Critical Care Nursing

Iran J Crit Care Nurs. 2014;7(3):132-141

Journal home page: www.inhc.ir

Nursing Documentation Requirements in Coronary Care Unit

Khadijeh Nasiriani1, Hamide Dehqani[1], Mahdi Akbari Roknabadi[*]

1. Nursing department, School of Nursing and Midwifery, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

ARTICLE INFO

Article type:
Original article

Article history:
Received: 20 Dec 2013
Revised: 27 Aug 2014
Accepted: 30 Aug 2014

Keywords:
Nursing documentation
Coronary Care Unit (CCU)
Iran
Qualitative study
Content analysis

ABSTRACT

Aims: Considering the importance of correct documentation in taking care of the patients especially in Coronary Care Unit (CCU), this study aimed at explaining nursing documentation requirements in CCU for improving the reporting system.

Methods: It's a qualitative content analysis study, 15 qualified nurses and 15 qualified instructors from Iran were selected through purposeful and snowball sampling method in 2013. They explained documentation requirements in the CCU by using open-ended questionnaire. One note software was used for data analysis.

Results: After data analysis, 22 subcategories from 5 main categories were emerged as documentation requirements in CCU: 1. Health history, 2. Health evaluation, 3. Monitoring, 4. Nursing interventions, and 5. Nursing discharge notes.

Conclusions: On admission information regarding health history, findings achieved from patient's health assessment in different situations such as; a. at the beginning of admission, b. at the beginning of every shift and c. Discharge time, also information achieved from patient's monitoring during shift; nursing interventions done for the patient and discharge time report are counted as nursing documentation requirements in (CCU).

Please cite this paper as:
Nasiriani Kh, Dehghani H, Akbari Roknabadi M. Nursing Documentation Requirements in Coronary Care Unit. Iran J Crit Care Nurs. 2014;7(3):132-141.

1. Introduction

Nursing documentation is a part of clinical notes which is done by nurses and it contains all the written information regarding a patient's conditions, his/her needs, nursing cares and responding to cares [1].

Documenting and conveying information in its correct way is one of the important duties of a nurse and the slightest error and negligence can cause professional problems for the nurse and the patient's health [2].

Currently in Iran, most of the recording systems are in traditional and storytelling form and it does not have any specific structure and formatting, so that there is the probability of subjects distribution, repetitive documentation, omission of information and also instability between different parts of a report, so that data recovery is going to be hard for the subsequent usage [3].

* Correspondence Author: Mahdi Akbari Roknabadi
Nursing department, School of Nursing and Midwifery, Shahid Sadoughi University of Medical Sciences-Yazd, Iran.
Tel:+989132534954
Email: akbarimahdimail@gmail.com

[Downloaded from mail.jccnursing.com on 2026-11-15]

These factors impede nursing documentation to find its real and vital situation and performance [4].

Nursing documentation has a very important role regarding members of a treatment team, continuity of care, reminding nurses and their involvement in professional duties and responsibilities, evaluation of therapeutic interventions, determining health care costs, supporting and protecting legal rights of patients and nurses and providing research and training details.

Despite the importance of documentation quality, specifically in CCU, different domestic (5-8) and foreign (9-11) studies indicate low quality of nursing documentation.

In many cases, the reasons of this problem are the shortage of nurses' knowledge about the items that should be documented, lack of appropriate structure for recording, lack of control and observation and lack of evaluation, encouragement and punishment system [10, 12]. Documentation according to key words and in a structured form can probably help in solving these problems.

Using this method in documentation can lead to nurses' increased knowledge and occupational skills.

From the other side, this method facilitates information retrieval for evaluating documentation quality, guaranteeing care quality, collecting information for conducting clinical studies and researches [13].

