Essential Elements of Nursing Notes and the Transition to Electronic Health Records

The Migration from Narrative Charting Will Require Creativity to Include Essential Elements in EHRs.

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KEYWORDS
Charting, documentation, nursing care, computerization, electronic health record, EHR.

ABSTRACT
Nursing notes have historically told the patient’s story of nursing care during a hospital stay, but technology and trends in healthcare require conversion of paper to electronic health records (EHR). The purpose of this study was to explore what clinical nurses believe are essential elements of nursing notes, ways that these data are documented and barriers to documentation.

This qualitative study used four focus groups. Twenty-four registered nurses identified themes of evidence of care, quality issues, interaction patterns, clarification and the “picture” of the patient.

Barriers to documentation were time, legal issues, defensive charting, “sidebars” and family/patient behavior. Findings suggest that the transition to EHRs will provide solutions to time-intensive charting and allow for detailed task check-offs. However, psychosocial characteristics and indirect care activities not quantified on checklists also are necessary for understanding the patient experience. The migration from narrative charting will require creativity to include essential elements in EHRs.

Nurses have told the patient’s story for decades in the form of written narrative nursing notes and the verbal shift report. The advent of paper flow sheets and checklists over the past two decades streamlined the data recording process for many specialty and acute-care units. However, improvements in computer technology now support the implementation of clinical documentation and information systems across all healthcare disciplines. This move to computerized systems makes it necessary for nursing and allied health professionals to reframe their thinking about recording the patient’s story. Commonly held beliefs among some nurses, as explored in this study, are the need to tell the patient’s story, explain the problems encountered and convey ideas that are not quantifiable for a computer entry system. Despite these beliefs, patients may be better served when nurses give up the written narrative charting and invest their energies into electronic health records (EHR).

Complicating this transition are research studies that support conflicting beliefs and practices related to nursing documentation. Nurses are reluctant to use computers because they feel that it will
either take them away from the bedside, or because conventional methods of charting are easier and more intuitive to use.2,6

Howse and Bailey reported that nurses, historically, have resisted documentation and held negative views of charting.7 Tapp also described nurses’ views on the inhibitors to charting.8 Surprisingly, lack of computer literacy did not appear to be an issue.9 The major barrier may be resistance to the idea of computerized documentation systems. Such concerns provide an open area for research into the critical elements of the narrative nursing note, one of the indicators of care given to patients. Although fundamentals of nursing textbooks give guidelines for charting, research and theoretical essays on the content of the nursing note are nearly absent from published literature.

However, Saba and McCormick address this theoretical perspective on nursing documentation in their publication on nursing informatics.10 These issues stimulated the following research questions:
1. What do nurses believe are the essential elements of a nursing note?
2. What are the ways that nurses communicate their nursing work?
3. What prevents nurses from documenting key issues in the patient chart?

These questions framed a research project to translate the essential elements of a nursing note into a format suitable for inclusion into an EHR. The researcher designed a qualitative study to identify the essential elements of narrative nursing notes as described by registered nurses in the clinical setting and to explore the transition of narrative notes to the EHR format. The study addressed three research questions and focus group methodology was used to collect the data.

BACKGROUND

Clinical documentation across all disciplines, whether narrative, computerized or a combination of both systems presents an ongoing challenge in healthcare. The terms charting, narrative charting, nursing documentation, narrative notes and nursing notes are used interchangeably and may be regarded as identical in meaning. The change from narrative notes to EHRs is occurring now and directly affects the future of the healthcare system in the United States. This transition presents multiple challenges to health providers and the hospitals and clinics in which they are employed.

The earliest published research on nursing notes dates to 1964, when Walker and Selmanoff reported the findings of their exploratory study of the nature and uses of the notes. Nurses considered charting as an “instrumental function” of nursing (p 120) without significant status. Furthermore, nurses’ notes were not deemed an effective means of communication among interdisciplinary and multidisciplinary staff.11

Walker and Selmanoff also noted that documentation of the patient’s care and progress by nurses, or the story of nursing care, was inadequate in quality and quantity. Nurses reported satisfaction with the existing practice, even with minimal time spent in charting and minimal content in the notes. However, omissions in documentation were identified as a serious and frequent problem.

