden* OR	493	35	15	2

available 2015-2022	“patient incidents” OR “incident report”				
PUBMED 21.11.2022 LIMITS: Abstract available 2015-2022	Aged OR Elderly OR “homes for the aged” AND documentation OR “electronic medical records” OR “nursing reports” AND inciden* OR “patient incidents” OR “incident report” OR “not a disease” NOT disease*	1370	38	13	4
RECORDS AFTER DUPLICATE REMOVE		1863	68 (5 removed)	28	6
RECORDS IN TOTAL		-	-	-	6

Elderly in residential care and long-term facility was the focal point of our review. Settings outside our inclusion criteria, particularly elderly in acute and outpatient care were excluded (Table 3). Safety issues and incidents and not on the disease management were part of the criteria. Mixed literature yielded were inspected accordingly.

Table 3. Inclusion and exclusion criteria.

INCLUSION	EXCLUSION	RATIONALE
Studies that only focuses on elderly home care settings.	Studies that involve elderly outside residential care (hospital, SOC, and rehabilitation).	The QI project focuses only on residential elderly care.
Studies that aim at different elderly safety incidents.	Studies with disease progression.	The project only aims to explore the issues in documentation practices associated with elderly

		safety rather than diseases.
Studies that are published from the year 2015 until present.	Studies that are published before the year 2015	Technology evolving rapidly so as documentation practices.

A total of 6 articles were selected and summarized (Table 4) composing of a mixed study, quality improvement article and audit reports that addressed queries regarding association of poor documentation to patient incidents and safety as well as articles that explored on the different approaches to electronic medical recording. Articles from countries where aged population are also growing in numbers like Japan, Australia, and Germany.

Table 4. Summary of selected articles

Author, year, country	Purpose	Sample	Design/method/ (scale/tool), analysis	Main Findings **Research questions:** **1. Is poor nursing documentation associated with increased patient incidents in elderly residential care?** 2. **What are the approaches/interventions/strategies to poor nursing documentation in elderly care?**
1. Larjow et al. 2022 Germany	To identify quality differences between available documentation approaches from the perspectives of nursing professionals in Germany.	250 nursing home practitioners including nurse managers, trained nurses, nursing assistants, and untrained caregivers	A mixed method design was used and a cross-sectional survey was conducted. Descriptive statistical analysis, Mann-Whitney and Kruskal- Wallis test.	The findings or this article answered our aim of finding approaches to nursing documentation. One group consisted of nurses using the new Structural Model documentation approach. The other group consisted of caregivers working with non-SM approaches. By comparing the frequency of positive effects of documentation approaches perceived by these two user groups, they identified higher scores for users of the SM approach on all three quality dimension subscales (structure, process, and outcome). About their experience in applying the surveyed documentation approaches, the overwhelming part of study participants was quite familiar with the employed recording technique. While 71% of the SM users reported that they have been working with the new documentation approach for at least 1 year, this was true for 89% of the non-SM users. For users of the SM approach, this answer category could include a maximum period of 6 years as the SM approach was introduced in some nursing homes in 2013 in the context of a pilot project.
2. Andrews et al. 2019 Australia	To investigate the quality and completeness of pain documentation for people living with dementia and assess the extent to aged care staff engaged in documentation processes.	A total of 114 resident files were audited which comprised largely female residents, had an average age of 86 years, with moderate/severe cognitive impairment, and a median length of stay just less than 3 years.	A three-month retrospective documentation audit. Exploratory, descriptive analyses were conducted.	Consequences of untreated pain can lead to impaired physical function, falls, depression, anxiety, and overall reduction in quality of life. Twenty-nine percent of pain episodes had no documentation about how resident pain was identified and only 22% of the episodes contained an evidence-based (E-B) assessment. At least one intervention was documented for 89% of the pain episodes, the majority (68%) being non-pharmacological. Only 8% of pain episodes had an E-B evaluation reported. Thirteen percent (13%) of episodes contained information across all four pain management domains (Identification/ problems, assessment, intervention and evaluation). In slightly more than 20% of episodes, some type of behavior change was documented as a possible indication of pain.

