Abu-Saad 1998
Abu-Saad, H.H.
_Linking nursing variables with patient outcomes. A challenge for computer-based systems._

**SCHLAGWÖRTER:**
nursing research; vocabulary, controlled

Anderson, Goodman 2002
Anderson, J. G.; Goodman, Kenneth W.
_Ethics and Information Technology._

Andrusyszyn, Iwasiw, Goldenberg 1998
Andrusyszyn, M.A.; Iwasiw, C.; Goldenberg, D.
_Computer conferencing for graduate students._

**SCHLAGWÖRTER:**
Internet/Intranet; education

Arnold 1996
Arnold, J.M.
_Nursing Informatics Educational Needs._

**SCHLAGWÖRTER:**
needs assessment; education

Bachman, Panzarine 1998
Bachman, J.A.; Panzarine, S.
_Enabling student nurses to use the information superhighway._

**ABSTRACT:**
[Healthstar]
Nursing graduates must be sophisticated in the use of information technologies and understand how these technologies interface with various health care systems. The purpose of this project was to evaluate the impact of a newly developed Internet course, focusing on current information technologies, on 29 RN-to-MSN students. Author-developed instruments were used to measure weekly computer use, perceived computer skill, and knowledge related to the information superhighway. The Stronge & Brodt Nurses Attitudes Toward Computerization Questionnaire was used to assess attitudes toward computerization. Qualitative data was elicited using weekly evaluation forms. When compared to 23 students at a similar stage of their nursing program, quantitative findings indicated that, at the end of the semester, students in the pilot course had more computer knowledge, reported greater computer skill, and used computers more. Qualitative findings suggested that pilot students: * Were connected with nursing networks and expressed their intent to maintain these networks. * Were able to use current health information found on the Internet in their nursing practices. * Used skills learned in the pilot class to complete projects in other classes. * Communicated with classmates via the Internet, thus forming a potentially valuable professional support system. * Used the library and librarians early in their programs. * Understood the relevancy of telemedicine and the Internet to the future survival of nursing in a changing health care arena. The authors caution that an adequate infrastructure must be available to support such an endeavor, they emphasize that knowledge of the relevancy and use of the information superhighway is crucial to the future survival of nursing in a rapidly changing health care arena.

**SCHLAGWÖRTER:**
computer literacy; education; attitude to computers; knowledge

Bair, Brown, Pugh et al. 1996
Bair, A.H.; Brown, L.P.; Pugh, L.C.; Borucki, L.C.; Spatz, D.L.
_Taking a bite out of CRISP strategies on using and conducting searches in the Computer Retrieval of Information on Scientific Projects database._

**SCHLAGWÖRTER:**
information retrieval; nursing science

Barnett 1995
Barnett, D.E.
_Medical informatics and nursing. European perspectives._

**SCHLAGWÖRTER:**
nursing informatics; Europe

Beier, Bodin, Bazak u.a. (Hrsg.) 1997
Beier, Jutta; Bodin, Monika; Bazak, Wilhelm u.a. (Hrsg.):
_Jahrbuch der Pflege- und Gesundheitsberufe._
Reinbek (LAU) 1997.

Bergen 1996
Bergen, Peter
_EDV in der Pflege leicht gemacht._
Stuttgart (Fischer) 1996.

**ABSTRACT:**
[Verlagsinfo]

Bergen 1997
Bergen, P.
_Der Umgang mit Computern ist nicht so schwer, wie es scheint._

**SCHLAGWÖRTER:**
attitude to computers; computer user training; education

Bergen 1997a
Bergen, P.
_EDV für Pflegekräfte. Teil 2: EDV erhöht die Wirtschaftlichkeit und Flexibilität._

**SCHLAGWÖRTER:**
computer user training; nursing staff; automatic data processing; education

Bersky, Krawczak, Kumar 1998
Bersky, A.K.; Krawczak, J.; Kumar, T.D.

**ABSTRACT:**
[Healthstar]
Computerized Clinical Simulation Testing (CST) is under research and development by the National Council of State Boards of Nursing for potential use as a component of the National Council Licensure Examination for Registered Nurses. It is designed to evaluate the application of the clinical decision-making process to the management of client care. The authors describe how CST works, the case development and...
ABSTRACT:

The purpose of this study is to describe some effects on the clinical nursing documentation after registered nurses (RN) had participated in a three-day course in nursing documentation in accordance with the VIPS-model. Between November 1993 and December 1996, 4594 registered nurses participated in the course. In order to evaluate the effects of the course two questionnaires were sent out to 900 participants, one concerning the degree of development in their nursing documentation and another concerning what they perceived as inhibitors and facilitators to the development of nursing documentation. The result will be presented at the conference.

SCHLAGWÖRTER:

computer user training; education; medical records systems; nursing records

Bokeloh 1998

Bokeloh, C.

Forum für Krankenhaus-Software in Flensburg. EDV und Pflege - wann geht's endlich los?

SCHLAGWÖRTER:

hospital information system; medical records systems; nursing records; trade unions

Bölter, Grünewald 1999

Bölter, Andreas; Grünewald, Matthias

Heimcomputer: ein Medium in der beruflichen Weiterbildung von Pflegepersonen?

Bowles 1997

Bowles, K.H.

The barriers and benefits of nursing information systems.

ABSTRACT:

Nursing informatics is a growing field with many opportunities for nursing involvement. Because nurses are involved increasingly in the design, installation, and use of nursing information systems (NIS) it is important that they are aware of the barriers to and benefits of nursing information systems. This article describes the evolution of nursing information systems and the design goals for current systems. The lack of a unified nursing language and individual and organizational factors such as characteristics of the nurse, the unit, the administrative philosophy, and workload issues are discussed as barriers to NIS development. Increased nurse involvement, education, research, and recognition of the benefits of computerization are suggested to overcome the barriers. A review of the literature provides the reader with evidence of improved efficiency, patient safety and satisfaction, and ability to measure quality as benefits of NIS. Areas for further research are identified: outcomes measurement using NIS, decision support and expert systems, point-of-care documentation, interagency and interdisciplinary communication, and further work on individual and organizational factors.

SCHLAGWÖRTER:

information systems; education; nursing research; vocabulary, controlled

Bradley, Parker, Duggan 1996

Bradley, V.; Parker, C.; Duggan, B.


Brennan 1996

Brennan, P.F.

The future of clinical communication in an electronic environment.

SCHLAGWÖRTER:

nonverbal communication; nursing interventions

Brennan, Daly 1996

Brennan, P.F.; Daly, B.J.

Information requirements of advanced practice nurses.

SCHLAGWÖRTER:

information needs

Brühe, Isfort, Sowinski 1998

Brühe, Roland; Isfort, Michael; Sowinski, Johannes

Das Internet für Pflegende.
Bern (Huber) 1998.

Button, Androwich, Hibben u.a. 1998

Button, P.; Androwich, I.; Hibben, L.; Kern, V.; Madden, G.; Marek, K.; Westra, B.; Zingö, C.; Mead, C.N.

Challenges and issues related to implementation of nursing vocabularies in computer-based systems.

ABSTRACT:

[Healthstar]
As key stakeholders from the clinical setting and vendor communities, the authors share a summary of their collective experience related to the challenges and issues associated with implementing the vocabularies recognized by the American Nurses Association in several installations of commercially available clinical information systems. Although the focus of the article is on summarizing the challenges and issues, it is of note that the authors’ experiences across care settings suggest that the experience and effort of using one of the ANA-recognized vocabularies in a computer-based system are essentially worthwhile and positive. The issues and challenges fall into two categories: 1) those related to the developmental status of nursing vocabularies, and 2) those related to the adoption or implementation of new technology.

SCHLAGWÖRTER:
medical records systems; vocabulary, controlled; American Nurses’ Association

Calderone 1998
Calderone, A.B.
Computer construction of test banks and tests.

SCHLAGWÖRTER:
computer assisted instruction; education; software

Carroll 1997
Carroll, P.
Writing and evaluating computer-based training programs.
In: Nurse Author and Editor, 7. Jg. (1997), H. 1, S. 1-3.

ABSTRACT: [Healthstar]
Publishers are preparing for the high tech future and authors and editors need to also. Publishers know that book sales may be down in the future, while computer program sales are expected to increase. Most book publishers have added media divisions to position themselves for the future. Authors and editors can also shift from writing or editing books to developing computer-based training programs. This author tells you how to write, edit, or evaluate the new computer-based training programs.

SCHLAGWÖRTER:
computer assisted instruction; continuing education; evaluation

Carty, Graves 1996
Carty, B.; Graves, J.R.
Foreword ... computer-based strategies can add to the holistic care of whole persons.

SCHLAGWÖRTER:
holistic nursing; nursing informatics

Carty, Rosenfeld 1997
Carty, B.; Rosenfeld, P.
The information age: the status of technology in nursing education programs in the United States.

ABSTRACT: [Healthstar]
The purpose of this research was to determine the status of technology in nursing education in the United States. The research design was a comparative descriptive survey of a stratified random sample of National League for Nursing accredited diploma, associate, baccalaureate and master programs. The instrument for data collection was developed by a panel of six experts in the area of educational technology. The survey mailed to 347 randomly selected schools identified four primary areas of investigation: 1) technology inventory, 2) technology applications and content, including education and clinical areas, 3) implementation plan, and 4) decision making including funding and staffing resources. Findings indicated that there was a significant difference in available electronic resources among baccalaureate, associate and diploma programs. A majority of schools utilize computer applications to enhance teaching, but a very small percentage of schools addressed informatics in the curriculum. The project was funded by a grant from the Helene Fuld Health Trust Fund.

SCHLAGWÖRTER:
medical informatics; education; attitude to computers; curriculum; USA

Cheek, Doskatsch 1998
Cheek, J.; Doskatsch, I.
Information literacy: a resource for nurses as lifelong learners.

ABSTRACT: [Healthstar]
The use of information technologies throughout the world continues to increase rapidly and inexorably. Information exchange is rapidly becoming a major economic commodity. The short half-life of professional and technical knowledge necessitates nursing graduates having generic qualities that will enable them to adapt to technical change and cope with an 'information overabundant environment'. Today's nurses must have the capacity to access information, both physically and intellectually; that is, they must be information-literate. Nurses need to be discerning information consumers in order to acquire knowledge and skills in relation to their jobs and social roles and as participants of a democratic society. This paper examines information literacy as a critical resource for nurses as lifelong learners, and explores how information literacy is situated in the nursing literature. The authors pose two questions. Firstly, just how information-literate and aware of information literacy is the nursing profession? Secondly, how can the nurses as lifelong learners be fostered, cultivated and attained in nursing education?

SCHLAGWÖRTER:
computer; information science; knowledge; attitude to computers

Cheek, Gillham, Mills 1998
Cheek, J.; Gillham, D.; Mills, P.
Using clinical databases in tertiary nurse education: an innovative application of computer technology.