Walker and Selmanoff theorized that verbal communication with handoffs, ongoing updates, and the shift report may have supplemented written documentation.12

Nearly three decades later, Tapp conducted a grounded theory study with registered nurses in a veterans hospital on the inhibitors and facilitators of nursing documentation. Findings suggested that nursing lacked “a distinct professional identity and language” (p 238) as perceived by the participants.8

Documentation was deemed inaccurate, incomplete and inconsistent, adding to its lack of credibility and value. Tapp found that accurate documentation was integral to defining clinical nursing practice and substantiating that nursing care had occurred. Such communication linked practice to both research and education.

Brooks analyzed nursing documentation in terms of describing the actual work of nursing and compared verbal descriptions of care issues with the written documentation from the same patient charts. She also found that nurses were struggling with challenges in streamlining and condensing documentation in case-managed systems and managed care environments. Her findings supported the need to investigate and refine nursing documentation practices to reflect and capture the holistic nature of nursing care.22

The essential elements of nursing notes were rarely addressed in the clinical or research literature. References to the actual content of charting were related to the format of the nursing process categories or completed tasks. However, the identification of the essential elements of nursing care is important to the transition to an EHR system.

The movement from a narrative system of charting to an EHR system requires major changes in mindset, knowledge, performance and skills.13 In addition, providing a translation of the required content areas and documentation needs is crucial to the planning and implementation of a high technology EHR system.

METHODOLOGY

Qualitative research design uses language to explore meanings rather than numerical or quantitative data. The researcher is involved with participants who can provide narrative content to explain their experiences with the topic and descriptions of situations. Focus groups are a qualitative method in which participants respond to questions about their experiences.

This study used focus groups of nurses to identify currently held beliefs regarding the essential elements of nursing notes. As a qualitative research method, focus group interviews provide a venue for sensitive discussion of individuals’ beliefs, perceptions, and attitudes.14-16 The subjective nature of focus group methodology lends itself to exploring the beliefs and attitudes of professional nurses who shared their experiences with colleagues in a comfortable, non-threatening environment.

Focus groups facilitators encourage participation and open dia-
1. When you document, who do you think reads your notes and what do they look for?
2. What do you see as the value of documentation? What is most important and for whom?
3. How accurate do you think that documentation is as a reflection of nursing work done that shift?
4. Think about one patient you cared for in the past few days. What was one key nursing issue?
5. How did you communicate that key issue and to whom?
6. What parts of this issue might be important to convey in writing?
7. What factors influenced your decision about what you wrote in the chart?
8. What did you find important to chart? What other ways do you communicate?
9. Is there anything you want to chart but can’t or don’t? What stops you from charting?
10. What would make documentation easier for you?


Table 1: Questions for Focus Groups.

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<th>Question</th>
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Historically, focus group methodology has been used as a market research strategy. The method has been found to be beneficial in nursing research to shape and develop nursing education strategies, evaluate clinical practice goals, explore and discover patterns, and interpret behaviors, feelings and meanings.

Completion of the focus group and analysis of group data followed similar processes as are used in qualitative studies. Content analysis of the data using an inductive approach was done for development of thematic categories until data saturation was achieved. Data saturation occurs when repetition across responses is noted and no new information is added by participants in the sessions.

**DATA COLLECTION**

The study was conducted in an urban hospital setting in the northeast region of the United States. The hospital's Institutional Review Board (IRB) approved the proposal. A research team composed of the primary investigator, a nursing research council task force, and two facilitators planned the implementation of the study.

All members of the hospital’s professional nursing staff were potential subjects. Using a random number table, 150 nurses were selected from the total of 480 registered nurses on the staff. The plan was to recruit at least 30 nurses from the professional staff to represent all areas of specialties and units. Since patient census was high, staffing patterns were not flexible and nurses needed to come in to the setting outside of working hours, a large pool of potential nurses were selected.

The nurses were mailed letters inviting them to participate in the focus groups, along with demographic data forms and informed consent forms. The consent forms included an offer of monetary compensation for participation in one of the group sessions. Thirty nurses agreed to participate and completed the forms. Demographic data sheets and consent forms were returned prior to the start of each session. Follow-up phone calls were made to each nurse to verify receipt of the forms and confirm the date and time for the focus group session.