Writing report according to structure helps the nurses to document events at the moment [14] which leads to certainty of reports recording and a proper reflection of the patient's conditions and taking care of the patient [15]; specifically an immediate report, documentation and assessment in CCU leads to immediate decision making of the medical team and decrease of cardiac emergencies [14]. Documenting nursing care through this method makes the nurses to think about the patient and disease and achieve more awareness about patient's conditions and the patients' problems are going to be more specific and it is going to lead to more specific nursing measures [16].

Standardization and uniformity of nursing documentation are the concerns of many countries [17]. Considering researcher's conducted searches, there are very few studies about nursing documentation in CCU.

Since content analysis is an appropriate method for achieving valid and reliable results from the textual data in order to create new knowledge and attitude, providing practical facts and guide for performance [18], it is necessary to do this process with holistic approach and through qualitative method.

Since determining words and components are necessary for a structured documentation according to the key words, this study is conducted with the aim of explaining documentation requirements in CCU.

2. Methods

It's a Conventional Content Analysis qualitative study which explains nursing requirements in CCU.

Fifteen nurses working in CCU and fifteen lecturers of cardiac intensive care lesson were selected from the whole country through purposeful and snowball sampling method in 2013. Participants working in CCU were selected among the nurses who were working in CCU during information collection; they had at least three years of working experience in CCU with at least nursing BA.

Also some lecturers who had the experience of theoretical and practical teaching of CCU for at least three years and with at least nursing MA were selected for the study.

After achieving informed and written consent, participants entered the study voluntarily.

The main method of data collection was a questionnaire including five open-ended questions about documentation in CCU and due to distance; it was faxed or emailed for the members in the form of written texts.

100% of the lecturers and 93% of the nurses sent the answers. Every written text was immediately coded and analyzed after

[Downloaded from mail.jccnursing.com on 2026-11-15]

achievement. Data analysis was done according to conventional content analysis method after reading and reviewing written texts and coding was done by using one note software.

In the next stage, the basic contents of subcategories were recognized by comparing and combining codes, and the main themes were determined by completion of reviewing written texts (omission and combination of the subcategories) and analysis progress [19].

To ensure data consistency; according to Lincoln and Gouba' opinion, we considered credibility, dependability, transferability and conformability which are the scientific accuracy in qualitative studies [20].

One of the best methods for creating credibility is long-term involvement with the subject; during this study, the researcher was involved with the subject of the study and nursing documentation in CCU.

The methods of allocating enough time for collecting data, good communication and frequent phone calls to the participants, reviewing data by mentors and advisors and professionals were used for increasing acceptability and reliability of data.

Also sampling technique was used with the highest variety which helps transferability of findings to others or readers.

Through avoiding personal beliefs and prejudice by the researcher, conformability was also considered.

Informed and written consent and voluntarily participation, anonymity, confidentiality of information, right to withdraw during the study and other ethical observations were considered.

3. Results

After data analysis, five main categories were emerged as the documentation requirements in CCU:

a. Health history
b. Health assessment
c. Monitoring
d. Nursing interventions
e. Nursing discharge report

A. Health history

One of the main categories which was introduced as the CCU recording requirements by the participants was health history which indicates history of patient's health situation and includes the following subcategories: biographic and organizational information, patient's main complain, current disease history, past medical history, family history, warnings, the conducted measures before admission, information related to admission and the source of providing information. Participants believe that this information should be taken from the patients and recorded on admission.

Participant number 12 says: "a patient's health history including biographic information, current disease, underlying diseases, family and medicinal records should be taken and recorded".

Participant number 17 says: "recording some information such as the place of patient's reference, reference instrument, the time of patient's entry to the ward, clinical fellows and patient's last name are very necessary on admission."

B. Health assessment

Participants believed that a nurse should achieve information from the patient and record them by using physical examination methods on admission or at the beginning of every shift or in necessary situations. This main category is extracted from the two overall assessment and system assessment subcategories.

Overall assessment included the following subcategories: signs and subjective and objective symptoms, patient' physical, mental and social problems, vital signs, height and weight, diet, feeding method, appetite and food tolerance, sleep status, permitted activity, personality status and warnings.