3. Waird & Monaro 2021 Australia	To describe reports on pressure injuries (PI's) in residents of a high-level care facility by increasing staff knowledge and skills through clinical support and skin integrity education package.	Pre/Initial phase- the initial PIPPA included 44 residents over the age of 70 years. Post Implementation- 45 residents	Quality Improvement Project. This QI project used validated pressure injury point prevalence audit (PIPPA) methodology	Pre-implementation data indicated that staff knowledge was very limited, skin inspections and PI risk assessments and documentation were not performed, and use of pressure redistribution devices was low, with point prevalence at 64% of mainly severe PIs. Despite ongoing external clinical and project support, compliance with project elements was deficient. Post-implementation knowledge change was unable to be measured, but skin inspections improved and documentation improved. PI point prevalence reduced to 33% and suspected deep tissue injuries (SDTI) were eliminated.
4. Bail et al. 2022 Australia	To evaluate the acceptability, efficiency, and quality of health information system implementation in aged care.	65 aged care residents, 90 staff 7 managers/consultants. Total of 162 participants	Mixed methods, descriptive statistics thematic analysis, Chi square, Mann- Whitney U	The study's findings show that the acceptability of health information systems within the staff was 50% average or above average with computer skills, 46.28% were expert users, 71% agreed that they were easy to sign in and 100% agreed they had the knowledge to use HIS. Post-implementation of HIS improved work efficiency including reduced nurse documentation time from 23.9 mins to 7.5 mins and an increase of time in communicating with residents/relatives from 42.7 mins to 52.6 mins. The quality-of-care post-implementation of HIS was improved from 25% of missed care reduced to 3%, the complete history and assessment form was increased from 61% to 86%, and the assessment of resident's ability to perform ADL was improved from 75% to 100%.
5. Paulik et al. 2022 Australia	To examine the strength of improvement recommendations proposed after investigation of fall incidents in health care facilities that result in major injuries	Ninety-eight injurious fall incidents during a 2-year period (2015–2016) were investigated.	Retrospective multi-incident analysis de-sign, central tendency measures and categorical variables, descriptive analysis	Majority of the incidents (34.7%; n = 34) occurred between 1300 and 1859 hours,65.3% (n = 64) occurred in the patient's room, and 79.4% (n = 81) of the injuries were fractures. There were 224 recommendations made for 79 incidents, and 19 incidents did not have any recommendations. A majority of recommendations were weak (n = 125; 55.8%). The most common recommendation in the weak category related to unit-level communication and documentation processes (n = 54; 24.1%).
6. Yamamoto-Takiguchi et al. 2021 Japan	To describe characteristics and contexts of patient safety incidents (PSI) occurrences in homecare settings.	84 HCN agencies within the City	Observational study according to the STROBE statement. Descriptive statistics analysis	The study findings show that HCN agencies identified the most common PSI type as falls at 43.9%. 20.9% required unplanned admission or consultations. Among the PSI 31.7% were recorded on the incident report form while 72.4% were not recorded. 76.2% occurred during the absence of the HCN. Of the 21 incidents that required unplanned admission/consultation at hospital/clinic with no documented incident reports, 16 (76.2%) were PSIs whose contributors were clients/informal caregivers were not recorded as incident reports (89.5%).

Summary of the literature review results.

Association of poor nursing documentation to patient safety

Patient safety is a core pillar and vital factor in contributing to the best quality healthcare. Patient safety incidents, on the other hand, are defined as events or circumstances that can cause direct or indirect harm to patients. (WHO 2011). Incidences like pressure injury, unplanned hospital admission, and fall are common in frail and elderly populations in long-term residential care (Yamamoto-Takiguchi et al. 2021). Quality and completeness of pain-related documentation in residential aged care services with dementia raise serious concerns especially regarding the pain care management for aged care staff to be responsive to pain that these groups of people experience (Andrews et al. 2019). Skin injuries among the elderly have a wider scope which includes pressure injury, skin tears, moisture-associated skin damage (incontinence-associated), dermatitis, and mechanical-related skin injuries therefore identifying and proper documentation of these injuries should be conscientiously considered for the safety of the frail skin conditions of the aged population. They added that daily documentation of skin inspections on these risk groups are important preventive measures for pressure injuries among the elderly. (Waird & Monaro 2021.)

Fall injuries are also common in elderly care that can result in major harm including fractures and intracranial surgeries hence, a detailed and thorough investigation must be conducted. A retrospective multi-incident analysis suggested improvement recommendations for injurious fall incidences that identified communication and documentation processes as a medium to weak recommendations. Documentation on the term “supervision” in relation to patient mobility functions should be reviewed to ensure consistency in communication and handover between staff in the fall prevention recommendation. (Paulik et al.2022.)