ABSTRACT: [Healthstar]
This paper provides an initial report of an educational innovation in nursing that promotes exchange of information and close cooperation between hospitals and a university. Data from a computerized nursing care planning system are used as the basis for the design of the acute care clinical component of the nursing curriculum. The project has been developed with the aim of minimizing the theory-practice gap and making the transition from university to hospital an easier process for students and new graduates. From the very early stages of the project, it was recognized that the introduction of new computer-based innovations or educational technology, in itself, would not necessarily improve teaching and learning. Therefore, strong emphasis was placed on how the database would be
used as the basis for sound curriculum development while maintaining the clinical and practical focus required by students. Difficulties associated with the project, ranging from lengthy legal negotiations to the challenge of integrating a curriculum strongly based on critical reflection and problem-solving with a highly prescriptive hospital database are reported. The project not only provides an example of the efficient exchange and use of hospital-based data for teaching purposes but also provides the groundwork for many potential and exciting developments in national and international nursing data exchange.

SCHLAGWÖRTER: computer assisted instruction; databases; education; medical records systems; nursing records; curriculum

Clark 1998
Clark, D.J.
Course redesign.
Incorporating an Internet web site into an existing nursing class.
ABSTRACT:
[Healthstar]
The representation of nurses and the discipline of nursing on the Internet is a growing and important contribution to the profession. Nursing students must be prepared for the impact technology will have on their careers. Nursing faculties can assist in the preparation of students for the role technology plays by creatively introducing computers and the Internet into the curriculum. An Internet web site was incorporated into an existing sophomore nursing course entitled "Nursing Issues: A Compendium." The course content defined the scope of the web site. The purpose of the web site was to provide a resource for further study and research into the professional issues facing nurses today. A web site evaluation tool assisted students in thinking critically about nursing resources available on the Internet. The students evaluated each web site they located for usefulness to nurses and nursing students. The benefits described by the students included obtaining a broader perspective of the profession.

SCHLAGWÖRTER: Internet/Intranet; education

Clarke 1997
Clarke, A.
Role and responsibilities of an information specialist.
ABSTRACT:
[Healthstar]
The primary challenge in the role of an information system specialist is to combine clinical expertise with knowledge of current computer technology. Health care data must be collected, stored, and accessed in the most efficient manner possible to meet the variety of information management needs found in a health care setting (ie, patient care, research, and financial requirements).

SCHLAGWÖRTER: job description; medical informatics; Internet/Intranet; hospital information system

Coleman 1997
Coleman, N.J.
Nursing the net: searching for information.

SCHLAGWÖRTER: computer user training; Internet/Intranet

Corben 1997
Corben, V.
The Buckinghamshire nursing record audit tool: a unique approach to documentation.
ABSTRACT:
[Healthstar]
A project to examine the quality of manual nursing documentation using an action research approach, prior to the introduction of a computerized system is described. The findings showed that there was a general lack of understanding about care planning. There was therefore a need to find an audit tool which could identify and develop nurses’ knowledge of documentation as well as identifying the strengths and weaknesses of existing documentation. A literature review revealed Phaneuf’s audit tool, but this proved difficult to use. Two nurse teachers agreed to develop their own documentation audit tool, based on the UKCC document on record keeping, which identifies criteria for effective documentation. A tool was developed which adopts a facilitative educational approach enabling the practitioner to audit and learn simultaneously. Much interest is being shown by other areas, and the questions are worded so that it could be used in a variety of settings.

SCHLAGWÖRTER: nursing audit; nursing evaluation research; patient care planning

Cox 1998
Cox, R.A.
Implementing nurse sensitive outcomes into care planning at a long-term care facility.
ABSTRACT:
[Healthstar]
This article describes one long-term care facility’s efforts to implement standardized language in the care planning process. Federal regulations for long-term care mandate the use of a uniform comprehensive assessment tool. Eighteen Resident Assessment Protocols (RAPs) are identified for data collection. Computer databases were revised for care planning. Appropriate North American Nursing Diagnosis Association (NANDA) diagnoses were linked to each RAP. Nursing-Sensitive Outcomes (NOCs) were linked to each NANDA as goals. Nursing Interventions Classifications (NICs) were linked to NANDA diagnosis and NOC outcomes as approaches. The databases are illustrated, and frequently used NANDAs and NOCs are identified.

SCHLAGWÖRTER: nomenclature; vocabulary, controlled; databases; outcome assessment; medical records systems; long-term care; nursing records

Creedon 1997
Creedon, S.
How useful is the computer as tutor?
SCHLAGWÖRTER: computer assisted instruction; education; software
Dakin, Garner, Plura 1997
Dakin, S.; Garner, M.; Plura, M.
Understanding surgery: multimedia comes to theatre.

ABSTRACT: [Healthstar]
Educational technology is well established within Schools of Nursing, however there are few computer based learning packages within the clinical environment. It was felt within the Operating Services Directorate, Royal Hallamshire Hospital, that the development of a multimedia package would enhance and complement existing teaching methods. This paper describes the theory behind the choice of a multimedia presentation and its development within the operating theatres. The package, concentrating on general surgery, has been developed by two experienced theatre nurses and a graphic designer. This has resulted in a structured but flexible, fun package which is relevant to all learners within the operating theatre nurses and a graphic designer. This has reinforced the project team's original feeling that multimedia is a highly appropriate resource for clinical education.

SCHLAGWÖRTER: computer assisted instruction; multimedia; user computer interface

Daly, Button, Prophet 1997
Daly, J.M.; Button, P.; Prophet, C.M.; Clarke, M.; Androwich, I.
Nursing Interventions Classification implementation issues in five test sites.

SCHLAGWÖRTER: classification; nursing interventions; nursing information systems

Daly, Maas, Johnson 1997
Daly, J.M.; Maas, M.L.; Johnson, M.
Nursing outcomes classification.
An essential element in data sets for nursing and health care effectiveness.

ABSTRACT: [Healthstar]
The Nursing Outcomes Classification (NOC) is a comprehensive classification of patient outcomes responsive to nursing interventions. The NOC is complementary to taxonomies of the North American Nursing Diagnosis Association and the Nursing Interventions Classification. The NOC provides the language for the evaluation step of the nursing process and the content for the outcomes element in the Nursing Minimum Data Set (NMDS). The patient information system Patient Care Data Set (PCDS) is a new, computerized health care information system introduced by the Blue Chip Company and the faculty at Wright State University Miami Valley College of Nursing and Health. An important innovation for evaluation of health care delivery and effectiveness, the PCDS is a record of the patient's health/medical history. Documentation and evaluation of health care must include nursing data along with data from all health care disciplines in minimum data sets. Standardized nursing languages are necessary for inclusion of nursing data. The NOC is a comprehensive classification of patient outcomes that are responsive to nursing interventions. It provides a standardized language for the outcomes element of the NMDS, and contains outcomes that can be shared by all health care disciplines. The PCDS is an innovative minimum data set and patient health record system that is consistent with the NMDS. The NOC is a perfect fit for the PCDS.

SCHLAGWÖRTER: medical records systems; nomenclature; nursing care; data collection; documentation

Dillon, McDowell, Salimian, Conklin 1998
Dillon, T.W.; McDowell, D.; Salimian, F.; Conklin, D.
Perceived ease of use and usefulness of bedside-computer systems.

ABSTRACT: [Healthstar]
Many new technologies are being developed to improve the efficiency and productivity of nursing staff. A key to the success of these technologies is acceptance by nurses. Davis' constructs of perceived ease of use and perceived usefulness were developed to measure the acceptance of computer systems. This article presents a discussion on nursing acceptance of computer systems, reviews the development of the perceived ease of use and perceived usefulness measures, and reports findings of a study based on these constructs along with attitude of bedside-computer systems. Results of the study showed that nurses in general are accepting of bedside-computer technology.

SCHLAGWÖRTER: attitude to computers; user computer interface; intensive care

Dounavis, Karistinou, Diomidus, Mantas 1997
Dounavis, P.; Karistinou, E.; Diomidus, M.; Mantas, J.
Using World Wide Web technology for educating students in the health care sector.

ABSTRACT: [Healthstar]
The Internet was born in December of 1969 and has grown phenomenally since. Its graphically interactive, user-friendly modality, the World Wide Web (WWW), is younger and growing even more explosively. By its nature, the WWW is a tool ideally and uniquely suited for the advancement education. This paper describes the design, development and the implementation of a Web Site for supporting the education of the students in the Faculty of Nursing at the University of Athens.

SCHLAGWÖRTER: Internet/Intranet; computer assisted instruction; education; curriculum; software design; user computer interface

Dounavis, Karistinou, Mantas 1998
Dounavis, P.; Karistinou, E.; Mantas, J.
Building nursing informatics courses on the Web.

ABSTRACT: [Healthstar]
The Information Technology is rapidly being integrated into Educational Institutions and Health Care Environments. Although the use of computer for education and training is not new to the academic society, further prospects are available through the use of emerging technologies as the Multimedia and the World Wide Web. In today's rapidly changing healthcare environment, the need for high quality, cost effective education for employees, consumers, and students is gaining increased attention. The development of customised computer-based training programs has long
been beyond the capabilities or financial resources of most healthcare organisations; however, with recent advancements in technology, this situation is rapidly changing. The Nurses represent the greater part of the Health Care Professionals thus the education of this group is of outmost importance for the health-care environments. The World Wide Web can be used as an educational tool in order to have better-educated Nurses not only by supporting the Academic institutions but also by providing Distance Learning Education covering new aspects of the Nursing Science. The purpose of this paper is to increase the understanding of the ways in which the emerging technologies of Multimedia and the World Wide Web can enhance the learning process, and also provide education at a distance.

SCHLAGWÖRTER:
multimedia; education; Internet/Intranet; medical informatics

Dreiner, Grünewald, Meurer (Hrsg.) 2001

Dugas 1997
Dugas, M. Intranet and HTML at a major university hospital - experiences from Munich.
ABSTRACT: [Healthstar]
Intranet-technology is the application of Internet-Tools in local networks. With this technique electronic information systems for large hospitals can be realized very easily. This technology has been in routine use in 'Klinikum Grosshadern' for more than one year on over 50 wards and more than 200 computers. The following clinical application areas are described: drug information, nursing information, electronic literature retrieval systems, multimedia teaching und laboratory information systems.
SCHLAGWÖRTER:
databases; hospital information system; local area network; Internet/Intranet; computer assisted instruction; information retrieval

Dugas 1998
Dugas, M. An intranet-based information system for nurses.
ABSTRACT: [Healthstar]
Nurses require extensive information and it must be up to date. At large highly specialized hospitals paper-based communication is not sufficient. This article describes the design and implementation of an intranet-based nursing information system for a major university hospital in Germany. The organizational infrastructure and the technical concept are discussed. The intensive use of the system during the first year of operation indicates an urgent need for computerized nursing information and suggests that intranet technology can meet this need.
SCHLAGWÖRTER:
Internet/Intranet; hospital information system; nursing service; information retrieval

Elford 2000

Elford 1998
ABSTRACT: [Healthstar]
Memorial University of Newfoundland has been continuously involved in telemedicine activities since 1975. Unlike most early telemedicine programs, which did not continue after grant funding ended, Memorial made the transition to create a self-sufficient Telemedicine Centre. Key to its success was the vision and drive of its founder, Dr. Max House, and adherence to the following principles: (1) all activities were based on a legitimate need; (2) the simplest, least expensive technology was used to meet the need; (3) the network was shared by a variety of users; and (4) users were given proper training and support. Over the years, Memorial has been involved in 30 telemedicine projects, many of which became ongoing services. Although most initial activity was health related, educational activities have played an increasingly important role. In 1997, the Telemedicine Centre delivered approximately 7000 hours of programming and administered a network of 247 dedicated audioconference sites in 161 communities (168 of the sites had telewriter workstations and 75 had multimedia workstations) and eight videoconferencing sites. Approximately 70% of all programming was distant high school and university education, 20% health education, 5% clinical activities, and 5% other uses. Current clinical activities include tele-electroencephalograms, tele-ulasonography, tele-nuclear medicine, child telepsychiatry, general teleconsultation from a remote nursing station, and general teleconsultation from an offshore oil platform. Lessons learned from more than 20 years of telemedicine experience are presented.
SCHLAGWÖRTER:
telemedicine; education; Newfoundland

Elfrink, Martin, Davis 1997
ABSTRACT: [Healthstar]
The international health care delivery system is evolving to include an increased emphasis on community care and automated clinical information and communication systems. These trends are dramatically affecting nursing education in the U.S. as faculty consider the strategies needed to communicate with their students at multiple clinical sites, and to educate students to fulfill their changing practice roles. In response to these changes, FITNE, Inc. is using triangulated research methods to develop an information technology system for use in community nursing education. Named the Nightingale Tracker, this system will: (1) facilitate real time voice and data distance communication between students at the point of care and their instructors, and (2) electronically process clinical data related to community nursing education visits. The Nightingale Tracker was pilot tested in 1996; findings will be used to
plan a national beta test. Project completion is scheduled for late 1997.