Participant 16 says: "a nurse should examine body systems by putting cardiovascular and respiratory systems in priority and records the findings on admission and also at the beginning of every shift".

[Downloaded from mail.jccnursing.com on 2026-11-15]

Participant 5 says: "a nurse should do an exact system to system examination and records them during patient's assessment at the beginning of every shift and in every ward. Examination of cardiovascular system is in priority in CCU. Immediately after that patient's condition was appropriate, examination of other systems of the body should be done in the same way".

C. Monitoring

Other main categories that are considered as the recording requirements in CCU by the participants of our study were findings achieved from monitoring. Participants believe that patient's moment changes in CCU should be considered and they have to be recorded on time. This main category consists of two subcategories: signs and subjective and objective symptoms, and monitoring care process.

Monitoring signs and subjective and objective symptoms

Participants believed that permanent consideration of signs and subjective and objective symptoms such as vital signs, heart rhythm, consciousness level, EKG changes, patient's complains and oxygen saturation lead to identification of certain and probable problems of the patient and continuity of care program.

Participant 1 says: "constant assessment and recording vital signs, heart rhythm, EKG changes, patient's complains and problems are the main and important part of a nurse's activities in CCU that should be considered since a patient's admission to his/her discharge."

Monitoring care process

Participants believe that constant consideration of: the level of adaptability and tolerance of the patients and their relatives, function of fittings and devices connected to the patients, therapeutic interventions (serum and oxygen therapy), patients' problems during a shift, barriers to care, measures feedback, the level of patient's activity during shift, patients' tolerance to measures and follow-up measures are necessary.

Participant 2 says: "feedback on the done measures, unexpected events during treatment and follow-up measures should be recorded".

Participant 22 says: "recording ventilator settings, the situation of catheter connected to the patient, drugs and serum during the shift, the level of patient's activity and tolerance to the activity and barriers of the care is necessary".

D. Nursing interventions

Among other achieved main category in this study, it can be pointed out to nursing interventions and this main category is extracted from four subcategories that is: health care, supportive, educational and coordinator measures. Recording cares and measures related to the problems that are determined at the time of patient's assessment and monitoring are included in these categories.

Care and treatment interventions

All the nurse's care and treatment interventions for a patient should be recorded whether independently or by the cooperation of other members of the care treatment; these cares include the following subcategories: a: general cares (care related to physiologic needs, care related to immunity and prevention, care related to patient's comfort) B: Specialized diagnostic and therapeutic interventions (working independently or as a colleague) (pharmacotherapy, oxygen therapy, EKG, ETT etc.) C: care before and after diagnostic and therapeutic procedures.

Participant 19 says: "recording care before, during and after drug therapy, care related to the patient's fittings and cares before surgery (shave, satisfaction with surgery, para clinics and fasting (NPO)) and after surgery and care related to meeting physiologic needs are necessary".

[Downloaded from mail.jccnursing.com on 2026-11-15]

Participant 26 says: "care related to objective and subjective symptoms (pain care, shortage of breath, patient's nausea and anxiety) and preparations for diagnostic and treatment measures are among the nursing interventions that should be recorded".

Supportive interventions

Participants believed that full support of the patient (physically, mentally and legally) is one of the most important roles of nurses specifically in CCU.

Participant 16 says: "recording cares related to reducing patient's anxiety especially at the beginning of his/her admission and getting patient and his/her relatives consent are necessary in emergencies".