In addition, a mixed-method study on adopting technology in residential healthcare that accurate and updated documentation of care supports are effective and timely care by the multidisciplinary team. Alongside documentation, all steps in the nursing care process support suitability, accuracy, transparency, and continuity of care of delivery helps detect and avoid adverse events, duplication, and missed care. Using health information systems as an advanced tool in the documentation in elderly home care it is convenient for healthcare providers to exchange information between organizations that further supports patient safety and quality of resident care. (Bail et al. 2022.)

Furthermore, another study reported that no documentation on some of the safety incidents that occur in as incident reports may be a barrier to preventive measures. Patient safety information (PSI), reporting of falls, and medication errors is an early warning about the new serious risk that may happen to the patients. Preventive measures and necessary actions may be implemented to prevent further injury to the patient. (Yamamoto-Takiguchi et.al.2021.)

Strategies in Improving Nursing Documentation in Elderly Care

Improving nursing documentation through education can increase staff knowledge and skills to promote a better quality of care. A retrospective study conducted in New South Wales Australia has pointed out that improvement recommendations in staff education and nursing role are essential to minimize incidences in healthcare settings including elderly homes. It includes improvement in the documentation where staff must complete the assessment tool and management plan for the high fall-risk patient to identify the required action plan for the patient to prevent future harm that will threaten patient safety. Educational interventions are recommended as well, where the staff needs to complete the fall education training session to identify staff knowledge deficits on factors and behavior that contributed to fall incidences. (Paulik et.al.2022.)

Another quality improvement study conducted in a residential aged facility in Australia aims to reduce the incidence and severity of pressure injuries by educating staff on skin integrity as well as improving documentation of skin inspection is important. Staff daily compliance in skin inspection documentation forms is encouraged to promote staff awareness of pressure injury risks among patients that will prevent future injury incidences. (Waird & Monaro 2021.) On the other hand, a 3-months retrospective documentation audit exploring pain documentation in the residential aged facility with severe dementia also suggested that registered nurses, enrolled nurses, and the involvement of care assistants in the recognition of pain in older people living with dementia to be more proactive through anticipating and monitoring the well-being of an elderly clients as well as how the pain is managed and documented (Andrews et.al 2019).

Several nursing documentation approaches exist, and most residential care facilities adopted digital documentation using health information system (HIS) through this digital innovation helps in minimizing documentation time spent by aged care staff through a mixed-method evaluation study and concluded that implementation of this system the residential aged care facility improved resident focused care and staff efficiency (Bail et al.

2022). A particular study in Germany uses a structural model approach that focuses on open-ended text information and special incidents reporting which shows a significant result and improved nurse's satisfaction in their documentation practices in a residential home care environment. Furthermore, it can contribute to a positive attitude toward nursing documentation. (Larjow et al. 2022.)

3. Aim and Objectives

The aim of this quality improvement proposal is to increase care home staffs' compliance to 100% by utilizing SOAP method of documentation in the long-term elderly unit per shift by the end of 2023.

The Subjective, Objective, Assessment and Plan (SOAP) is an acronym that represents an essential and widely used documentation method for healthcare providers in assisting a structured and organized way of documentation (Podder, Lew & Ghassemzadeh 2022). The proposed project's objectives will be through distribution of a study pack, staff training, implementation, and tracking of SOAP daily documentation in aiming to reduce incidences of fall, unplanned hospital visits, and complex pressure injuries which are common occurrence in a long-term elderly care.

4. Measurement, Design, and Strategy

4.1 Measurement

Care home staffs' documentation practices will be measured in terms of how consistent they perform nursing documentation in their resident's file. Electronic medical records and HAIPRO system will be used to investigate if all the staff in the two long term elderly unit are able to carry out nursing documentation in each of their resident's electronic medical records.

In measuring care home staffs' documentation practices, a table will be utilized and marked using the five-bar graph tool. A nominated champion in each unit will be assigned to gather baseline data and mark in the table twice weekly. The table comprises of the type of incident, the frequency of occurrence and to assess if care home staff has any documented report indicating an impending incident (Table 5). Fall incidents are those fall incidences that

occurred in the unit that does not require hospital visits. Fall that requires hospital admission due to fractures or sustained injuries will be marked under unplanned hospital visits. A mark will be placed if care home staff have any nursing documentation done or not done prior to an incident.