SCHLAGWÖRTER: community health nursing; education; Internet/Intranet

Englebardt, Welton, Thorson 1997

Fehrenbach 1998

SCHLAGWÖRTER: nursing informatics; job description

Felber 1997

SCHLAGWÖRTER: database management system; psychiatric nursing

Frank 2001

Fullerton, Graveley 1998

ABSTRACT: [Healthstar] A series of self-paced tutorials was developed for use by graduate students on the assumption that acquisition of skills in accessing e-mail accounts, use of the World Wide Web, file-transfer protocols, Excel spreadsheet, and PowerPoint presentation software would help students succeed in their program of graduate studies. The postproject evaluation tool was sent to participants via e-mail, to reinforce the acquired skills and demonstrate the successful accomplishment of project objectives. Pre- and postevaluation data indicated an increase in self-rated skill level after participation in the tutorial series. Analysis showed an overall mean gain score of 2.3 points, with pre- and posttutorial gain scores significantly increased for all topic areas.

SCHLAGWÖRTER: computer assisted instruction; education; hypermedia; software design

Goossen 1998

Goossen 1998a
Incorporating electronic-based and computer-based strategies: graduate nursing courses in administration.

ABSTRACT: [Healthstar]
The use of electronic technology allows faculty to improve their course offerings. Four graduate courses in nursing administration were contemporized to incorporate fundamental computer-based skills that would be expected of graduates in the work setting. Principles of adult learning offered a philosophical foundation that guided course development and revision. Course delivery strategies included computer-assisted instructional modules, e-mail interactive discussion groups, and use of the electronic classroom. Classroom seminar discussions and two-way interactive video conferencing focused on group resolution of problems derived from employment settings and assigned readings. Using these electronic technologies, a variety of courses can be revised to accommodate the learners’ needs.

SCHLAGWÖRTER: computer literacy; curriculum; education

Graves 1996
Graves, J.
Nursing words reflect power of electronic era: new classification system announced ... the Third Edition of the Sigma Theta Tau International Nursing Research Classification System.

SCHLAGWÖRTER: classification; Sigma-Theta-Tau-International; research

Graves, Amos, Huether u.a. 1995
Graves, J. R.; Amos, L. K.; Huether, S. et al.
Description of a Graduate Program in Clinical Nursing Informatics.

SCHLAGWÖRTER: nursing informatics; education

Graves, Corcoran 1989
Graves, J. R.; Corcoran, S.
An Overview of Nursing Informatics.
In: Journal of Nursing Scholarship, Jg. 1989, H. 21, S. 227-231.

SCHLAGWÖRTER: nursing informatics

Graves, Corcoran-Perry 1996
Graves, J.R.; Corcoran-Perry, S.
The study of nursing informatics.

SCHLAGWÖRTER: nursing information systems; data collection; knowledge

Greenwood 1998
Greenwood, J.
Establishing an international network on nurses’ clinical reasoning.

ABSTRACT: [Healthstar]
A recent review of the relevant literature indicates that different approaches to the exploration of nurses’ clinical reasoning are being adopted in North America, Australia and the United Kingdom. These differing approaches, which tend to cluster chronologically and which include decision analysis, information processing and skills acquisition theory and their limitations will be outlined; it will be argued that it is through their conflation that nurses’ collective understanding of nurses’ clinical reasoning is deepened. The author is attempting to develop an international network of nurse scholars interested in clinical reasoning with the aim of achieving this. The purposes of this network will be to facilitate international collaboration to expedite both the growth of knowledge related to nurses’ clinical reasoning and the development of programs of international comparative research related to it. The setting up of this network and progress to date is described.

SCHLAGWÖRTER: Internet/Intranet; decision support techniques; nursing process; nursing research; nursing theory; knowledge

Grobe 1996
Grobe, S.J.
The nursing intervention lexicon and taxonomy. Implications for representing nursing care data in automated patient records.

SCHLAGWÖRTER: vocabulary; controlled; nomenclature; documentation

Grohs, Brandt, Muhl 1997
Grohs, N.; Brandt, J.; Muhl, E.
EDV gestützte patientenbezogene Leistungserfassung und Pflegedokumentation auf der Chirurgischen Intensivstation.

ABSTRACT: [Healthstar]
A software was created that picks up the attainments and procedures of a surgical intensive care unit on a computer to control and handle the processes and operations. After the data have been obtained, they are used for science and for the controlling department to establish what costs are incurred for a patient.
SCHLAGWÖRTER:
hospital information system; intensive care; medical records systems; nursing assessment

Grutter 2002
Grutter, Rolf
Knowledge Media in Healthcare: Opportunities and Challenge.

Hacker (Hrsg.) 1999
Hacker, Winfried (Hrsg.):
Computer in der Krankenpflege.
Regensburg (Roderer) 1999.

Hannah, Ball, Edwards 1998
Hannah, Kathryn J.; Ball, Marion J.; Edwards, Margaret J. A.
Introduction to Nursing Informatics. 2. ed.

Hannah, Ball, Edwards 2001
Hannah, Kathryn J.; Ball, Marion J.; Edwards, Margaret J.A.
Pflegeinformatik.

ABSTRACT:
Amazon-Rezension:
Das Buch besteht aus 25 Kapiteln, welche in vier Teile gegliedert sind, sowie einem ausführlichen Service-Teil.
Eine Stärke des Buches liegt sicherlich in der Kompetenz der Herausgeber, in der Breite an Themen, in dem umfangreichen Service teil, und in der erstmalig an einer Stelle gesammelten kompetenten Darstellung der Entwicklung der Pflegeinformatik im deutschsprachigen Raum.
Einige Dinge sind jedoch überraschend. So findet sich keine explizite Darstellung der Elektronischen Patientenakte. Sie wird zwar in Kapitel 5 kurz vorgestellt, ein Hinweis findet sich aber weder im Inhaltsverzeichnis noch im Stichwortverzeichnis.
Alle relevanten Pflegeklassifikationen werden genannt und kurz diskutiert. Leider wird aber nur die ICNP etwas ausführlicher erläutert. Hier ist also der interessierte Leser auf weiterführende Literatur angewiesen.

Haux, Lagermann, Knaup 1998
Haux, Reinhold; Lagermann, Anita; Knaup, Petra
Management von Informationssystemen.
Analyse, Bewertung, Auswahl, Bereitstellung und Einführung von Informationssystemkomponenten am Beispiel von Krankenhausinformationssystemen.
Stuttgart (Teubner) 1998.

Hebda, Czar, Mascara et al. (Hrsg.) 2001
Hebda, Toni; Czar, Patricia; Mascara, Cynthia et al. (Hrsg.):
Handbook of Informatics for Nurses and Health Care Professionals (2nd Edition).

Heinrich 2002
Heinrich, Lutz J.
Informationsmanagement. 7., vollst. überarb. u. erg. Aufl.
München (Oldenbourg) 2002.

Henry, Mead 1997a
Henry, S.B.; Mead, C.N.
Nursing classification systems: necessary but not sufficient for representing "what nurses do" for inclusion in computer-based patient record systems.

ABSTRACT:
[] (Healthstar)
Our premise is that from the perspective of maximum flexibility of data usage by computer-based record (CPR) systems axiord una minim classification systems
are necessary, but not sufficient, for representing important aspects of "what nurses do." In particular, we have focused our attention on those classification systems that represent nurses' clinical activities through the abstraction of activities into categories of nursing interventions. In this theoretical paper, we argue that taxonomic, combinatorial vocabularies capable of coding atomic-level nursing activities are required to effectively capture in a reproducible and reversible manner the clinical decisions and actions of nurses, and that, without such vocabularies and associated grammars, potentially important clinical process data is lost during the encoding process. Existing nursing intervention classification systems do not fulfill these criteria. As background to our argument, we first present an overview of the content, methods, and evaluation criteria used in previous studies whose focus has been to evaluate the effectiveness of existing coding and classification systems. Next, using the Ingenerf typology of taxonomic vocabularies, we categorize the formal type and structure of three existing nursing intervention classification systems—Nursing Interventions Classification, Omaha System, and Home Health Care Classification. Third, we use records from home care patients to show examples of lossy data transformation, the loss of potentially significant atomic data, resulting from encoding using each of the three systems. Last, we provide an example of the application of a formal representation methodology (conceptual graphs) which we believe could be used as a model to build the required combinatorial, taxonomic vocabulary for representing nursing interventions.

SCHLAGWÖRTER: medical records systems; nursing care; nursing records; vocabulary, controlled; data collection; data interpretation


Henry, S.B.; Warren, J.J.; Zielstorff, R.D.

A review of major nursing vocabularies and the extent to which they have the characteristics required for implementation in computer-based systems.


ABSTRACT: [Healthcare]

Building on the work of previous authors, the Computer-based Patient Record Institute (CPRI) Work Group on Codes and Structures has described features of a classification scheme for implementation within a computer-based patient record. The authors of the current study reviewed the evaluation literature related to six major nursing vocabularies (the North American Nursing Diagnosis Association Taxonomy 1, the Nursing Interventions Classification, the Nursing Outcomes Classification, the Home Health Care Classification, the Omaha System, and the International Classification for Nursing Practice) to determine the extent to which the vocabularies include the CPRI features. None of the vocabularies met all criteria. The Omaha System, Home Health Care Classification, and International Classification for Nursing Practice each included five features. Criteria not fully met by any systems were clear and non-redundant representation of concepts, administrative cross-references, syntax and grammar, synonyms, uncertainty, context-free identifiers, and language independence.

SCHLAGWÖRTER: medical records systems; vocabulary, controlled; evaluation; nomenclature

Hillan, McGuire, Cooper 1998

Hillan, E.M.; McGuire, M.M.; Cooper, M.

Computers in midwifery practice: a view from the labour ward.