Educational interventions

Education is in three parts in the participants' point of view; on admission, during hospitalization and at the time of discharge. It should be mentioned that all the presented education to the patient should be recorded, since lack of recording means it hasn't been done at all. Disease and the process of treatment, the ward rules, and the amount of permitted activity, using the ward facilities, devices and alarms should be taught to the patient at the beginning of admission. Education at the beginning of admission is more important since lack of patient's awareness of the environment and observing devices lead to patient's increased anxiety; stress has an inappropriate impact on cardiac patients. Also participants believed that it is necessary to record the presented educations including treatment process, medical diagnostic tests, drugs, disease recurrence symptoms and their information and diet during hospitalization. Also at the time of discharge some educations regarding diet, drugs (time, the method of using, the amount of using, cares, drug interventions, allergies, contraindications), the amount of permitted activity, management of angina, warning signs and the way of dealing with them, asleep and rest, bathroom, sexual activity, taking care of special devices such as pacemaker, lifestyle modification, date of next appointment, guidance and advice call after discharge should be recorded in nursing discharge report.

Participant 24 says: "patients should be taught about the ward rules, disease and using the urinary container on admission to decrease their anxiety".

Participant 21 says: "patient should be taught about disease, treatment process and diagnostic tests during hospitalization and they have to be recorded".

Participant 3 says: "providing and recording educations such as diet, level of activity, drugs, warning signs that need further reference, the exact time of next appointment with the doctor are necessary at the time of discharge"

Coordination of treatment team

Participants of this study believed that a nurse as a coordinator of the treatment team should record his/her relationships and coordination with other members of the treatment team, also he/she should record the treatment team relationships with each other; if they don't record the information, their treatment relationship will be cut off. Nurse's relationship with other members of the treatment team and the patient's family, interventions of other health treatment members, their feedback and their relationship with each other should be recorded.

Participant 23 says: "all the diagnostic tests which have been done for the patient and their results and also important and unnatural achievement of the tests, visits and consultations should be recorded in the nursing report".

E. Nursing discharge report

The last theme extracted from the content analysis was nursing discharge report. A recording which is done by the nurse at the time of patient's discharge and it consists of some information that make relationship between different caregivers and works their guidance

[Downloaded from mail.jccnursing.com on 2026-11-15]

Table 1: The main categories and subcategories extracted from content analysis

Main category	Subcategories
Health history	Biographic and organizational information, Patient's main complains, History of the current disease, Last medical history, Family history, warnings, Measures done before admission, Information related to admission, The source of providing information.
Health assessment	Holistic assessment, Systems assessment.
Monitoring	Monitoring signs and subjective and objective symptoms, Monitoring care process.
Nursing interventions	Health care measures, Supportive, Educational , Coordination measures.
Nursing discharge report	Disease process, General status of the patient at the time of discharge, Measures that can be followed, Educations during discharge, Discharge information.

too. The subcategories of this theme include; the process of disease (the initial diagnosis, the final diagnosis, a summary of the problems and measures), patient's general condition at the time of discharge, follow-up measures, educations during discharge and discharge information.

Participant 2 says: "the process of disease by emphasizing on problem, an overall report of the patient's status at the time of discharge, follow-ups, presented educations during discharge and the nurse responsible for discharge should be recorded during patient's discharge".

Considering findings of the above study (table one), it can be concluded that by getting health history and assessing patient's health and recording that at the beginning of admission, patient's basic situation and his/her problems will be determined. Also health assessment at the beginning of every shift causes continuous and updated care program and identification of the new problems and also awareness of the new nurses in the ward about the patient's status and problems. From the other side, constant monitoring of the patient during shift identifies moment problems and changes and nursing interventions will be done by considering the achieved data from these stages. Patient's health assessment will be done again at the time of discharge and nursing discharge report which is in fact the cause of treatment continuity among the different health centres will be recorded.

[Downloaded from mail.jccnursing.com on 2026-11-15]

4. Discussion

Recording items related to health history, health assessment, health monitoring, health interventions and reporting nursing discharge are necessary during patient's hospitalization in CCU.