The final participant groups included 24 nurses (21 females and three males) from all major specialty areas in the hospital. The age range was 23 through 56 years, with a mean age of 41.6 years. The average for years as a registered nurse was 15.3. Focus groups ranged in size from five members to eight members and each group met for two hours.

The focus groups were scheduled during the staff’s non-working hours. Five focus groups were planned; however, one early session was canceled due to minimal membership and high staffing needs at the hospital. Scheduled participants in that group joined one of the remaining groups. The four focus groups were held at various times throughout the day over a three-week time span. The rooms
chosen for the sessions were conference rooms that were well-lighted and furnished with comfortable chairs. Refreshments were provided for all participants at the conclusion of each session.

Both facilitators for this study were registered nurses with strong clinical backgrounds and members of the quality management department. They were trained in focus group facilitation by the researcher and an experienced focus group facilitator from the department of organizational staff development. The facilitators of the focus groups prepared for two months prior to initiating the study.

The researcher opened each focus group session with an introduction to the study and the facilitators and presented guidelines to be used in the session. The facilitators then conducted the focus group and at the end of each session, the researcher returned and thanked the participants. A compensation benefit of $25 was distributed to each participant at the conclusion of the group session.

Modifications of Brooks’ questions guided the focus groups for this qualitative study. (See Table 1.) The questions were sent to each confirmed participant at least one week prior to the scheduled session. The questions were also printed on poster boards that were prominently displayed in the conference room during the focus groups. Following the first focus group, questions were reordered to facilitate the group participation in the final three groups. Responses to the questions were tape-recorded for transcription of content. Meanings and beliefs were clarified with participants throughout the sessions and printed on flip charts for visible validation.

The facilitators and primary investigator met following each focus group to review the process and content of the group session. The research team also met consistently throughout the study and discussed themes that arose from each focus group. Data saturation occurred during the fourth focus group session. Data were then transcribed verbatim from the tapes and flip charts into a narrative for each group. The primary investigator and members of the research team read each of the transcriptions independently at completion of the focus groups.

**FINDINGS**

The first focus group questions asked were “When you document, who do you think reads the notes and what do they look for?” Respondents identified healthcare delivery team members by their positions or functional roles. These included nurses, physicians, students, residents and ancillary staff.

A second group of persons identified were those individuals or groups who provide internal and external oversight to care delivery: care/case managers, risk managers, utilization review coordinators, Joint Commission teams, insurers and quality assurance personnel. The legal system surfaced as a separate and important entity in all four groups and was the first response of one focus group. Another focus group, with neonatal and pediatric staff, identified the parents of minor children as potential readers of the documentation, yet no group members considered the actual patient as one who reads the chart.

**Themes.** Although the nursing process formed the framework for the organization and delivery of care, five major themes formed the essential elements of a nursing note: evidence of care, quality issues, interactional patterns, clarification of orders and the “picture of the patient.”

Evidence of care included actual care activities, tasks performed, discharge plans, medications and treatments, referrals, educational interventions, changes in protocols, responses to interventions and acuity issues. This content primarily reflected physiological and educational needs. The daily hygiene, teaching sessions, therapeutic treatment regimens and vital signs comprised much of this theme.

The second theme, quality issues, encompassed thoroughness in delivery of care, the timing and sequencing of care, and continuity across time periods. The following of standards of care, the documentation of rationales for care decisions or changes, sentinel events, outcome evidence and updating care with the expansion of a care plan arose under this theme.

Interaction among various groups and individuals surfaced as the third theme. The focus groups believed that the communication patterns, context and content of interaction were important to the understanding of the patient, family and care needs. The interactions included, but were not limited to, healthcare staff and patients, patient and family contacts with other family members, and patient contacts to ancillary help. Communication of nursing staff with physicians or other healthcare specialists, nursing staff member to another staff member, or nursing staff to support services provided another pattern of interactions, one of professional contacts.

Clarification of specifics of care, unclear or unmet patient needs and details in the descriptions of problems were grouped together. Incidents or changes in treatment plans directed by individual patient needs clustered with the clarification theme.

The “picture of the patient,” mentioned in these exact words by nurses in two different focus groups, captured nurses’ descriptions of holistic assessment and the complete patient’s experience in the documentation. They spoke about their intuitive knowing and understanding of the needs of the patient in their daily work.

