



Chart Audit

Strategies to Improve Quality of Nursing Documentation

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Nursing documentation is an essential component for professional practice and providing quality patient care. A complete, accurate, and up-to-date document is a defense tool to prevent liability if nurses are involved in a lawsuit. To evaluate the quality of nursing documentation in a neurosciences unit, a chart audit project was conducted in year 2004. This project assessed nurses' documentation skills and consistency between prescribed care and care provided to patients. Strategies have now been implemented to improve nursing documentation and resolve issues that were identified during the chart audit.

Nursing documentation is any written or electronically generated information used to record patients' condition, their progress, treatments, and/or nursing care provided at a specific time, date, and place. It also records patients' responses to these treatments and cares (Barloon, 2003; Registered Nurses Association of British Columbia, 2002). This information is the main vehicle to communicate about patients' status and needs between the healthcare team (Morrissey-Ross, 1988). Effective documentation demonstrates the chronological order of care provided (Edelstein, 1990) and the response and effectiveness of this care (Bernick & Richard, 1994). With this information, nurses can avoid trial and error to find the most effective care for the patient given the variety of nurses who care for the same patient.

As professionals, nurses bear the responsibility of what they have done (Wilkinson, 1998). The Supreme Court of Canada has ruled that nursing documentation was admissible evidence since the *Ares v Venner* case in 1970 (Richard, 1995). In this case, a young student suffered fractures of the right tibia and fibula from a skiing accident. He was treated in a rural hospital. A full leg cast was applied after surgery. The affected limb gradually deteriorated after surgery. Nurses in that hospital had carefully assessed, documented, and notified

the patient's physician about their observations. This patient was transferred to a larger facility few days after the injury and was found to suffer extensive muscle and nerve damage on the fracture site. The lawyer for the physician tried to exclude the nursing documentation as evidence. However, the Supreme Court ruled that the nursing notes were admissible as proof, and the physician was held liable (McLean, 1992). Effective documentation can be used as a defense against liability if nurses are involved in a lawsuit (Sullivan, 2004). In addition, nursing documentation can be used for assessing care provided to patients and quality improvement purpose (Kirchhoff, Anumandla, Foth, Lues, & Gilbertson-White, 2004).

BACKGROUND

During a brief chart review on a clinical neurosciences unit in a teaching hospital in Calgary, the clinical nurse educator discovered that nursing documentation was inconsistent among nurses. The timeliness of charting, data recorded, or style of charting were all different among nurses. This phenomenon is consistent with findings in other hospitals (Brown, 2006; Miller & Pastorino, 1990; Porter, 1990; Tapp, 1990). After reviewing some of the nursing documentation on the unit, the patient care manager and the clinical nurse educator decided to conduct a chart audit to evaluate the quality of nursing documentation in the unit.

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TOOL

A chart audit form (see Figure 1) was developed according to the unit routine, nursing policies, and standards of nursing practice in this hospital. This form was

reviewed by the nurse clinicians of the unit for accuracy. To assess the current standards of nursing documentation, guidelines and recommendations from different nursing associations in Canada were reviewed (College of Nurses of Ontario, 2004; College of Registered

| | | | | |
|---|----------|-------------------------------|-----------|---------------|
| Date: Patient's Name: | Shift: | Primary Nurse: Bed Number: | | |
| | C | I | NA | Remark |
| Vital Sign | | | | |
| Neuro Assess | | | | |
| Spinal Assess | | | | |
| Admission Form | | | | |
| Discharge Planning | | | | |
| System Assess Charting (Psychosocial) | | | | |
| Progress Charting | | | | |
| In & Out Charting (& BM Record) | | | | |
| IV Fluid Sign off | | | | |
| IV Line Label | | | | |
| 24 Fluid Balance | | | | |
| Cumulative Fluid Balance | | | | |
| ECG Rhythm Strip | | | | |
| Rancho Scale | | | | |
| Glucometer | | | | |
| CSF Drainage | | | | |
| Fall Prevention | | | | |
| DVT Prophylaxis | | | | |
| Skin Assessment | | | | |

Overall comments on documentation:

Legend: (C) Complete; (I) Incomplete; NA (Not Applicable)

Date: _____ Educator's Signature: _____

FIGURE 1 Chart Audit Form.

Nurses of Nova Scotia, 2002; Nurses Association of New Brunswick, 2002; Registered Nurses Association of British Columbia, 2003). A video on nursing documentation, prepared by the legal department of the hospital, was also used as the reference.

Edelstein (1990) stated that nursing documentation should be audited by qualified persons such as nursing educators, who can determine the quality of documentation, the significance of issues in the documentation, and furthermore, who can implement appropriate strategies to improve the documentation. Thus, the clinical nurse educator of the unit served as the reviewer to conduct the chart audit.