It's quoted from Salimi (2013) that getting health history at the beginning of admission helps the nurses to achieve a background of the initial status of the patient and defend the patient and their (nurses themselves) legal rights by using that information [21]. Study of Ehnfors et al. (1991) which led to development of VIPS model for nursing recording showed that recording nursing history and nursing status is necessary. Also the necessity of separated recording of nursing history and nursing status has been emphasized in this study [22]. Similarly in our study participants pointed out to recording health history and health assessment separately. The study of Stokke et al. (1991) which assessed structure and content of nursing report in Norway considered some issues such as admission, health status, sensitivity, previous provided care, social history and lifestyle at the time of getting health history [23]. Bjorvell et al. (2000) talks about patient's health assessment as one of the main duties of nurses which has to be done and recorded on admission in the ward or regularly for example at the time of delivering the patient at the beginning of a shift, and also at the time of discharge. Actually by assessing patient's health in every shift, patient's problems are identified and the care program is updated [24]. Kinnunen et al. (2012) in their study regarding developing a standard model for recording wound care showed that recording wound status assessment in nursing report has a remarkable impact on improvement of care quality [25].

Considering the importance of intensive unit and moment change of the patients' status, one of the main duties of the nurses in intensive unit is constant observation of the patients in terms of vital signs, heart rhythm, consciousness status, oxygen saturation, signs and subjective and objective symptoms, the current drugs and serums, absorption and excretion status etc. and recording the achieved information from this monitoring. This constant and moment monitoring leads to faster and moment identification, and recording patients' problems accelerates appropriate treatment interventions. Study of Ahmadi et al. (2010) showed that moment assessment, recording and reporting in CCU lead to immediate decision making and decrease of cardiac emergencies [26]. Also in the study of Considine et al. (2006), it has been talked about nurses' ability in identifying, interpreting and intervention during physiologic disorders as the main factor in decreasing sickness and mortality especially regarding cardiac arrest; complete assessment and constant monitoring of the patient are necessary in this regard [27]. From the other side, Aroliga et al. (2011) believe that according to the results of some retrospective studies in assessing critically ill patients that were suffering from severe injuries or died because of very bad clinical conditions, symptoms predicting worsening clinical conditions were present in recorded monitoring of the patients [28].

Some participants in our study pointed out to the importance of monitoring and assessing cardiovascular and respiratory system in CCU. Cardiovascular and respiratory problems in critically ill patients are among the most important problems that should be monitored. Exact recording of the level of blood pressure and arterial oxygen saturation are comprehensive alone regarding non-invasive monitoring. Actually blood supply to vital organs is the most important aim of systems monitoring which is done in the first stage through assessing heart and respiratory system [21].

The fourth main theme which is one the nursing recording necessities in CCU in participants' point of view is nursing interventions; it is extracted from the following subcategories: a. care treatment b. supportive c. educator d. coordinator. In the study of Ehnfors et al.

[Downloaded from mail.jccnursing.com on 2026-11-15]

(1991) nursing interventions include; supportive interventions, general cares, cares related to environment , observation and monitoring, pharmacological cares, cares related to coordination of the treatment team, discharge program and educational cares [22]. In the study of Goossen et al. (2000) which was done in Poland with the aim of identifying categories and items that should be recorded in nursing recording, a model was achieved which included 32 nursing interventions; components of recording nursing measures in this study is the same as our study [29].

The fifth main theme which has been emerged in this study is recording nursing discharge report. A nursing discharge report should convey important and essential information between different health centres. Presence of a comprehensive discharge report is one of the requirements of treatment continuity among different caregivers [30]. Considering the study of Ehnfors et al. (1991), a nursing discharge report should include some categories such as; a. provided cares during hospitalization b. the made changes in the patient's status during hospitalization D. patient's status during when he/she is discharging and E. recommendations for treatment continuity [22].

Anderson & Helms (1993) divided the information that should be conveyed among the caregivers in nursing discharge report into four categories including; underlying information, physiologic information, medical information and nursing cares [31]. Sperling (1998) stated the importance of recording information related to drugs, doses and times of consuming them especially about old patients in the discharge report [32].