ABSTRACT: [Healthstar]

Concern continues to exist about the lack of integration of research into clinical practice. One of the reasons which has been suggested for this, is that practitioners may either not know about, or understand, the research findings. The availability of a database which contains systematic reviews of research such as the Cochrane Pregnancy and Childbirth Database, should go some way to overcome such obstacles associated with the implementation of research into practice. As part of a national audit on Caesarean section, a computer with the Cochrane Database was installed in the labour ward of each consultant maternity unit in Scotland. The purpose of this study was to determine if midwives working in labour wards make use of this accessible source of research findings to inform their practice. Anecdotal evidence suggested that although midwives were keen to use the databases, they did not have the requisite computer skills to do so. This study examined the computer literacy of midwives and their perceived educational needs. A questionnaire was distributed to all labour ward midwives in 22 consultant maternity hospitals in Scotland (n = 850). This questionnaire considered issues such as the preparation of midwives to use computers, midwives' perceptions and use of computers and their perceived educational needs. The response rate was 74%. Following analysis of the questionnaire labour ward managers were interviewed by telephone to ascertain their views regarding the Cochrane Database and their perception of its effectiveness. The results highlighted that only 27% of midwives claimed to use the Cochrane Database on a regular basis. Overall midwives had a positive attitude towards information technology but claimed they did not have the requisite computer skills to use these tools. Managers agreed that there was a need for further instruction and support for midwives. The findings of this study have important implications for the future professional preparation and continuing education of midwives.

SCHLAGWÖRTER: computer literacy; education; midwifery
Hogston 1997
Hogston, R.
Nursing diagnosis and classification systems: a position paper.
ABSTRACT: [Healthstar]
There has been little professional debate in the UK literature about nursing diagnosis and this paper explores some of the reasons why nursing diagnosis has failed to gain momentum among nurses in the United Kingdom. The nursing diagnosis movement has now reached some European countries and in the light of the International Classification of Nursing Project (ICNP) and the Strategic Advisory Group for Nursing Information Systems (SAGNIS) project commissioned by the NHS Executive (NHSE), requires a close examination by British nurses. The unsuccessful attempt by the North American Nursing Diagnosis Association (NANDA) to have its taxonomy accepted for inclusion in the World Health Organization’s 10th revision of the International Classification of Diseases, an innovation which would have made the NANDA taxonomy the definitive classification of nursing, should alert British nurses to the importance of nursing diagnosis. Although nurses effectively diagnose as part of the nursing process, adoption of the concept of nursing diagnosis as a driving force for practice evades many of them. This paper reflects upon some of the logistical and conceptual difficulties including issues of culture and terminology. It is suggested that nursing diagnosis has a great deal to offer British nurses in their efforts to improve the quality of care and to provide data in this area for both practice and research.
SCHLAGWÖRTER: classification; nursing diagnosis; medical records systems; nomenclature

Horsch, Sokol, Heneka, Lasic 1997
Horsch, A.; Sokol, R.; Heneka, D.; Lasic, G.
A hypertext information system for standard operating procedures in haematological intensive care.
ABSTRACT: [Healthstar]
In times of cost reduction efforts the role of standard operating procedures for both medical and nursing procedures gets increasing importance. Such standards are necessary if the quality of patient care shall not suffer but improve. While some sophisticated approaches are coming up with generation of clinical processes from formal protocol models in connection with documentation systems the clinical practice actually looks quite different: Paper-based "operating standards" are used in day-to-day work, if any. In this paper a simple and powerful WWW-based hypertext information system for easy provision and maintenance of nursing standards is presented.
SCHLAGWÖRTER: intensive care; Internet

Hovenga, Goldsworthy 1998
Hovenga, E.J.; Goldsworthy, D.
Health informatics education for undergraduates: teaching experiences with multi media.
ABSTRACT: [Healthstar]
In a global information society all students regardless of discipline need to have or acquire basic computing and information literacy skills. The Faculty of Health Science at the Central Queensland University now includes a compulsory and introductory course in Health Informatics at the undergraduate level for all its first year students to meet these educational needs for the future health industry workforce. This paper describes the teacher and student lived experiences encountered throughout the concurrent use of a variety of delivery modes to teach an introductory unit of health informatics to this varied student population. It will include a discussion about the unit itself, educational philosophy adopted, strengths and weaknesses of the technologies and delivery methods adopted and the results of the student evaluation.
SCHLAGWÖRTER: education; medical informatics; nursing schools

Hughes 1997
Hughes, S.J.
Nursing systems '97. Time for new thinking.
ABSTRACT: [Healthstar]
The nursing information systems challenge in 1997 is to identify and implement technology and information systems solutions that provide more breadth, depth, flexibility and standardization than ever before, and at a faster pace. To meet the challenge we need more than application checklists. We need to challenge the old approaches to defining needs, implementing systems and training users. Nurses must be educated, involved and accountable for the integration of systems into the patient care process. It’s time for new thinking; it’s time to ask why we are doing things the same way we did them 20 years ago when everything else about healthcare has changed.
SCHLAGWÖRTER: hospital information system; nursing service; computer user training; data collection; user computer interface

Issing, Klimsa (Hrsg.) 2002
Issing, Ludwig J.; Klimsa, Paul (Hrsg.):
Information und Lernen mit Multimedia und Internet. 3. Aufl.
Weinheim (Beltz) 2002.

Johns 2001
Johns, Merida L.
Information Management for Health Profession.

Jones, Wainwright 1998
Jones, P.G.: Wainwright, P.
The teaching of nursing by computer-assisted learning: maximisation of existing resources in an established school of nursing.
ABSTRACT: [Healthstar]
Computer Assisted Learning (CAL) has made limited inroads into the teaching of nursing. While existing CAL materials are often excellent for supporting conventional teaching programs, they cannot in any way be considered as steps towards providing a free-standing CAL course. The recently published Dearing Report on the state of higher education in the UK recommends a major shift towards CAL, proposes Open and Distance Learning (ODL) as a means of effective courseware delivery, and encourages British Higher Education Institutions to enter the competitive global marketplace for ODL students; the Dearing recommendations reflect
the trend within both the European Union and North America towards CAL and ODL. This report documents one potential solution to the problem of raising educational standards through capitalising on existing expertise for the development of CAL using hypertext mark-up language, while working within shrinking budgets. It represents a model which is capable of adoption by other Nursing Schools, and is therefore presented with a view to stimulating discussion.

**SCHLAGWÖRTER:**
computer assisted instruction; education

**Kaltenborn 1999**

Kaltenborn, Karl-Franz

*Informationsttransfer und Wissenstransfer in der Medizin und im Gesundheitswesen.*


**ABSTRACT:**

**Kanai-Pak, Hosoi, Arai u.a. 1997**


*Innovation in nursing education: development of computer-assisted thinking.*


**ABSTRACT:**
[Healthstar]

In order to enhance students’ active thinking, faculty members at International University of Health and Welfare developed the CAT (Computer Assisted Thinking) program. The CAT program is different from CAI (Computer Assisted Instruction), which mainly asks users to choose correct answers. Instead, the CAT program asks users to type in short sentences. There are two functions in the CAT program: one is to keep the students’ action log each time they use the program and the other is to serve as medical dictionary. An analysis of the action log revealed that the students demonstrated little skill in inferential thinking. Their observations were very concrete. In order to help the students to develop their abstract thinking skills, we need to review our curriculum.

**SCHLAGWÖRTER:**
computer assisted instruction; user computer interface; Japan

**Karistinou, Dounavis, Mantas 1998**

Karistinou, E. Dounavis, P.; Mantas J.

*Hyperlinked Lexicon in Nursing Informatics - a tool for navigating through Nursing Informatics Terminology.*


**ABSTRACT:**
[Healthstar]

The Evolution of Information Technology is rapid. Electronic circuits substitute mental activities and new Technology invades to all aspects of life. Nursing, which is like all the other Health related professions information-intensive, could use the new Technology to be facilitated. The implementation of Informatics to Nursing was supported by the growing information that Nursing has to manage. The definition of Nursing Informatics was put on 1980 and since then a lot attempts to define Nursing Informatics have followed. The applications of Nursing Informatics are focused on four fields of Nursing: Administration of Nursing, Clinical Practice, Education, and Research. The first applications of Nursing Informatics made visible the need for the development of a Unified Language System. The efforts, today, are focused on two fields: to establish a standard definition of the terms of or related to Nursing Informatics, to establish standard definitions and Classification Schemes for the Nursing Phenomena and Practice so that they can be processed by Nursing Informatics. In solving these problems important role plays the study of Linguistics. Another important factor that should be taken into account is the Development of International Standards of general acceptance that enhances communication aspects. Apart from the International Standardisation Organisations, other non-profit organisations have constituted Special Groups that are dealing with the promotion of Nursing Informatics. Final Nursing Informatics should follow the previous attempts of Nursing to establish a Unified Language System. All the steps of the development of the application are described. In particular subjects that are covered are: the scope of the application, the collection of the material, the designing and building up of the Database, the development of a User Interface and the characteristics of the Application.

**SCHLAGWÖRTER:**
nomenclature; medical informatics; databases; hypermedia; user computer interface

**Kim 1997**

Kim, J.A.


**ABSTRACT:**
[Healthstar]

With the growing need in the field, the application of computers in nursing has been frequently studied with the aim of improving the quality of nursing care in Korea. However, the development of useful clinical programs has not received adequate attention. The aim of this study is to compare two Nursing Diagnosis Systems - one involving a Neural Network and one involving an Expert System. The simulated output of each Nursing Diagnosis System was compared with the judgement of the researcher and of two professors of nursing. The misdiagnosis rate of the Nursing Diagnosis System using the Neural Network was nine percent, while the Nursing Diagnosis System using Expert System showed consistency with the three experts in every aspect. The result of this study demonstrated the feasibility of the use of an expert system based Nursing Diagnosis System as another nursing tool.

**SCHLAGWÖRTER:**
expert systems; neural networks; nursing diagnosis

**Kirkpatrick, Brown, Atkins 1998**

Kirkpatrick, M.K.; Brown, S.; Atkins, T.

*Using the Internet to integrate cultural diversity and global awareness.*


**ABSTRACT:**
[Healthstar]

Societal paradigm shifts are fundamentally changing
nursing education and practice. A global view is fostered in business, education, and healthcare; a microcosmic view is no longer acceptable. Seeking to increase the global and technological knowledge of their students, the authors describe how they used electronic technology to integrate cultural diversity and global awareness concepts into a nursing curriculum.

SCHLAGWÖRTER: 
Internet; education; cultural diversity; curriculum

Klein, Goehl, Tischler u.a. 1997
Klein, P.; Goehl, J.; Tischler, K.; Hohenberger, W. 
EDV-Stationenmanagement. 
Möglichkeiten zur Rationalisierung und Kostendämpfung.
In: Langenbecks Archiv für Chirurgie, Jg. 1997, H. 114, S. 800-802.

ABSTRACT: 
[Healthstar]
Electronic data processing in ward management increases cost and time efficiency. Nurses and doctors will have more time to concentrate their genuine rather than administrative duties. Therefore the presented model has gained high acceptance.

SCHLAGWÖRTER: 
amtomatic data processing; hospital information system

Kraus, Westermann 1998
Kraus, Georg; Westermann, Reinhold 
Projektmanagement mit System. 3. erw. Aufl. 

Kuhlen 1996
Kuhlen, Rainer 
Informationsmarkt. 
Karlsruhe (UVK) 1996.

Lakeman 1998
Lakeman, R.
The Internet: facilitating an international nursing culture for psychiatric nurses.