METHOD

Most chart audits are done retrospectively; it is convenient and efficient. However, in retrospective review, reviewers are unable to assess what has been done or what has not been done in relation to what was documented (Akhtar, Weaver, Pierson, & Rubinfeld, 2003; Carroll, Tarczy-Hornoch, O'Reilly, & Christakis, 2003; Hansebo, Kihlgren, & Ljunggren, 1999). A prospective review on all nurses' documentation is not possible because it is very time consuming. To accurately assess nursing documentation compared with the care provided to the patient, the chart audit was conducted retrospectively 1 day after the charting was completed. In this case, if the reviewer had a query on the documentation, the patient's primary nurses could clarify the query because the nurse still had a fresh memory of the events. The manager announced the chart audit project during the unit meeting and the chart audit was started in September 2004.

Before each chart auditing session, the reviewer prints out a computer version of the patient care summary, which lists all nursing care orders, medications, treatments, scheduled tests, and other important information about the patient. Next, the patients' charts were reviewed for their medical history, presentations, admission assessment record, treatments, progress, and discharge care plan. After all required data were collected, the reviewer took the patient care summary to the bedside and assessed whether the care/treatment ordered was consistent with the care/treatment provided. For example, if the order for intravenous fluid infusion was saline water 0.9% at 125 ml/hr, the reviewer would assess if the patient was receiving that solution at that rate. The bedside nurse was asked to clarify if there were any discrepancy between what was ordered and what had been done.

After the bedside assessment, the reviewer uses the chart audit form as a template to evaluate the nursing documentation. Each component was classified either as completed such as all organ systems were assessed

and findings were documented, the admission form was completely filled out, or vital signs were checked and documented according to physician's order or unit policy; or as incomplete when some data were missing, such as discharge planning not initiated or patient safety measurement not documented. In addition, timeliness, clarity, documenting in a chronological order, appropriate abbreviations (abbreviations accepted by the hospital), and terminology were also assessed.

A copy of the chart audit result was given to the manager and the charting nurse for feedback on his or her documentation. A cover letter was attached to the feedback form. This letter explained the purpose of the chart audit and that the result of chart audit would not be part of the nurse's performance appraisal.

ISSUES IN CHARTING AND INTERVENTIONS TO IMPROVE CHARTING

A review on the chart audit results was conducted 2 months after this project was started. The results indicated that some components of documentation were frequently missed or not completed. These components included interpreting electrocardiography (ECG) results, dating the intravenous infusion lines, recording the intravenous fluid administration, and planning discharge. Other areas that were not consistent among nurses included use of different terminology as well as timing for documentation of care provided.

To understand the reasons for these incomplete components and issues in documentation, the reviewer discussed them with several bedside nurses. One nurse stated, "We do not have adequate training on ECG interpretation to be confident in interpreting patients' ECG rhythm strips." Another nurse stated, "We do not have any guideline on nursing documentation." Most comments from the bedside nurses related to not knowing the expectations for documentation, not having enough knowledge, or not having the guidelines for documentation.

After identifying these learning needs, a number of strategies were implemented. To increase knowledge of ECG interpretation skills, an ECG workshop was conducted in November 2004. Twenty-five nurses attended the workshop. Because ECG interpretation is an advanced skill and nurses may not be able to master this skill in a 1-day workshop, a poster was made and posted on the unit in December 2004. The poster included the anatomy of the heart, the cardiac circulation and conduction system, and the normal and the most common dysrhythmias seen on ECG strips. Descriptions of the characteristics of each rhythm were also included in the poster.

Some nurses indicated that there were no policies, guidelines, or recommendations in the hospital to guide

their charting. Lack in guidance in documentation may be part of the reason for poor documentation (Casey, 1995). A list of recommendations for effective nursing documentation was obtained from the Nursing Professional Resource Department of the hospital and was posted on the unit in November 2004.

Discharge planning is important to smooth patient transfers from the hospital to the rehabilitation unit, long-term care facilities, or back to the patient's own home. Every patient admitted to the unit should have a discharge plan initiated to coordinate services provided to the patient from all healthcare professionals when the patient is discharged. According to the chart audit results, a high percentage of patients did not have the documented discharge plan. Lack of documentation on discharge planning may result in misunderstanding, repetition of information, and even delays in a patient's transfer or discharge (Macleod, 2006). Starting in December 2004, the unit manger assigned the rehabilitation liaison, one of the licensed practical nurses (LPNs) on the unit, to check all discharge care plans and assist primary nurses to initiate the discharge planning for patients.