Table 5. Sample table using five-bar graph tool

Type of Incident	Frequency of Occurrence	With documentation prior to an incident	Without documentation prior to incident	Reason/comments
Fall	𝍸-I	II	IIII	2 fall incidents not included due to other reason (bad luck)
Unplanned Hospital Visit	𝍸I-I	II	IIII	
Pressure Injuries with complex dressing change	III	I	II	

Two project team members from each unit will act as nominated documentation champions that will inspect and update the table weekly (Tuesday or Thursday) every afternoon. Data will be entered into the run chart to generate a monthly compliance report that will be done by the project team leader.

4.2 Design

This project proposal will be utilizing the model for improvement framework and Plan, Do, Study, Act cycle in developing and testing ideas for evaluation. The PDSA cycle, which was first introduced by Walter Shewhart in the 1920s, and started out as Plan, Do, Check, Act cycle is an essential tool when planning a quality improvement as it enables the project team to test ideas in a little and safer scale in introducing change in a particular area. This will enable project team to see if the proposed change will be a success and learn from the ideas that will and will not work hence, the process of
change is less disruptive and acceptable to care home staff. (NHS QI handbook).

The project team will consist of the two-unit managers, four registered nurses and two practical nurses that will oversee the whole project phase. The project team leaders, which are the nurse managers of each unit, will assist in data analysis and generate solutions to address human barriers which is ensuring staff engagement to trainings as an anticipated challenge. Project team members include registered nurses and practical nurses that will help in data collection and dissemination of information and training to all care home staff in the two units.

In pre-implementation phase of the project, baseline collection of data from fall incidences, unplanned hospital visits, and complex pressure injuries will be gathered examining care home staffs' compliance to nursing documentation from January until December 2022. The proposed project timeline will be having three phases of PDSA cycles (Figure 1) and planned to end in December 2023.

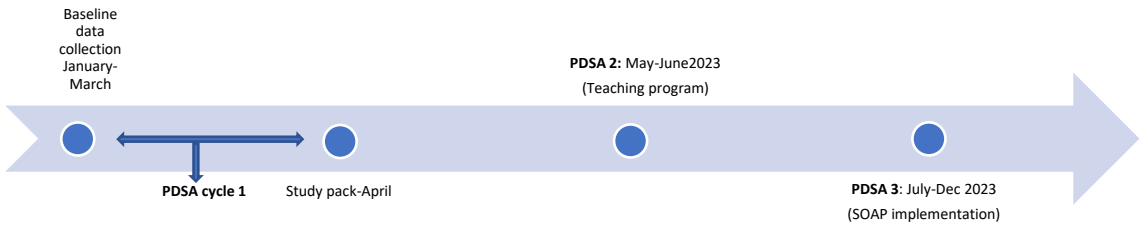

Figure 1. Timeline of the whole project proposal

4.3 Strategy

The main intervention of this quality improvement project is the implementation of electronic SOAP documentation method per shift to care home staff in the two long-term elderly residential units to reduce incidences of fall, unplanned hospital admission, and complex pressure injuries requiring wound care. This will be supported by staff training and hands-on navigation and practice using SOAP in the resident's electronic medical record.

Plan, Do, Study, and Act (PDSA) cycles will be used to trial the components of the proposed interventions to achieve the proposed aim of the project. The project plan will have pre-implementation and implementation phase with a total of three PDSA cycles (Figure 2, 3, and 4), each with a corresponding aim to test the improvement process.

Pre-Implementation Phase

PDSA cycle 1

In this phase, the goal is to increase staff knowledge and awareness particularly in the prevention of fall, pressure injuries, and signs and symptoms of deterioration among elderly. Baseline data collection regarding the mentioned incidents and assessing staff compliance will be performed in this cycle. By doing so, the project team can determine the importance of implementing a self-study pack to raise care home staff awareness regarding common incidences in the elderly facility.

A self-study pack will be distributed together with a barcode link that will provide an evaluation of the study pack. Project team will analyze and act according to survey results if the individualized study pack was able to help in increasing staff knowledge and awareness regarding fall preventention, pressure injuries grading and signs and symptoms of deterioration among elderly for care home staff to practice in applying it to SOAP method in reporting.