**Value of documentation.** Other focus group questions addressed what the participants saw as the value of documentation, what is most important, and for whom. Respondents from the groups said that the value was related to understanding the patient experience; communicating needs, ethical issues, and collaboration processes; recording the delivery of care, reviewing activity and preventing duplication of services, noting social issues and providing evidence for accountability and protection from liability.

The most important elements emphasized were basic care, the evidence of communication, ethical issues, safety measures, collaboration with others and social problems. There was agreement...
across all groups that there was value for the healthcare team members, the family and the patient. Participants noted that communication might occur in verbal and other written format, not just in chart documentation. Their examples included hand-offs at change of shift and summaries, unit communication books, and paper reports as other written sources. Verbal reports, team meetings, team rounds, and nursing rounds provided other important sources for communication.

**Accuracy.** The question about accuracy in charting, “How accurate do you think that documentation is as a reflection of nursing work done during that shift?” brought discussion about the minimal reflection of actual nursing work that can be conveyed in writing. Some focus group participants said that nursing is “active work” and “writing reflects only a small percentage of the nursing care given.”

Group members pointed out indirect care activities. Examples included contacts on the phone with families, physicians and departments; psychosocial interactions with patients and families, caring for a difficult patient, time assisting physicians and time spent looking for forms or identifying the correct form for the problem. Nurses believed that current documentation “undervalued” the work done and did not show the “nuances of care.” One group member said that the documentation “was not very accurate since the nurse is spending more time doing than writing.” All of the focus groups agreed that documentation under-represented actual nursing work.

**Barriers to documentation.** Barriers to documentation were identified as limitations in time, legal ramifications, the perceived need for “defensive” charting, “sidebar” stories and variations in family and patient behavior. Several nurses noted that charting forms varied across units and access to forms was often difficult because of differences in filing systems and availability of materials. The time spent identifying the correct form and then locating the form created frustration and used time that could have been spent with patients. Consequently, the issue of time constraint was a common theme throughout all of the group discussions.

**Summary**

Focus group themes that arose from the questions that dealt with the essential elements of documentation were evidence of care, quality issues, interactional patterns, clarification of orders and the picture of the patient’s experience. The focus groups identified the nursing process as the framework for achieving the documentation elements. The process included assessment, diagnosis with pathway development and care planning; interventions, including tasks and teaching; patient and family responses to care, change of patient status and reassessment. Participants also said that nursing is “doing” and the written documentation in the chart reflects only a small percentage of the care given. Time constraints were the most frequently noted barriers to documentation.

**Limitations**

Several limitations to a focus group study were addressed during the data collection and analysis. The facilitators were aware of the “group think” potential, where group members are less likely to share individual feelings or beliefs and tend to follow the group consensus. Efforts were made to refocus participants to individual responses on the issues with group discussion. Attempts by more assertive members to monopolize group discussion were also managed by facilitators, and all members were encouraged to share their own viewpoints and contribute examples for clarification.

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Although the research team experienced no difficulty in accessing staff volunteers for participation in the study, patient acuity and census increased during the three-month time period in which the groups were scheduled. Consequently, a few participants withdrew from their individual groups because of work schedule conflicts. The first planned focus group session was cancelled within 24 hours of its starting time as staffing needs escalated when the patient census increased on several units. Those nurses who were available for another scheduled group arranged to participate at a different time. The variety of specialties represented in the focus groups did not appear to be a problem as discussions were open, candid, and respectful. Using focus groups of nurses from one medical center limited the findings to one particular urban setting, which may not represent nurses in other regions or in other acute care agencies.

**Clinical Implications**

The redesign of traditional clinical records into an EHR system presents multiple opportunities for improvement, both in what nurses present in the patient record and how it is presented. Focus group themes of the nurse work being inaccurately reflected in the record may be the main reason behind some nurses’ resistance response to computerized documentation.

The most dramatic change from narrative notes to EHR systems is the standardization of data elements and terminology. The current electronic format focuses on the capture of orders or actions, documenting the completion or result of an action and ongoing documentation of objective assessment findings.