DISCUSSION

The goal of this chart audit was not only to assess the completeness of nursing documentation on the unit but also to review the nursing practice, standards of care, and consistency of treatment provided. During chart auditing, several issues were identified.

Comments From Nurses on the Chart Audit

Initially, some nurses resisted the chart audit because they believed that it was an evaluation of their performance. After the reviewer discussed the importance

of documentation and how the chart audit was meant to help nurses in their charting skills, most were willing to change. A few months after the chart audit had been started, some nurses approached the reviewer and asked to have their charts reviewed to improve their documentation.

Trends Identified During the Chart Audit

In the early phase of the chart audit, large numbers of incomplete components were identified. With the continuation of chart audit, the number of incomplete components decreased gradually (see Figure 2). This result suggests that the chart audit increased nurses' awareness of the importance of effective documentation. Morrissey-Ross (1988) states that high-quality documentation requires that both nurses and management work together to create a culture that emphasizes the importance of documentation. The hospital management supported the use of several strategies to improve nursing documentation. Nurses also discussed the chart audit during social conversations.

Difference of Documentation Between Shifts

Morrissey-Ross (1988) stated, "Poor charting habits are often contagious and have a way of perpetuating themselves" (p. 369). Another interesting finding in this chart audit was that if the day nurse charted well, the evening and night nurse would chart well too. If the day nurse charted poorly, the chance that the evening or night nurse also charted poorly was relatively high (see Figure 3). For example, it was noticed that if the day nurse had not entered the intake and output balance, the evening or night nurse would not either. Also, if the day nurse had not completed the admission assessment record or discharge planning, the evening or night nurse would not complete these forms.

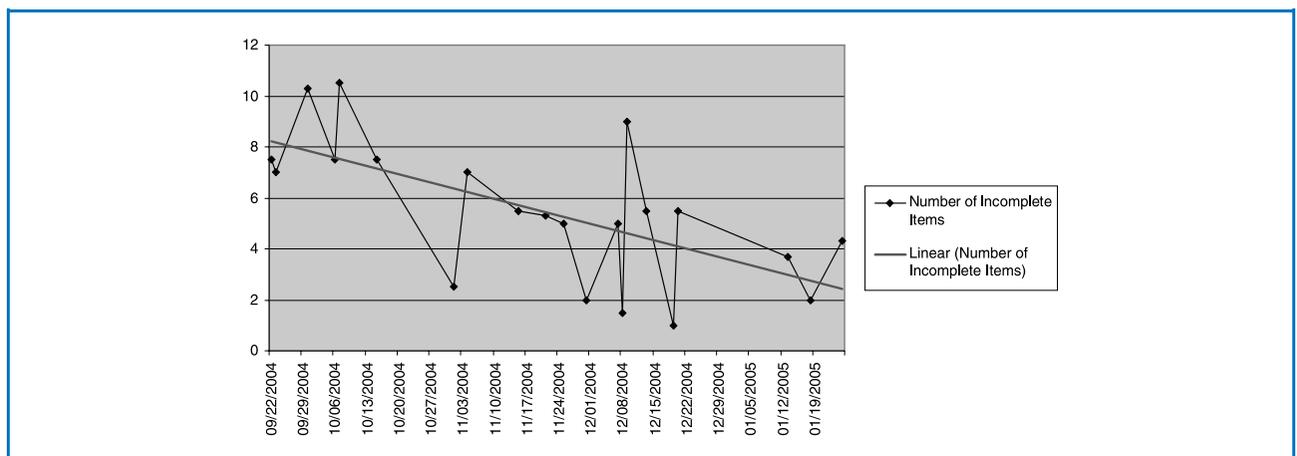


FIGURE 2 Trend of Improvement in Nursing Documentation.