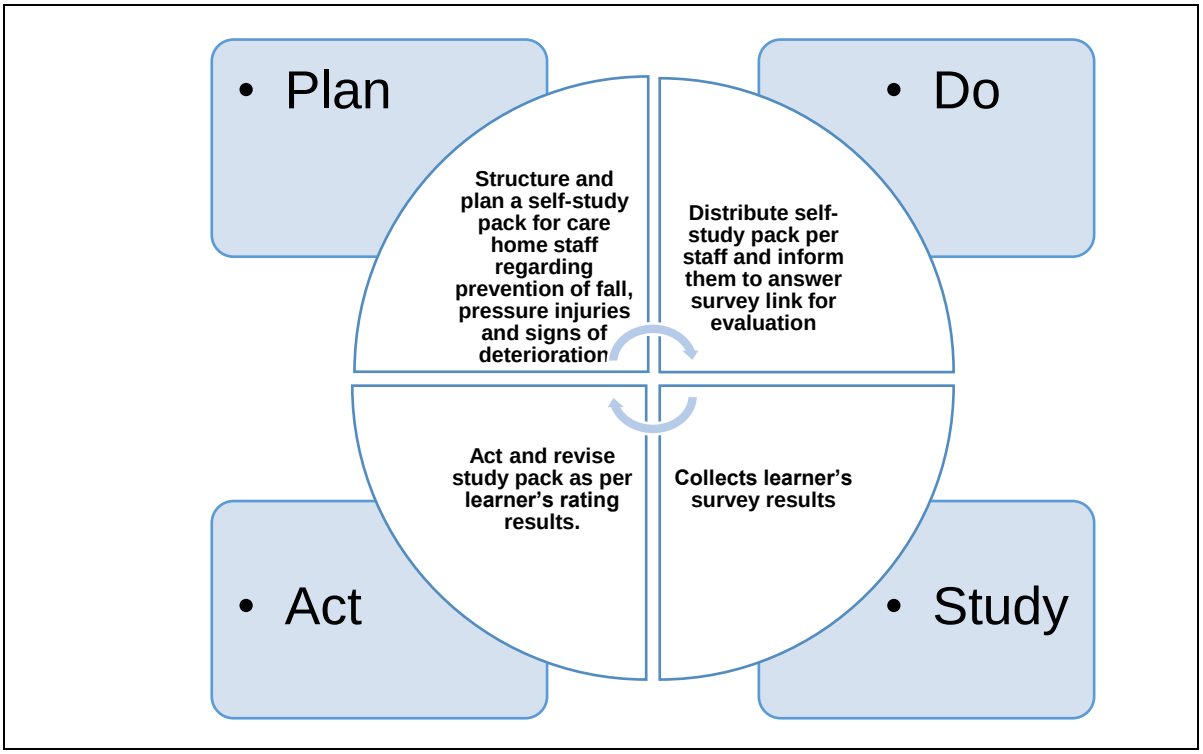

Figure 2. PDSA cycle 1 of Pre-implementation phase.

PDSA cycle 2

The goal of PDSA cycle 2 is building staff knowledge and applying SOAP method of shift documentation into practice. A one-hour in-service teaching program will be held in the care home twice a week for 1 month. The teaching session will be held after the morning and afternoon shift handover and attendance will be recorded. The teaching program will cover each criterion of SOAP recording, sample entries of each criteria using one resident case per session. At the end of each session, care home staff will have a return demonstration on how to document SOAP in the resident's electronic medical records and will be asked for their feedback or if they would like to attend another session since the teaching program will not be limited to 1 session per staff.