Many studies [24, 33] and also organizations involved in nursing issues such as World Health Organization, Nursing International Society and UK Central Broad of Nursing emphasized the importance of recording cares based on nursing process. Also in our study, recording requirements include nursing process components. Assessing patient is the first component of nursing process; it leads to identification of the patient's problems and nursing diagnoses. Participants believe that assessing patient's health leads to identification of patient's problems at the beginning of admission or shift.

Also constant monitoring of the patient identifies certain and probable problems of the patient during shift and patient's care program can be set and updated according to that. Recording the interventions and their feedback are counted as the recording requirements too.

5. Conclusions

It can be concluded that data achieved during getting health history on admission is the findings achieved from patient's health assessment in the following situations a. at the beginning of admission b. at the beginning of every shift c. at the time of discharge and also data achieved from patient's monitoring during shift, nursing interventions and discharge report are the nursing record requirements in CCU. It is recommended to give the structured recording requirements to the nurses, nursing supervisors and universities lecturers to make the nurses to record cares with their help; the authorities should do their observations and evaluation based on them. Also lecturers should teach the method of recording in CCU with the help of this structure, so that recording quality and consequently care quality will be increased. Also this structure can be used for computerizing recording which has a very effective role in increasing recording and care quality.

6. Acknowledgments

We thank and appreciate faculty members of Nursing Colleges of Baqiatallah (AJ) Science University, Mashhad, Shahed, Shiraz, Isfahan, Ahvaz, Yazd and Kerman and also nurses and nursing supervisors of heart hospitals of Afshar and Shahid Sadoughi in Yazd, Rajayee, Jamaran and Modares in Tehran, Golestan hospital in Ahvaz, Fatema-tazahra (s) hospital in Mehriz and Imam Jafar-e-Sadegh in Meibod.

[Downloaded from mail.jccnursing.com on 2026-11-15]