SCHLAGWÖRTER: 
Internet; psychiatric nursing; education

Lange 1997a
Lange, L. L.
Informatics Nurse Specialist. 
Roles in Health Care Organiztions.

SCHLAGWÖRTER: 
nursing informatics; job description

Lauterbach 1997
Lauterbach, Andreas 
Pflege im Internet. 
Wiesbaden (Ullstein-Medical) 1997.

Lehmann 1998
Lehmann, E.D.
Preliminary experience with the Internet release of AIDA. 
An interactive educational diabetes simulator.

ABSTRACT: 
[Healthstar]
This paper overviews the Internet release of AIDA, a freeware interactive educational diabetes simulator. Since its release on the World Wide Web as a non-commercial contribution to continuous diabetes education over 14,000 people have visited the AIDA Web site - http://www.diabetic.org.uk/aida.htm - and over 5000 copies of the program have been downloaded, without charge. User responses thus far have been very encouraging. Example feedback and clinical experience reported by two insulin-dependent (type 1) diabetic patients, a patient's carer, the father of a diabetic teenager, a diabetes doctor and nurse educator, an endocrinologist and a postgraduate educator are presented. While such anecdotal, qualitative assessments are worthwhile and form a necessary step in the overall evaluation process - they are clearly subjective in nature and fully recognised as such. Given this, definitive outcome measures are highlighted as being required for the next stage in the evaluation process, and various objective evaluation criteria are proposed. A general protocol for the evaluation of interactive educational simulation tools, like AIDA, with patients is described and the concept of applying this in multiple centres - as a way of increasing study sample sizes - is discussed. It is highlighted that such a protocol could also be used to objectively compare a number of different interactive educational diabetes simulators. Clinicians who are interested in collaborating by enrolling patients into such a study are invited to contact the author, by email, at aida@globalnet.co.uk

SCHLAGWÖRTER: 
computer assisted instruction; health education; simulations; software

Leiner, Gaus, Haux 1999
Leiner, Florian; Gaus, Wilhelm; Haux, Reinhold 
Medizinische Dokumentation. 
Lehrbuch und Leitfaden für die Praxis. 
Stuttgart (Schattauer) 1999.

Lombardo, McCarty, Wojcik 1997
Lombardo, J.S.; McCarty, M.; Wojcik, R.A. 
An evaluation of mobile computing for information access at the point of care.

SCHLAGWÖRTER: 
hospital information system; Internet/Intranet; user computer interface; nursing care

Lundgren, Wisser 1997
Lundgren, P.A.; Wisser, C. 
Functional requirements for IT support for nursing information systems integrated in electronic healthcare record systems (EHCRS).

ABSTRACT: 
[Healthstar]
This paper focuses on the functional requirements that support the activities performed by healthcare professionals, i.e. functions performed in the healthcare enterprise which result in requirements for IT support. The emphasis is on IT support for nursing activities as a part of general IT support for the whole care process realized through EHCRS. We argue that a standard for functionality (including user interface and functions supporting information security) would benefit manufacturers by giving them a well-defined target to aim for and give purchasers and users of EHCRS a foundation on which to base their specifications. Quality would be enhanced by ensuring that all EHCRS contained a standard core functionality and were compliant with basic structural requirements. To get a comprehensive list of requirements to ensure that EHCRS with IT support for nursing activities serve as an aid to the process of care it is essential that nurses get directly involved in the process of defining the
requirements. In this paper we also give some examples of requirements that are candidates for standardisation.

**SCHLAGWÖRTER:**
hospital information system; medical records systems; nursing records; user computer interface

**Lyness, Hravnak, Martich 1997**
Lyness, A.L.; Hravnak, M.; Martich, D.
*Nurses' perceptions of the impact of a computerized information system on a critical care unit.*

**ABSTRACT:**
Critical care nurses work in complex environments and encounter a vast amount of information daily. To learn how a computerized information system (CIS) impacted nursing practice on a critical care unit, this foundational research was conducted before and after implementation of a CIS. Qualitative methods using interviews and open ended questions were employed. Results showed that nurses felt positive overall about the implementation of a bedside CIS. Nurses liked the readability of the information and having the CIS near the bedside. They disliked the periodic slowness or downtime. Broad themes of reflection, questioning and action emerged from the content analysis. The themes were in accord with the theoretical framework that guided the study. Recommendations for future research included exploring nursing medication documentation, use of hand held devices, and having resource databases within the CIS.

**SCHLAGWÖRTER:**
attitude to computers; critical care; nursing staff

**Lyons, Miller, Milton 1998**
Lyons, J.; Miller, M.; Milton, J.
*Learning with technology: Use of case-based physical and computer simulations in professional education.*

**ABSTRACT:**
[Healthstar]
This presentation will clarify contemporary ideas on the role of technology in education and how it can be employed to improve student learning experiences and outcomes. The paper will emphasise RMIT's role in providing quality education that is relevant to today's world and professional practice. It will examine a specific collaborative (RMIT & ACU), interdisciplinary project 'Pregnancy Simulator: Developing and Enhancing Student Learning of Assessment Skills'. This project consists of a physical simulation of a pregnant woman at term and case-based multimedia computer simulations designed to develop and enhance student learning of abdominal assessment skills. A key feature of the development has been to design a learning experience explicitly on an authoritative theory-based view of teaching, in this case Diana Laurillard's 'Conversational Framework'.

**SCHLAGWÖRTER:**
computer; simulation; computer assisted instruction; evaluation

**Mantas 1998**
Mantas, J.
*NIGHTINGALE. A new perspective in nursing informatics education in Europe.*

**ABSTRACT:**
[Healthstar]
The NIGHTINGALE project, which is an EU financed project, is considered as essential in planning and implementation of strategy in training the nursing profession in using and applying healthcare information systems. Therefore, NIGHTINGALE gives a new perspective in Nursing Informatics Education in Europe. In 1997 some major goals of the NIGHTINGALE project were accomplished. These achievements are described in this document.

**SCHLAGWÖRTER:**
medical informatics; education; Internet/Intranet; curriculum; multimedia; European Union

**Mantas 1998a**
Mantas, J.
*Developing curriculum in nursing informatics in Europe.*

**ABSTRACT:**
[Healthstar]
The NIGHTINGALE Project (NIGHTINGALE Project: HC1109 DGXIII Contract and Technical Annex, European Commission, December 1995) which started on the 1st of January, 1996, after the approval of the European Commission, has a 36 month duration. It is essential in planning and implementing a strategy in training the nursing profession in using and applying healthcare information systems. NIGHTINGALE contributes towards the appropriate use of the developed telematics infrastructure across Europe by
educating and training nurses in a harmonious way across Europe in the upcoming field of nursing informatics. NIGHTINGALE develops courseware material based on the curriculum development process using multimedia technologies. Computer based training software packages in nursing informatics will be the basis of the training material and the corresponding courses. CD-ROM based training and reference material will also be provided in the courses whereas the traditional booklets, teaching material and textbooks can also play an adequate role in training. NIGHTINGALE will disseminate all information and courseware material freely to all interested parties through the publications of the proceedings of the conferences, through the establishment of the world wide web (WWW) server in nursing informatics for Europe (http://www.ni.uoa.gr/nightingale), which will become a depository of nursing information knowledge across Europe as well as a dissemination node of nursing informatics throughout the European members states for the benefit and welfare of the European citizen.

SCHLAGWÖRTER: curriculum; medical informatics; computer assisted instruction; data collection

Marasovic, Kenney, Elliott 1997

ABSTRACT: [Healthstar] This article describes a comparative study that examined the frequencies of nursing activities, when using a clinical information system (CIS) and a paper-based documentation system in an Australian intensive care unit. The study unit had half the beds equipped with a CIS, and the remaining beds used paper documentation. Work sampling methodology was used to observe nurses working with both systems. Though there were differences for all activities between the environments and the directions of the differences were logical, none were statistically significant using a chi-square test (P > 0.05), probably because of the small sample size. This study established that work sampling methodology using a random timer is a valid and relatively easy method to capture work activity in the clinical area. Although this article does not provide definitive information regarding the benefits of a CIS over manual documentation, a number of important methodological issues are discussed, including the study design, procedure, use of dedicated observers, and the distinction between basic versus fully optioned systems. Future research should evaluate the efficiency, impact on patient outcomes and nursing practice, and cost effectiveness of fully optioned systems.

SCHLAGWÖRTER: intensive care; medical records systems; nursing records; nursing care; workload; evaluation

Marek, Jenkins, Westra, McGinley 1998

ABSTRACT: [Healthstar] The Penn Nursing Network Information System Project is a collaborative effort of practitioners, academic researchers, and a health-care software developer. The Penn Nursing Network, a group of nurse-managed practices owned and operated by the University of Pennsylvania School of Nursing, has taken a leadership role in the project. PNN is developing an information system specific to the needs of nurse-managed care and creating a data warehouse for nursing centres in the Philadelphia region. Important components of this project include the identification of key data elements to represent the problems treated, interventions performed, and outcomes sensitive to the nursing care provided. The Omaha System provided a useful framework for capturing the necessary data elements. However, additional data were needed. In addition, attention was paid to the development of a software program that would complement the workflow of the practitioner while capturing data efficiently. The main goal of the project is development of a longitudinal database reflective of clinical practice, to be used for both research and evaluation.

SCHLAGWÖRTER: computer; network; databases; information systems; nursing records; medical records systems

Mayrshofer, Kröger 2001
Mayrshofer, Daniela; Kröger, Hubertus A. Prozesskompetenz in der Projektarbeit. Hamburg (Windmühle) 2001. ( = Moderation in der Praxis. 4)

McCormick 1997

ABSTRACT: [Healthstar] Often times when models of information systems are developed, outcomes are either left out or described as an end product of treatment alone. However, in research demonstrating outcomes, evaluating whether outcomes are achieved can best be accomplished when the outcomes are integrated into the entire care process. This paper describes a model for nursing to consider when integrating outcomes during several components of nursing care delivery, and several nursing domains for achieving outcome of care.

SCHLAGWÖRTER: management information system; nursing process; nursing records; outcome assessment

McCormick, Cohen, Reed et al. 1996

SCHLAGWÖRTER: Internet/Intranet; grants; telemedicine; telecommunication; government

McDaniel 1997

ABSTRACT: [Healthstar] The purpose of the two pilot studies described in this...
article was to develop and evaluate a database for managing patient care information. A retrospective review of medical records for 67 patients was used for capturing nursing information. Three categories of data were obtained: (1) patient problems, (2) nursing interventions, and (3) patient outcome achievement. A total of 438 patient problems was identified. A total of 4541 discrete nursing interventions were coded, with assessment and surveillance activities accounting for 26% of the total. The degree to which targeted patient outcomes were achieved was assessed by analyzing documentation of patient outcomes in the medical record. Of 2326 expected patient outcomes identified, only 55% (1272) were documented as "met" in the medical records. Potential uses for the database include outlier analysis and outcomes assessment in specific patient populations.