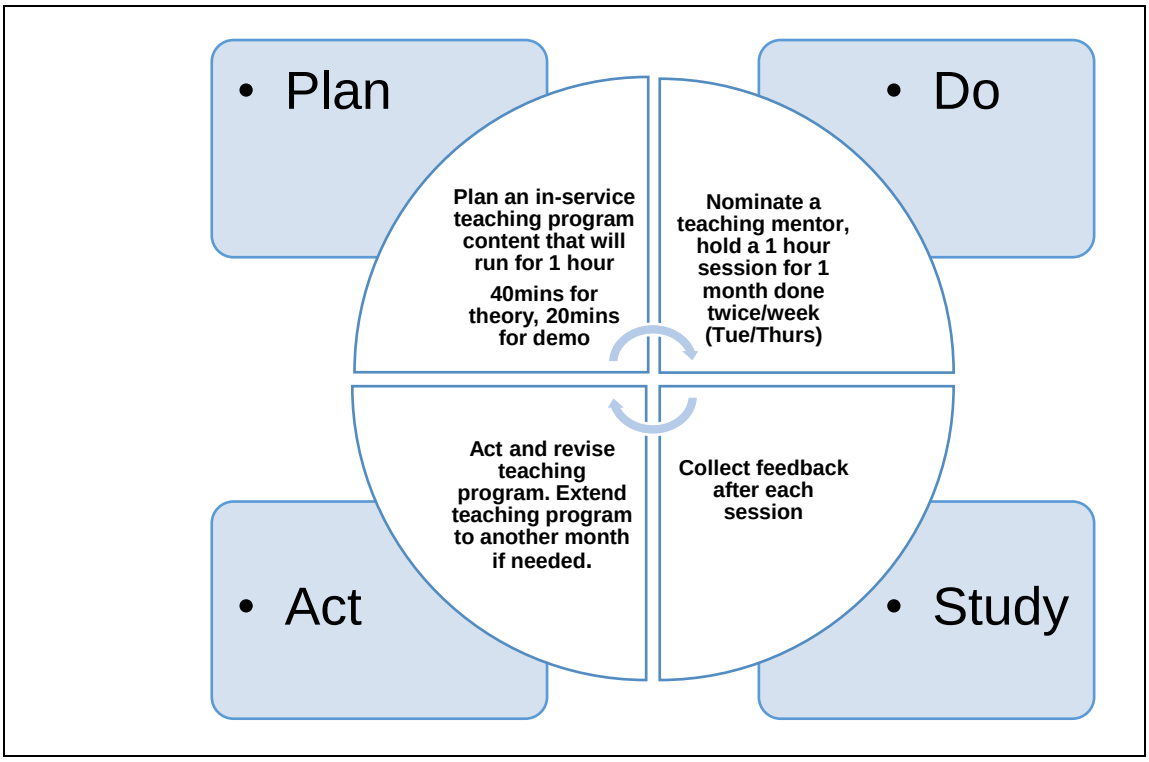

Figure 3. PDSA cycle 2 of Pre-implementation phase.

Implementation phase

PDSA cycle 3

In this cycle, the aim is to implement SOAP method of documentation in the two long-term residential units. Care home staff will be audited daily for their compliance. A senior staff member each shift will check in the resident's electronic medical record and will look for the SOAP documentation of the outgoing shift and record in the designated sheet provided (Appendix 1). Morning shift will be checked by evening shift senior staff, evening shift's

documentation will be checked by the night nurse and night documentation will be checked by the morning shift senior staff. One of the project team will collect the sheets weekly and the project team leader will input data into the run charts to generate compliance percentage every month. In this cycle, incidences of fall, unplanned hospital visits, and pressure injuries will be examined if indeed SOAP method of documentation impacted a change that can sustain in long-term elderly facilities.