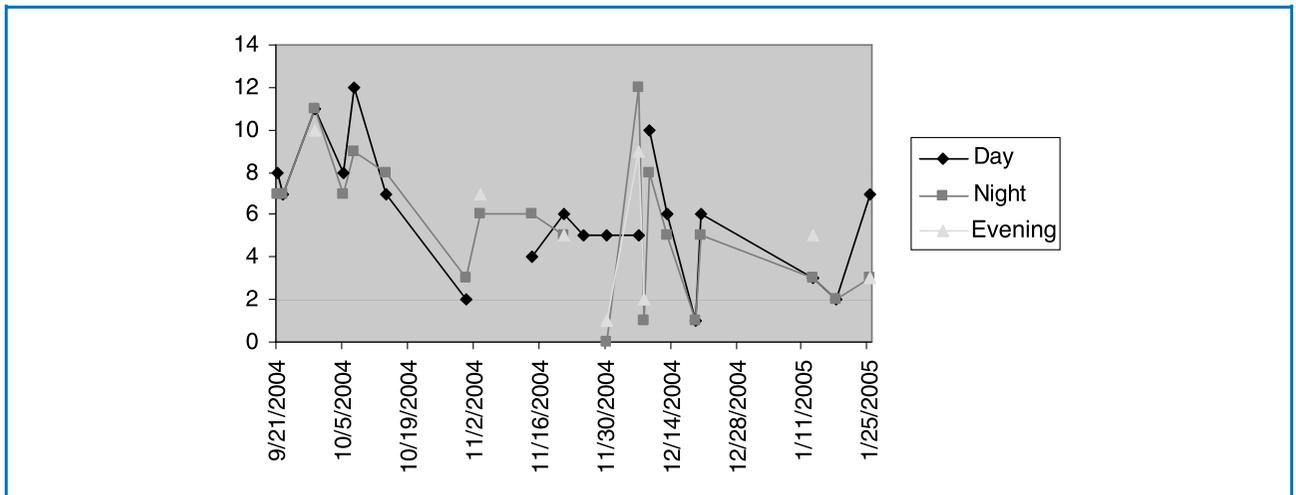


FIGURE 3 Comparing Incomplete Components Between Shifts.

Some of the nurses indicated that the most common reasons for incomplete charting were lack of time for charting and peer pressure. These issues are consistent with other researchers' findings. Howse and Bailey (1992) indicated that one of the social obstacles for poor documentation is the norm within the group. Bjorvell, Wredling, and Thorell-Ekstrand (2003) stated that lack of time is a major issue for completing nursing documentation. In this unit, nurses would finish all their morning routine before they did their documentation. Sometimes, there was a 4- to 6-hour gap between the time care was provided and the time of charting. With the support from the manager, an extra nursing attendant was hired and assigned to help with the morning routine so that nurses could do their documentation in a more timely fashion. The increased awareness of the importance of documentation, support from the manager, and implementation of several strategies have significantly affected the quality of nursing documentation.

Differences Among Nurses Based on Educational Preparation

The results of the chart audit also demonstrated some differences in documentation among the nurse with a diploma, the nurse with a degree, and the LPN

(see Table 1). Both the diploma nurse (>37%) and LPN (>35%) had more incomplete components in comparison with the nurse with a degree. Apparently, only degree-granting education programs have classes in documentation skills. Nurses from diploma programs and LPNs learned their documentation skills on the job or in their clinical practice. Therefore, the knowledge and practice related to documentation vary depending on the nurses' clinical instructor or preceptor.

Rodden (2002) stated, "For the majority of nursing staff, no training had been available in the post registration period" (p. 41). Simmons and Meadors (1995) indicated that such training can be through formal or informal educational events. To provide more knowledge and skills and to standardize the documentation among all nurses, teaching plans were developed, including strategies such as sending an e-mail to all nurses in the unit describing the importance of documentation and recommendations on how to document. A few inservice classes on documentation were conducted on the unit. A special session in the orientation program was designated to introduce the standards and expectations of documentation in this specific unit. A "cheat sheet" on recommendations of documentation was added to the orientation manual for reference. In addition, the educator of the unit reviewed

TABLE 1 Number of Incomplete Items in Documentation Between Nurses Based on Educational Preparation

| | No. Nurses | Incomplete Items | Average | Difference Between Degree Nurses Versus Diploma Nurses and LPNs |
|--------------------------|------------|------------------|---------|---|
| Degree nurses | 20 | 91 | 4.55 | |
| Diploma nurses | 17 | 106 | 6.24 | >37% |
| Licensed practical nurse | 6 | 37 | 6.16 | >35% |
| Total | 53 | | | |

the documentation of the new nurses when they finished orientation to ensure that their documentation was in compliance with the recommendations.

CONCLUSION

Each nurse spends a significant amount of nursing time completing documentation. Effective documentation is essential for meeting the professional standard (Suillivan, 2004) and is a requirement for accreditation. This chart audit project was conducted in a retrospective method. Because the chart audit was conducted 1 day after charting was completed, it provides results similar to those of a prospective method. However, the chart audit was still very time consuming. It took about 3 hours to review the documents, assess the care provided to the patient, and complete the feedback form. However, the time used was worthwhile. Nurses have demonstrated a significant improvement in documentation after the chart audit. The results of the chart audit not only helped improve nurses' documentation but also revealed some nursing issues that can be resolved. With the support from the management, the chart audit was a successful project. After sharing the results of the chart audit with educators and managers from other units in the neurosciences department, these other units in the department are conducting their own chart audits to review and improve the standard of nursing documentation in these units.

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