**SCHLAGWÖRTER:** medical records systems; nursing records; adult; vocabulary, controlled

McDaniel, Matlin, Elmer u.a. 1998  
McDaniel, A.M.; Matlin, C.; Elmer, P.R.; Paul, K.; Monastiere, G.  
Computer use in staff development.  
A national survey.  
ABSTRACT:  
[Healthstar]  
The Informatics Task Force of the National Nursing Staff Development Organization (NNSDO) conducted a national survey soliciting information about computer use in staff development. More than 600 members responded to the survey, suggesting that informatics and the issues surrounding nurses' use of computers are of concern to many staff development professionals. Responses from focus groups held at the National Nursing Staff Development Organization annual convention provided additional input. The results of the survey and discussion sessions have implications for preparing nurse educators for the specialty practice of staff development in the future.

**SCHLAGWÖRTER:** computer assisted instruction; medical records systems; statistics; nursing records; USA; computer user training

McGonigle 1996  
McGonigle, D.  
Executive practice. Nursing informatics: quantifying the CNS role.  
**SCHLAGWÖRTER:** cost-benefit-analysis; database management system

McKenna, Ribbons 1997  
McKenna, L.G.; Ribbons, R.M.  
Information technology in nursing: a project examining educational applications of the Internet and World Wide Web.  
**ABSTRACT:**  
[Healthstar]  
Developments in Information Technology are requiring nurses to not only access complex information but also manipulate it within an information rich environment to benefit patient care. Within such an environment, the role played by the Internet and more specifically, the World Wide Web (WWW or web), will become increasingly important to health care providers. Nurse academics within the School of Nursing, Monash University, have adopted an innovative and integrated approach to Internet technologies as part of information processing and inquiry in nursing. This approach is aimed at enhancing the teaching/learning process by lending additional richness to the learning environment. Initial feedback from this project supports the assumption that information technology has an important, and increasingly prominent, role to play within nursing education and clinical practice. Although very much at an embryonic stage, the project has been well received by students and staff alike. This descriptive paper will attempt to highlight some of the benefits of the project for nurse academics and students, provide an overview of Internet and WWW applications and suggest some practical applications of these technologies in nurse education.

**SCHLAGWÖRTER:** computer; education; Internet/Intranet

Meurer (Hrsg.) 1999  
Meurer, Peter F. (Hrsg.):  
Multimedia in der Pflege.  
Tagungsband zur Fachtagung am 12. März 1999 in Düsseldorf.  
Eschborn (DBfK) 1999.  
**SCHLAGWÖRTER:** nursing assessment; telemedicine; Basale Stimulation; simulation; nursing process; global classroom; computer assisted instruction; information management; information retrieval

Meurer 1996  
Meurer, Peter F.  
Hypermedia als Unterrichtsmedien.  
Entwicklung und Erprobung eines interaktiven Lernprogramms zu Themen der Krankenpflege.  
Heinrich-Heine-Universität Düsseldorf, Erziehungswissenschaftliches Institut, Magisterarbeit 1996.  
**SCHLAGWÖRTER:** hypermedia; computer assisted instruction

Meurer 1997  
Meurer, Peter F.  
Literaturrecherchen in Datenbanken.  
**SCHLAGWÖRTER:** information retrieval

Meurer 1998  
Meurer, Peter F.  
Lernen im World Wide Web.  
**SCHLAGWÖRTER:** Internet/Intranet; computer assisted instruction

Meyer, Sather-Levine, Laurent-Bopp et al. 1996  
The impact of clinical information systems research on the future of advanced practice nursing.  
**SCHLAGWÖRTER:** nursing information systems; software; evaluation; data collection

Miller, Piper, Tucker 1997  
Miller, J.J.; Piper, L.; Tucker, D.A.  
Strategies for getting students on the information superhighway.  
Mills, Prin 1997

Mills, M.E.; Prin, P.L.
Nurses' MEDLINE Usage and Research Utilization.

ABSTRACT: [Healthstar]
This exploratory study in the field of nursing informatics examined the usage of information technology, namely on-line access to MEDLINE in clinical setting, by a convenience sample of 121 nurses from a large university hospital. A descriptive correlational design was used. Guided by the conceptual framework of Nurse-Computer Interaction and based on variables set forth in the Theory of Reasoned Action, the study tested hypotheses regarding attitudinal and normative influences on reported use of on-line bibliographic retrieval systems. It was also hypothesized that using MEDLINE cold increase and improve nurses' adoption of nursing research findings. Multiple regression analyses were conducted on nurses' responses to survey questions to test hypotheses that those who register more favorable attitudes towards nursing research would have a higher reported use of the MEDLINE system. Findings were significant and supported the hypothesis that nurses' attitudes towards research influenced MEDLINE usage. Findings also indicated that MEDLINE usage was significantly related to nurses' research utilization.

SCHLAGWÖRTER: nursing research; nursing staff; MedLine

Milstead, Nelson 1998

Milstead, J.A.; Nelson, R.
Preparation for an online asynchronous university doctoral course. Lessons learned.

ABSTRACT: [Healthstar]
This article addresses the development of the initial course in the first completely online doctoral program in nursing. Synchronous and asynchronous methods of distance education were assessed. Planning focused at the university, school, and course levels. University planning involved the technical infrastructure, registration, student services, and library services. School planning examined administrative commitment and faculty commitment and willingness. Course planning focused on marketing, precourse information, time frame, modular design, planned interaction, and professor availability and support. Implementation issues centered on getting students connected, learning the software, changing instructional methods, and managing chats. Traditional methods of evaluating student learning and course evaluation were supplemented with the development of qualitative and quantitative tools to gather data for making administrative decisions. The Dean and faculty agreed that the internet was an effective method of delivering content in the initial Health Policy course. The Dean and faculty agreed to continue the PhD program online for one cohort and continue to evaluate student progress and faculty and student satisfaction.

SCHLAGWÖRTER: curriculum; Internet/Intranet; graduate

Moorhead, Clarke, Willits u.a. 1998
Moorhead, S.; Clarke, M.; Willits, M.; Tomsha, K.A.
Nursing Outcomes Classification implementation projects across the care continuum.

ABSTRACT: [Healthstar]
The health care environment in which nurses deliver care is experiencing constant change characterized by decreased lengths of stay in acute care settings, increased use of technology, increasing emphasis on computerized patient records and care planning options, increasing markets dominated by managed care, and an emphasis on outcomes rather than process. These changes dictate that nursing as a profession ensures that the work of nursing is visible in this health care environment and included in the data used to make health policy decisions. This article describes the rich history of a Midwestern hospital's use of standardized nursing languages for the last 25 years. Currently this facility is in the process of implementing the Nursing Outcomes Classification (NOC). Four projects are described that illustrate the ways nurses can use this language with diagnoses from the North American Nursing Diagnoses Association (NANDA) and interventions from the Nursing Interventions Classification (NIC).

SCHLAGWÖRTER: nomenclature; nursing diagnosis; vocabulary, controlled; education

Moorhead, Delaney 1997
Moorhead, S.; Delaney, C.
Mapping nursing intervention data into the Nursing Interventions Classification (NIC).
Process and rules.

ABSTRACT: [Healthstar]
TOPIC: Uniform language in nursing is needed to clearly depict the contributions of nursing in the healthcare arena but little data related to nursing interventions and patient outcomes are standardized. PURPOSE: To investigate the feasibility of mapping nonstandardized nursing interventions into standardized language using the Nursing Interventions Classification (NIC). SOURCE: Data from a Midwest community hospital's computerized information system. CONCLUSIONS: Results demonstrate that nonstandardized nursing orders can be mapped into standardized language using the NIC.

SCHLAGWÖRTER: hospital information system; nomenclature; nursing diagnosis; vocabulary, controlled; decision support techniques; Nursing Interventions Classification

Morison, Moir 1998
Morison, M.; Moir, J.
The role of computer software in the analysis of qualitative data.
Clerk, research assistant or Trojan horse?
ABSTRACT:

In the last 15 years there has been a proliferation of computer software packages designed to facilitate qualitative data analysis. The programs can be classified, according to function, into a number of broad categories such as: text retrieval; text base management; coding and retrieval; code-based theory building; and conceptual-network building. The programs vary enormously in the extent to which they can facilitate the diverse analytical processes involved. The decision to use computer software to aid analysis in a particular project may be influenced by a number of factors, such as the nature of the data and the researcher's preferred approach to data analysis which will have as its basis certain epistemological and ontological assumptions. This paper illustrates the way in which a package called NUDIST facilitated analysis where grounded theory methods of data analysis were also extensively used. While highlighting the many benefits that ensued, the paper illustrates the limitations of such programs. The purpose of this paper is to encourage researchers contemplating the use of computer software to consider carefully the possible consequences of their decision and to be aware that the use of such programs can alter the nature of the analytical process in unexpected and perhaps unwanted ways. The role of the Computer Assisted Qualitative Data Analysis (CAQDAS) Networking Project, in providing up-to-date information and support for researchers contemplating the use of software, is discussed.

SCHLAGWÖRTER:

nursing research; software; statistics

Mortensen 1997

Mortensen, R. (Hrsg.):
Telemurse.
( = Studies in health technology and informatics)

Murray 1996

Murray, P.J.
Nurses' computer-mediated communications on NURSENET.
A case study.

SCHLAGWÖRTER:

Internet/Intranet; electronic mail; network; nursing informatics

Musker 1997

Musker, M.
Demystifying the Internet: a guide for nurses.

SCHLAGWÖRTER:

computer; Internet/Intranet; computer user training

Nagelkerk, Ritola, Vandort 1998

Nagelkerk, J.; Ritola, P.M.; Vandort, P.J.
Nursing informatics: the trend of the future.

ABSTRACT:

Nursing informatics is a combination of computer, information, and nursing sciences. This new and expanding field addresses the efficient and effective use of information for nurses. Preparing nurses for computerization is essential to confront an explosion of sophisticated computerized technology in the workplace. It is critical in a competitive health care market for nurses to use the most cost-effective methods. A model is presented that identifies six essential factors for preparing nurses for computerization. Strong leadership, effective communication, organized training sessions, established time frames, planned change, and tailored software are the essential factors to consider for development of a successful educational program.

SCHLAGWÖRTER:

computer user training; education; medical informatics

Nagle, Ryan 1996

Nagle, L.M.; Ryan, S.A.
The superhighway to nursing science and practice.

SCHLAGWÖRTER:

nursing information systems; knowledge

Narita, Satou, Takahashi u.a. 1997

Narita, Y.; Satou, R.; Takahashi, H.; Miura, K.; Takemoto, Y.
An informatics education for improved nursing by introducing an easy data base system.
In: Studies in Health Technology and Informatics, Jg. 1997, H. 46, S. 139-144.

ABSTRACT:

We began to explore the subject of nursing information systems nine years ago. Since then, we have advocated a system that is intended to be used by nurses for their own purposes. We have developed an easy database management system (Native Data Base Management System, called NDBS hereafter) that is feasible to operate in the nursing situation. We also have developed an educational training system for information technology, which is appropriate for nursing students as well as for experienced nurses. Both systems have helped to greatly improve nursing services. In fact, nurses have already created several beneficial databases which are tailored to their nursing needs.

SCHLAGWÖRTER:

nursing staff; computer user training; databases; nursing records; Japan

Neafsey 1997

Neafsey, P.J.
Computer-assisted instruction for home study: a new venture for continuing education programs in nursing.