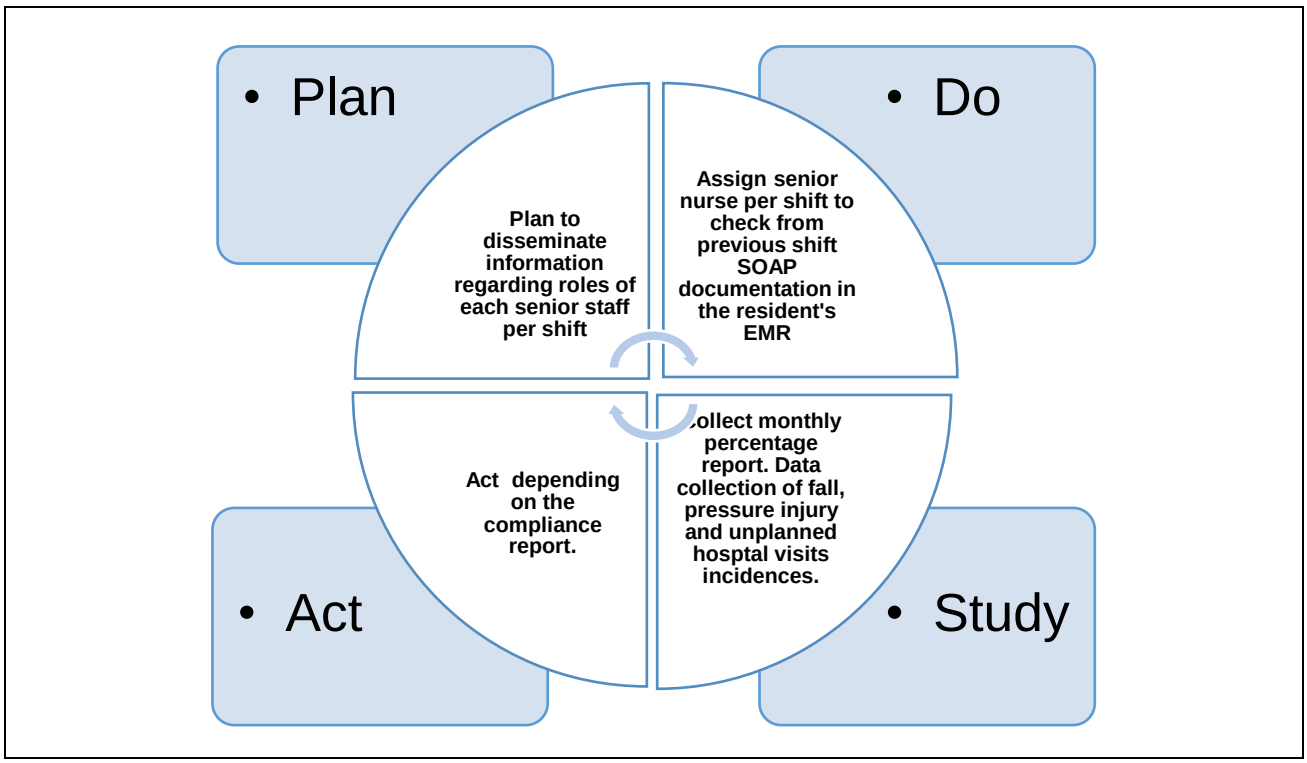

Figure 4. PDSA cycle 3 of Implementation Phase

4.4 Data Analysis

All data gathered will be entered and analyzed using Statistical Process Control (SPC) program whereby the variables for vertical axis represents the number of no/missed documentation by care home staff and the horizontal axis represents the week (NHS QI handbook p159-160).

To identify if a positive change has occurred, a control chart will be utilized in assessing staff compliance (Figure 5). An upper control and lower control limit will be set after a standard

mean value have been set. A value of +3 from the standard mean will be the upper control limit and the -3 will be the lower control limit (three sigma). Any value that will deviate outside the control limit will be investigated for the project team to look further.