Opportunities to streamline communication and documentation, decrease the amount of duplicative data entry, add to the evidence base for practice, influence policy-making and improve the standard of care are inherent in these systems. EHR systems will adequately meet and indeed enhance the completeness of documentation of basic care, clarification of orders, quality and safety elements, and the nursing process charting requirements as defined by the focus groups and supported by the literature.

However, current systems fall short of the identified need to communicate the collaborative care planning and goal-directed, outcome focus of integrated care delivery. The transition from
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The transition from traditional narrative notes to EHRs will require an adaptation of free text charting in EHR software programs, stakeholder buy-in and common language to capture critical descriptive details from healthcare providers. The National Institutes of Health (NIH) reported that implementation of a successful electronic record format for clinical documentation had the potential to save more than one-fifth of nursing time. The migration from narrative charting will require creativity in design so that essential elements of nursing notes identified by nurses are included in EHRs. The process of refinement must continue until accurate and comprehensive representation of nursing care these in current integrated systems. Acceptance and realization of the need to move from discipline-specific documentation to interdisciplinary health records, and indeed, to a truly integrated, goal-directed record of a continuum of care are necessary for successful adoption of EHR systems.

Nurses working collaboratively with other clinicians must now create a multidisciplinary, integrated database. The database requires the design of a care team and an understanding and acceptance of the individual and collaborative nature of each discipline involved in the team to effectively and efficiently coordinate and manage the continuity of care. The nurse, as a central player in this team, must be able to clearly articulate the nurse’s role and responsibilities as defined by the nursing process. Special attention to the psychosocial, ethical, and communication/interaction documentation needs, as defined by the focus groups, will be needed to facilitate the transition from the narrative format to an accepted online record.

CONCLUSIONS

Taking into account the responses of the registered nurses participating in this study’s focus group discussions, the psychosocial characteristics and indirect care activities not quantified on checklists are necessary for understanding the patient experience. Although this was one study with one group of registered nurses in one medical center, clinical anecdotal feedback from nurses in other areas of the country reflect similar themes as those that emerged from this focus group study. Further exploration of these concerns will assist medical centers in designing and/or implementing programs that meet the mandates and fit their own institutional models.

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Future research includes a gap analysis of defined, required elements of nursing documentation and the ability to capture siloed, discipline-specific charting to a truly integrated record is essential yet unsettling for some healthcare professionals. The requirement for a common vocabulary and approach to the computerized record may unify specialties, but also blur the lines between them. There is a critical need to define the role of nurses as members of an integrated team. The team must develop trust and respect between and among care providers in order to share, build upon and complement the assessment findings and evaluation of patient-specific goals. The nurse who prefers handwritten documentation rather than EHRs to define nursing practice will find this to be a difficult adjustment.

The nurse who chooses to give the “patient’s story” during handoff or shift report rather than find a way to reflect the story in the EHR has an opportunity to improve an incomplete patient record. This perspective addresses the nature of nurses’ concerns with telling the story as communicating anecdotal evidence. Wiltshire differentiated verbal storytelling from writing a narrative, which he described as a reflective, thoughtful, and theoretical construction. The narrative implied a more “equivalent position” between the nurse and the patient (p 81) linking empirical and theoretical content in documentation.

Definitions of standards of care and assessment criteria will provide opportunities to streamline current care processes and to understand why these processes are performed the way they are. Regulatory and institutional documentation requirements have and will continue to provide the framework for defining documentation standards.

Although current EHRs sufficiently meet the nurse’s need to document themes of evidence of care, they fall short when reporting the “story” that adequately depicts the context of human interactions, emotional and social perspectives, and sequence and timing of actions. Focus group feedback also noted who the nurses’ thought did and did not read nursing documentation. Clinician participation is critical for expert input in all aspects of definition of content and context of data element documentation.

Major vendors are moving towards integrated and automated documentation systems especially for case management. Shared data elements in the patient record afford increased exposure of nursing notes to other disciplines’ notes and vice-versa. This exposure, combined with regulatory-driven requirements for improved reflection of individualized care in documentation, will move healthcare institutions toward true integration of interdisciplinary teams and enhance the translation of research into practice.

FUTURE RESEARCH

The translation of elements into EHR format is in process. Because of the federal government’s commitment to promote nationwide adoption of EHR systems, it is likely that the trend to translate nursing notes to EHR format will continue to grow.
is achieved within the context and framework of an integrated, online health record.

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