ABSTRACT:

Advanced practice nurses (APNs) tested a 5-contact hour home-study computer assisted instructional (CAI) program in pharmacokinetics developed by the author. METHOD: Twenty-seven APNs enrolled in a traditional lecture continuing education course in pharmacology participated in the study. The APNs were given a knowledge test and self-efficacy questionnaire before using the CAI program and again at the completion of program use. RESULTS: Significant gains in knowledge and self-efficacy with large effect sizes were achieved by the program users. They cited the convenience, organization and simplicity of use, graphic animations, and interactive question sequences as advantages of the program. CONCLUSION: Home study by computer may be a feasible option to printed home-study and lecture-based continuing education programs in nursing.

SCHLAGWÖRTER:

computer assisted instruction; education; continuing education
Nelson, Anton 1997
Nelson, R.; Anton, B.
Organizational diagnosis of computer and information learning needs: the process and product.
ABSTRACT: [Healthstar]
Organizational diagnosis views the organization as a single entity with problems and challenges that are unique to the organization as a whole. This paper describes the process of establishing organizational diagnoses related to computer and information learning needs within a clinical or academic health care institution. The assessment of a college within a state-owned university in the U.S.A. is used to demonstrate the process of organizational diagnosis. The diagnoses identified include the need to improve information seeking skills and the information presentation skills of faculty.

SCHLAGWÖRTER:
computer user training; decision making; education

Nesler, Sopczyk, Cummings et al. 1998
Nesler, M.S.; Sopczyk, D.L.; Cummings, K.M.; Fortunato, V.J.
Nursing informatics needs assessment. Are distance programs needed?
ABSTRACT: [Healthstar]
Nursing informatics is a small but growing specialty area in nursing. The authors describe the results of a needs assessment designed to determine interest in a distance-based master's degree and certificate program in proficiency for a large sample of BSN graduates. Results suggest that there is an interest in informatics, although somewhat less than was found previously. Respondents indicated that a knowledge of nursing informatics could provide additional career opportunities and that there was a general lack of programs available.

SCHLAGWÖRTER:
distance education; medical informatics; computer literacy

Nicoll 1998
Nicoll, Leslie H.
Computers in nursing's. Nurses' guide to the Internet.

SCHLAGWÖRTER:
Internet/Intranet

Nonaka, Takeuchi 1997
Nonaka, J.; Takeuchi, H.
Die Organisation des Wissens. Wie japanische Unternehmen eine brachliegende Ressourcen nutzbar machen.
Frankfurt 1997.

Norris, Goldberg (Hrsg.) 2002
Norris, Thomas E.; Goldberg, Harold I.
Informatics in Primary Care.

Ochiai, Sota, Ezumi 1997
Ochiai, N.; Sota, Y.; Ezumi, H.
Self-study program on HTML browser - application to Clinical Nursing General Remarks Course.
Computerized education in a multi hospital university medical center.
ABSTRACT:
[Healthstar]
The advantages of using authoring, instructional, and informational computer applications in a university-based multi-hospital medical teaching center are vast. Software applications are used by the staff development educators at The Presbyterian Hospital, Columbia University Medical Center (CPMC) for test construction and administration, information processing, instruction, assessment, and evaluation. The media formats include Windows and DOS based CAI programs, CD ROM, IVD, INTERNET sites, and other on-line resources. This presentation will focus on how nurse educators use the various types of software applications available on the CPMC network and in the multimedia center, and on the benefits experienced by learners, educators, and nursing management and administration.

SCHLAGWÖRTER:
medical informatics; education; multimedia; Internet/Intranet; computer assisted instruction

Probst, G.; Raub, S.; Romhardt, K. 1999
Wie Unternehmen ihre wertvollste Ressource optimal nutzen.
In: Weisbaden (Gabler) 1999.

Prophet, C.M.; Delaney, C.W. 1998
Nursing Outcomes Classification: implications for nursing information systems and the computer-based patient record.
ABSTRACT:
[Healthstar]
Quality improvement, measurement, and accountability pervade all health care, including the agendas of nursing, other care providers, and consumer groups. One new face of quality is unequivocal: data will be more equitably shared among all groups for data-based quality judgments. This will emphasize quality more than cost with greater involvement of the citizens compared to health care providers, payers, and health care product suppliers. Emphasis on quality will allow patients to have a voice heard and amplified through the implementation of patient-centered outcomes in the computerized patient care record. This article describes the implications of the Nursing Outcomes Classification (NOC) for nursing information systems and the computer-based patient record.

SCHLAGWÖRTER:
hospital information system; medical records systems; nomenclature; outcome assessment; vocabulary; controlled; nursing records

Ribbons, R.M. 1998
Guidelines for developing interactive multimedia.
ABSTRACT:
[Healthstar]
In an environment of increasing economic constraint, it is necessary for nurse educators to design and implement cost-effective teaching and learning strategies. Computer-based interactive multimedia applications for use in nurse education have been touted as a cost-and time-effective method of providing a dynamic, information rich, learning environment. However, there is a dearth of literature outlining the processes involved in interactive multimedia production. It would, therefore, appear timely to address issues related to multimedia development. Based on the author's experiences, this article will offer a number of practical suggestions for the development of interactive multimedia applications in nursing education.

SCHLAGWÖRTER:
multimedia; software design; user computer interface

Richter, D. 1997
EDV-Einsatz in der Pflege - ein Problemaufriss.
ABSTRACT:
[Healthstar]
The increasing implementation of computers for nurses has mainly happened without being influenced by nurses themselves. The article identifies three central problems of implementation of information technologies for nurses. First, the economic motivation for implementation is critically analysed. Second, the potential discrepancy between intuitive nursing and structured patient data is discussed. Third, the...
necessary organisational changes while introducing computers are shown. The article holds the thesis that a successful implementation of information technologies for nursing (and other clinical areas) can only be reached by active participations of nurses.

SCHLAGWÖRTER: automatic data processing; nursing records

Rolfe 1997
Rolfe, G.
Science, abduction and the fuzzy nurse: an exploration of expertise.

ABSTRACT:
Benner's work on expertise in nursing drew heavily on the writing of Dreyfus and Dreyfus in the field of computing. Dreyfus and Dreyfus argued that the continued failure of computer programmers to create an 'expert system', a program which could replicate the way that a human expert thinks, implied that experts do not think in a rational, analytic way. Dreyfus and Dreyfus therefore concluded that expertise is an intuitive process, and that 'the expert is simply not following any rules! He is ... recognising thousands of special cases'. Applied to nursing, this model of expertise has a number of profound implications for practice and education, and has been criticised for being elitist and deliberately obscure. This paper examines some recent innovations in computer logic, and argues that nursing can learn from a new breed of 'fuzzy' computer programmes which appear to be able not only to perform better than experts, but to verbalize their decision-making processes. By beginning to understand how experts think, it might be possible to develop expertise in a more controlled and logical way, thereby improving the practice of nursing.

SCHLAGWÖRTER: fuzzy logic; models; decision making; human problem solving; thinking

Roßnagel, Haux, Herzog (Hrsg.) 1999
Roßnagel, Alexander; Haux, Reinhold; Herzog, Wolfgang (Hrsg.):
Mobile und sichere Kommunikation im Gesundheitswesen.
DuD-Fachbeiträge.
o.O. (Vieweg) 1999.

Royle, Blythe, DiCenso et al. 1997
Royle, J.A.; Blythe, J.; DiCenso, A.; Baumann, A.; Fitzgerald, D.
Do nurses have the information resources and skills for research utilization?

ABSTRACT: [Healthstar]
While access to information resources and the skills to use them do not ensure that nurses will use nursing research in their practice, they are important facilitators. Mailed questionnaires to assess existing information resources, the information management skills of nurses, and what additional resources and training are required were returned by 67 of the 71 vice-presidents or directors of nursing in hospitals in two regions of Ontario. The two regions have similar information resources, nursing staff with research expertise, and opportunities for training in research and information management but there is variation among hospitals. Most vice- presidents agreed that nurses need better information resources and skills to access and evaluate professional literature. The rapidly developing field of information technology, including the Internet, provides potential for sharing resources and expertise. Nursing administrators can minimize barriers and help staff nurses recognize that information management skills enhance professional development and improve patient care.

SCHLAGWÖRTER: computer user training; information management; education; nursing research

Saba 1997
Saba, V.K.
A look at nursing informatics.

ABSTRACT: [Healthstar]
This is a companion article to the article on Medical Informatics. It focuses on the new nursing specialty - Nursing Informatics. This article provides an overview, scope, definitions, data standards, goals, and research initiatives designed to advance the status Nursing Informatics. Seven research priorities have been proposed which not only provides the direction for Nursing Informatics research, but also the focus for computer-based nursing information systems.

SCHLAGWÖRTER: nursing education research; medical informatics; nursing informatics; computer assisted instruction; nursing research; user computer interface; USA

Saba, Pocklington, Miller (Hrsg.) 1998
Saba, Virginia K.; Pocklington, Dorothy B.; Miller, Kenneth P. (Hrsg.):

ABSTRACT: [Verlagsinfo]
Nursing and Computers: An Anthology, 1987 - 1996 is a compilation of landmark contemporary papers, illustrating the inception and evolution of nursing informatics. The editors have collected these independently published papers, and assembled them into an invaluable sourcebook providing a framework for future developments in the field of Nursing Informatics. It will be an essential tool for nurses seeking to attain credentials as Nursing Informatics Specialists.

Sahlstedt, Adolfsson, Ehnfors u.a. 1997
Sahlstedt, S.; Adolfsson, H.; Ehnfors, M.; Kaellstroem, B.
Nursing process documentation - effects on workload and quality when using a computer program and a key word model for nursing documentation.

ABSTRACT: [Healthstar]
In 1993 the federation of County Councils commissioned Spri to carry out a broadly based study aimed at investigating individualised patient care as described in the notes kept at various care units using computers to support documentation of the nursing process. The wards involved in the study represented various disciplines such as surgery, obstetrics, internal medicine, geriatrics and psychiatry. During the study period certain measures designed to improve the documentation were implemented i.e. a special computer program and structured nursing documentation following the VIPS-model. Interviews with staff at the units confirm that the introduction of computers, in combination with the structure of the VIPS-model and training in nursing documentation, has
made changes possible to working procedures and brought greater goal orientation to the activity of care. The overall examination of the nursing entries in the patients' notes showed that the language has improved. The entries were to a greater extent expressed clearly and distinctly.

SCHLAGWÖRTER:
medical records systems; nursing records; nursing staff; computer user training; outcome assessment; Sweden

Saranto, Leino-Kilpi 1997a
Saranto, K.; Leino-Kilpi, H.
Computer literacy in nursing: developing the information technology syllabus in nursing education.
ABSTRACT: [Healthstar]
This study has two main purposes: first, to identify and describe the computer skills required in nursing; and second, to find out what should be taught about information technology in nursing education. A three-round Delphi survey was carried out with a panel of experts representing nursing practice, nursing education, nurse students and consumers. The panel showed a consensus of opinion on 71% of the items included in the questionnaire designed for the study. The experts agreed that nurses must know how to use the computer for word-processing purposes, for accessing and using the hospital information system, and for e-mailing. Nurses must also be aware of system security and show a positive attitude towards computers. It is concluded that hospital information systems and nursing informatics should be integrated into laboratory and hospital training.