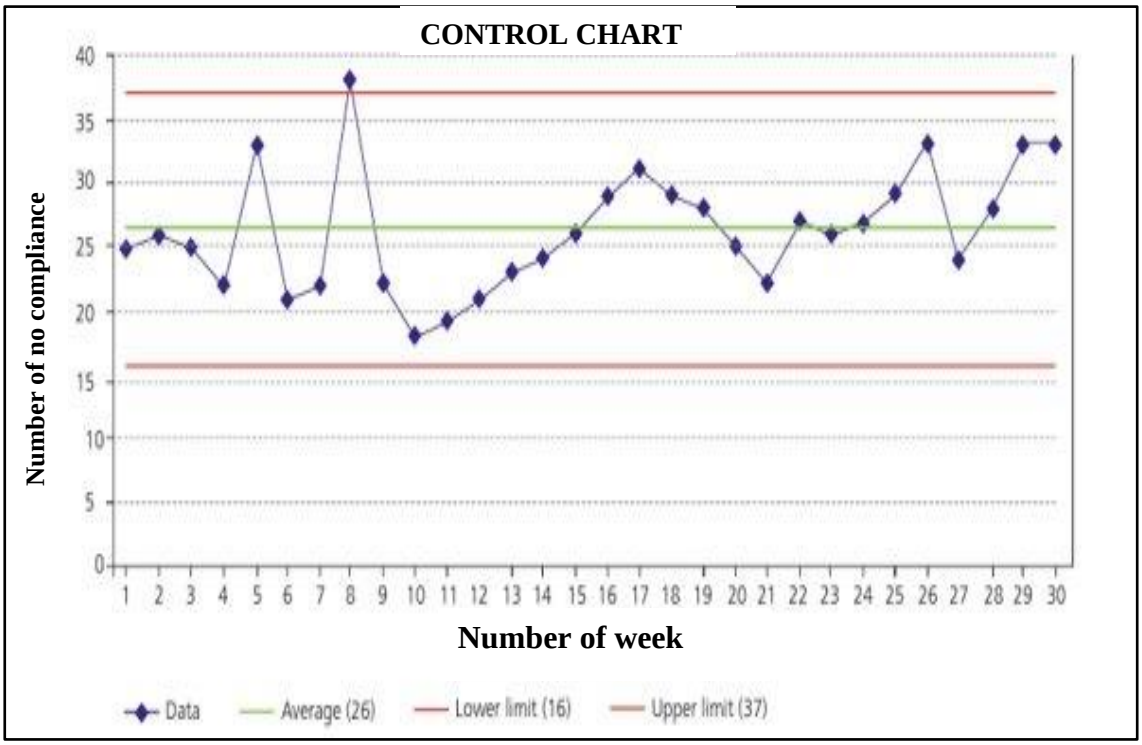

Figure 5. Sample of Statistical Process Control Chart (NHS QI Handbook p160)

4.5 Ethical Considerations

This quality improvement project will follow the protocol regarding research related to the Health Care Divisions. A research permit application form will be sent to the City of Helsinki Registry Office before the data collection happens. The research permit application form should state the target group of people in the study, goals, methods, data collection methods, and data analysis. The involved institution, which is the elderly home care, will be contacted in advance to establish whether the study is feasible, and the contact person (supervisor) will be notified about the project. The contact person (supervisor) will be participating in the planning and implementation of the data collection. Data Protection Act (1050/2018) guidelines will be followed as well to protect the patient's identity, health status, and ethnicity. (City of Helsinki 2022.)

5. Reflections and conclusions

Having worked in a long-term elderly facility whereby elderly residents' needs are the utmost priority due to their complex comorbidities and degenerative functions, likelihood of incidences is anticipated. As a home care staff, we encountered incidents like falls, pressure injuries, and unplanned hospital visits that threaten the elderly resident's safety and one of the neglected roles of staff who are involved in the care is writing a comprehensive nursing documentation. Writing reports based on staff observations and changes in an elderly resident's health status are given less importance and are sometimes ignored due to lack of knowledge and attitude, knowing that bedside care is more important than writing a report. In addition, we observed that documentation audits are not likely done in an elderly long-term facility compared to acute hospital care.

This proposed quality improvement project highlighted the importance of nursing documentation to the elderly population in long-term residential care who are at risk of developing incidences. Being in an environment where demands to care are too complex, it is important for a long-term residential institution to create a strategy in nursing documentation for the residents as it is essential in reducing harm, promoting safety, and avoiding elderly neglect. Providing them the best quality of care they deserve on their daily lives even towards to their peaceful and dignified death should be an attributes of a care personnel involved in the residential care.

The strength of the project proposal is the methodology that was being utilized. The quality for improvement design enables us to carefully plan the steps that should be undertaken. The Plan, Do, Study, Act cycle is the best quality improvement tool applicable for our project proposal. It provides us with a safer and controllable process of implementing a change without deviating from the goal that we want to accomplish. Each content of the PDSA cycle was pondered conscientiously before proceeding to another cycle for the project team to be able to introduce the proposed SOAP implementation.

There may be some limitations involved in this project proposal. Firstly, is the time allocated for the whole project process and secondly, is the fast turnover of manpower in the long-term residential facilities. Most residential care home environment poses specific challenges, not only with the staffing but managerial turnover is also imperative.

Lastly, we have learned an enormous amount of information from doing this project proposal that will be beneficial for us in the future. We realized that before conducting any quality

improvement project, careful planning of the topic and to which quality domain it will affect is vital and should be given enough time to consider. Any quality improvement projects are essential especially when it is thoroughly and meticulously planned since healthcare field is in a continuous development and change is necessary whether it is big or small.

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DAILY SHIFT TRACKING SAMPLE: SOAP DOCUMENTATION

Week 1

Resident	Date			Date			Date			Date			Date			Date			Date		
	A	I	Y	A	I	Y	A	I	Y	A	I	Y	A	I	Y	A	I	Y	A	I	Y
1.																					
2.																					
3.																					
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18.																					
19.																					
20.																					

Legend: **A**-morning, **I**- evening, **Y**-night shift

Morning shift checked by: _____
Evening shift checked by: _____
Night shift checked by: _____

To be filled by Project team to enter in the control chart

Number of no SOAP documentati-on(X) per day							
Total number of no SOAP documentati-on (X) per week							