References

1. Sattarzadeh M, Navipour H, Memarian R. Effects of Development and implementation of directional program on quality of nursing documentation in coronary care unit. Daneshvar Med. 2005;59:29-36.
2. Ghazanfari Z, Sheykhpour-khani M, Haghdoost A. Nurse's Khowledge and practice of the principle of nursing documentation at hospitals of Kerman university of medical sciences. IJN. 2009;22:15-22.
3. Zweigenbaum P, Bouaud J, Bachimont B, Charlet J, Séroussi B, Boisvieux JF. From text to knowledge: a unifying document-centered view of analyzed medical language. Methods Inf Med. 1998 Nov;37(4-5):384-93.
4. Aumillea, L. and M. Moskowitz. Nursing spectrum career fitness. 2002; 2:[Available from: http://nsweb.nursingspectrum.com.
5. Safari, M., Effects of nursing education method of group discussion on the quality of nursing care of patients with myocardial infarction, in School of Nursing and Midwifery. 2003, Tarbiat Modares University of Medical Sciences.
6. Majdabadi, H. and M. kahuee, Survey of the quality of nursing practice of documentation to determine their training needs and providing them with a program of quality promotion. Journal of Sabzevar University of Medical Sciences, 2004. 10: p. 61-69.
7. Khoddam, H., A. Sanagoo, and L. Juibari, Effectiveness of continual education on quality of nursing records. J Gorgan Uni Med Sci, 2001. 3: p. 65-69.
8. Mashoufi, M., et al., Evaluating information record in the hospital of Ardabil medical sciences university. Journal of Ardabil university of medical sciences & health services, 2004. 3: p. 43-49.
9. Aud, M.A. and J. Lee, Introducing nursing students to quality assurance activities in skilled nursing facilities. J Nurs Care Qual, 2006. 21(2): p. 121-3.
10. Cheevakasemsook, A., et al., The study of nursing documentation complexities. Int J Nurs Pract, 2006. 12(6): p. 366-74.
11. Darmer, M.R., et al., The effect of a VIPS implementation programme on nurses' knowledge and attitudes towards documentation. Scand J Caring Sci, 2004. 18(3): p. 325-32.
12. Balaghafari, A., et al., A study on the rate of knowledge, attitude and practice of medical students towards method of medical records documentation at Mazandaran University of Medical Sciences affiliated therapeutic and teaching centers. J Mazandaran Uni of Med Sci, 2005. 49: p. 73-80.
13. Johnson, S.B., et al., An electronic health record based on structured narrative. J Am Med Inform Assoc, 2008. 15(1): p. 54-64.
14. Toolabi, T., et al., Quality of nursing documentations in CCU by hospital information system. Iran J Crit Care Nurs, 2012. 5: p. 53-62.
15. Jefferies, D., M. Johnson, and R. Griffiths, A meta-study of the essentials of quality nursing documentation. Int J Nurs Pract, 2010. 16(2): p. 112-24.
16. Bjorvell C, Wredling R, Thorell-Ekstrand I. Experiences of using the VIPS-model for nursing documentation: a focus group study [corrected]. J Adv Nurs. 2003;43(4):402-10.
17. Kaakinen P, Torppa K. Implementation of a structured nursing documentation in a special care unit. Stud Health Technol Inform. 2009;146:367-9.
18. Graneheim UH, Lundman B. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Educ Today. 2004;24(2):105-12.
19. Hsieh, H.F. and S.E. Shannon, Three approaches to qualitative content analysis. Qual Health Res, 2005. 15(9): p. 1277-88.
20. Strubert Speziale, H.Y., J. Alen, and D.R. Carpenter, Qualitative Research in Nursing. 3 ed. 2003, Philadelphia: Williams & Wilkings.
21. Salimi, M., Development of monitoring & nursing care flow sheet for intensive care unit. 2013, Isfahan University of medical siences.
22. Ehnfors, M., I. Thorell-Ekstrand, and A. Ehrenberg, Towards basic nursing information in patient records. Vard Nord Utveckl Forsk, 1991. 11(3-4): p. 12-31.
23. Stokke, T.A. and M.H. Kalfoss, Structure and content in Norwegian nursing care documentation. Scand J Caring Sci, 1999. 13(1): p. 18-25.
24. Bjorvell, C., I. Thorell-Ekstrand, and R. Wredling, Development of an audit instrument for nursing care plans in the patient record. Qual Health Care, 2000. 9(1): p. 6-13.
25. Kinnunen, U.M., et al., Developing the standardized wound care documentation model: a Delphi study to improve the quality of patient care documentation. J Wound Ostomy Continence Nurs, 2012. 39(4): p. 397-407; discussion 408.
26. Ahmadi, M. and M. Habibi Koolaee, Nursing Information System in Iran. Hakim Res J, 2010. 13(3): p. 185-191.
27. Considine, J., R. Potter, and J. Jenkins, Can written nursing practice standards improve documentation of initial assessment of ED patients? Australian Emergency Nursing Journal, 2006. 9(1): p. 11-18.
28. Arroliga, A.C., J. Sanchez, and P. Sikka, Monitoring the ill: Is this another measurement or will it change outcomes? Crit Care Med, 2011. 39(1): p. 202-3.
29. Goossen, W.T., et al., Development of the Nursing Minimum Data Set for the Netherlands (NMDSN): identification of categories and items. J Adv Nurs, 2000. 31(3):536-47.

[Downloaded from mail.jccnursing.com on 2026-11-15]

30. Helleso, R., Information handling in the nursing discharge note. J Clin Nurs, 2006. 15(1): p. 11-21.
31. Anderson, M.A., et al., A rural perspective on home care communication about elderly patients after hospital discharge. West J Nurs Res, 2000. 22(2): p. 225-43.
32. Sperling, R.L., Continuity of care between home care and the emergency room. Home Healthc Nurse, 1998. 16(9): p. 633-4.
33. Thoroddsen A, Saranto K, Ehrenberg A, Sermeus W. Models, standards and structures of nursing documentation in European countries. Stud Health Technol Inform. 2009;146:327-31.

[Downloaded from mail.jccnursing.com on 2026-11-15]