SCHLAGWÖRTER:
computer literacy; education; medical informatics; attitude to computers; curriculum; delphi technique; Finland

Sauer 1998
Sauer, G.P.
Information technology: meet the challenge.
SCHLAGWÖRTER:
hospital information system; medical records systems

Schulz, Steeneck 1997
Schulz, B.; Steeneck, S.
Nursing informatics in Germany.
Hospitals on the track.

Shanahan (Hrsg.) 1998
Shanahan, Paul (Hrsg.):
Using and Managing Information for Better Health.

Sharpe 2001
Sharpe, Charles C.
Telenursing.
Nursing practice in cyberspace.

Sinclair, Gardner 1997
Sinclair, M.; Gardner, J.
Nurse teachers' perceptions of information technology: a study of nurse teachers in Northern Ireland.
ABSTRACT: [Healthstar]
This paper presents the results of a brief study of Northern Ireland nurse educators' perceptions of information technology (IT) in nurse education. The study focuses on training, computer use, student assessment, and future trends. The results indicate that although there remain tutors who have not received any formal training in computer use, the majority want to use computers and recognize their need for competence. While training would appear to have a positive effect on their perceived level of competence and computer knowledge, the study identifies factors which contribute to the restricted use of computer assisted learning (CAL). Student assessment varies across the province and findings of the study indicate that although many changes have taken place, staff expect more in the future. They identify a need for policies that include training programmes, competence assessment, appropriate technology, and networking.

SCHLAGWÖRTER:
attitude to computers; Ireland; nursing education research

Sinclair, Gardner 1999
Sinclair, Marlene; Gardner, John
Planning for information technology key skills in nurse education.
SCHLAGWÖRTER:
IT competence; IT experience; attitude to computers; new entrants

Skiba 1997
Skiba, D.J.
Nursing education to celebrate learning.
ABSTRACT:
Institutions of higher education currently face a number of challenges, from the increasing diversity of students, a growing disparity between what society and what the university defines as its core mission, and society's transition from an industrial economy to an information economy. As part of such institutions, schools of nursing will need to consider a new "business design," which may include: new course formats that will keep groups of students together for several years in the same "learning communities"; use of Internet communications for projects and public exhibitions and defenses of results instead of the regular weekly scheduled class; offering programs for learning entrepreneurship, business practice, management, and leadership; and establishing programs for working professionals that promise, deliver, and certify specified competencies.

SCHLAGWÖRTER:
curriculum; education; organizational innovation

Slack 1997

ABSTRACT: [Amazon.com Info] Written by the man Newsweek dubbed 'Cyberdoc', Cybermedicine is a passionate plea for the expanded use of computers among both doctors and patients. The book presents a compelling argument for the use of computers in the initial diagnosis and assessment of patients, for crucial decisions in the course of treatment, and for use in self-care, research, prevention of illness, and - above all - patient empowerment. Cybermedicine is filled with real-life examples from patients, practitioners, and health care institutions. Slack offers convincing evidence that computers can provide doctors with an invaluable extension of their clinical resources as well as the means for transferring more control to the patient. Slack shows that ultimately the computer has been a humanizing influence in the practice of medicine.

+++ Synopsis:
A Harvard doctor challenges the medical establishment to incorporate the use of computers into the delivery of health care in order to improve the quality of care through the large volume of medical information that computers are able to access. 12,500 first printing.

+++ Card catalog description
Cybermedicine presents a compelling argument for the use of computers for initial diagnosis and assessment, for crucial decisions in the course of treatment, and for self-care, research, prevention, and - above all - patient empowerment. Cybermedicine is filled with real-life examples from patients, practitioners, and health care institutions and offers convincing evidence that computers can provide doctors with an invaluable extension of their clinical resources as well as the means for transferring more control to the patient. And ultimately, Slack shows that the computer has been a humanizing influence in the practice of medicine.

+++ Customer Comments
thomas.h.munnecke@cpmx.saic.com from San Diego, CA, 01/15/98, rating=8: Excellent, good points about patient empowerment. Generally a good book, explains a lot about the author's history. Good points about patient empowerment. Very important points about use of e-mail in clinical settings. I'm a little more cynical about the use of direct computer-patient dialog for clinical information (One such system once told me that I was suffering from premenstrual tension...it forgot to ask my sex.) Would like to have much greater focus on the future, however...Incidents from the 1960's and 1970's are not all that relevant today.

+++ Table of Contents
Preface
1. Providing Information to Patients
2. The First Patient-Computer Dialogue
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8. The Clinician On-Line
9. Confidentiality
10. Barriers to Clinical Computing
11. What Can Be Done

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SCHLAGWÖRTER:
computer systems

Stock 2000

Teixeira, Anjos 1998

SCHLAGWÖRTER:
attitude to computers; medical informatics; telemedicine

Thiele 1997

ABSTRACT: [Healthstar] Development of the World Wide provides educators with an enormous library of teaching tools. The purpose of this presentation is to share the results of introducing over 60 graduate students to use e-mail, internet mailing lists, computer conferences, and the World Wide Web as teaching strategies. Data were collected from students through questions and Electronic Communication Logs. Response of the students was categorized into 6 phases: 1) fear and trepidation, 2) excitement, "this is great!", 3) "help, my mail box is full", 4) venturing forth independently, 5) this is easy, and 6) accepting the internet as a useful tool. Identification of these phases provided a basis for developing teaching strategies specific to internet uses. Feedback between students and instructor increased and was far more timely than occurs in the classroom setting. The student responses to these experiences were overwhelmingly positive.

SCHLAGWÖRTER:
Internet/Intranet; education; evaluation
Thomson 1998
Thomson, M.
*Multimedia anatomy and physiology lectures for nursing students.*
ABSTRACT: [Healthstar]
The use of the multimedia computer and projector can provide the lecturer who teaches anatomy and physiology to nursing students with a very powerful educational tool. The recent explosion in the number of Internet sites has resulted in a huge resource base of illustrations, photos, x-rays, and film clips, which are useful for anatomy and physiology multimedia presentations. These allow nursing students to be instructed in a clear, colorful, and dynamic fashion. This article shows how to put together anatomy and physiology multimedia presentations quickly and easily, and reviews some of the key sites on the Internet that provide resources suitable for lectures to nursing students.

SCHLAGWÖRTER: anatomy; education; multimedia; physiology; teaching methods

Todd 1998
Todd, N.A.
*Using e-mail in an undergraduate nursing course to increase critical thinking skills.*
ABSTRACT: [Healthstar]
This article describes how e-mail was used in an undergraduate nursing course to increase contact between students and faculty. Students were required to respond to critical thinking questions using e-mail.

SCHLAGWÖRTER: Internet/Intranet; education; evaluation; problem based learning

Travis 1997
Travis, L.
*Integrating information management into a baccalaureate nursing curriculum.*

SCHLAGWÖRTER: curriculum; nursing informatics; information management

Travis, Brennan 1998
Travis, L.; Brennan, P. F.

SCHLAGWÖRTER: curriculum; nursing informatics

Travis, Flatley 1998
Travis, L.; Flatley, Brennan P.
*Information science for the future: an innovative nursing informatics curriculum.*

ABSTRACT: [Healthstar]
Health care is increasingly driven by information, and consequently, patient care will demand effective management of information. The report of the Priority Expert Panel E: Nursing Informatics and Enhancing Clinical Care Through Nursing Informatics challenges faculty to produce baccalaureate graduates who use information technologies to improve the patient care process and change health care. The challenge is to construct an evolving nursing informatics curriculum to provide nursing professionals with the foundation for affecting health care delivery. This article discusses the design, implementation, and evaluation of an innovative nursing informatics curriculum incorporated into a baccalaureate nursing program. The basic components of the curriculum framework are information, technology, and clinical care process. The presented integrated curriculum is effective in familiarizing students with informatics and encouraging them to think critically about using informatics in practice. The two groups of students who completed the four-course sequence will be discussed.

SCHLAGWÖRTER: curriculum; education; computer; medical informatics

Trill 1999
Trill, Roland
Nürnberg (Luchterhand) 1999.

Tronni, Prawlucki 1998
Tronni, C.; Prawlucki, P.
*Designing a computer-based clinical learning lab for staff nurses.*

SCHLAGWÖRTER: computer assisted instruction; education

Turley 1996
Turley, J.
*Nursing decision making and the science of the concrete.*

SCHLAGWÖRTER: decision making; nursing science

Turley 1996a
Turley, J.P.
*Toward a model for nursing informatics.*

SCHLAGWÖRTER: models; information technology; nursing science

Uto, Muranaga, Kumamoto 1997
Uto, Y.; Muranaga, F.; Kumamoto, I.; Ohno, A.; Iwasaki, S.; Igata, A.
*The frontier of nursing in the age of multimedia.*

SCHLAGWÖRTER: Internet/Intranet; education; home care service; Japan

Vanderbeek, Beery 1998
Vanderbeek, J.; Beery, T.A.
*A blueprint for an undergraduate healthcare informatics course.*

ABSTRACT: [Healthstar]
Healthcare informatics has been taught at the graduate level for a number of years. With the proliferation of computer uses and information management systems,
all nurses must interface with computer technologies. Healthcare informatics courses can no longer remain limited to specialists at the graduate level. Undergraduate nursing educators must incorporate information management content into their curricula. The authors provide a detailed description of an undergraduate healthcare informatics course.

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**Weis, Guyton-Simmons 1998**

Weis, P.A.; Guyton-Simmons, J.

A computer simulation for teaching critical thinking skills.


**ABSTRACT:**

[Healthstar]

Critical thinking is difficult to teach because it is an abstract conceptual skill and there is no standard model. The authors discuss the development and use of a computer simulation that stimulates critical thinking in nursing students. Computer simulations are an efficient method of teaching students content and critical thinking skills without exhausting severely limited clinical time or placing a patient in jeopardy.

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**Walker, Prophet 1997**

Walker, K.P.; Prophet, C.M.

Nursing documentation in the computer-based patient record.


**ABSTRACT:**

[Healthstar]

This paper describes the INFORMM NIS (Information Network for On-line Retrieval & Medical Management Nursing Information System) charting system developed by the Departments of Nursing and Information Systems at the University of Iowa Hospitals and Clinics (UIHC). The documentation system features automated work lists, defaulted charting responses, decision support, automatic computations, chart forms and reports, and graphical displays of clinical data. The impact of the on-line charting system has been demonstrated by content standardization with Nursing Interventions Classification (NIC), improved standards compliance, increased efficiency, enhanced timeliness, expanded accessibility, and an augmented data archive.

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**Welton, Jarr 1997**

Welton, J.M.; Jarr, S.

Automating and improving the data quality of a nursing department quality management program at a university hospital.


**ABSTRACT:**

[Healthstar]

BACKGROUND: The development and implementation of a relational database program for nursing quality management at a university hospital was stimulated by a lack of consistent data management and analysis tools in the existing noncomputerized program. PROGRAM DEVELOPMENT AND IMPLEMENTATION: An initial software prototype implemented in the critical care service included data collection instruments for five areas: medication errors, patient falls, returns to an intensive care unit within 48 hours, hospital-acquired skin breakdown, and unplanned extubations. Access to the database was limited and paper reports only were disseminated on a scheduled basis. In a second phase, the database is being deployed throughout the nursing department using a local area network. Nurse managers will enter and interact with the quality database online and have access to graphics, reports, and action plan development. POSSIBLE ERRORS: A wide range of potential errors influences decisions on how to collect, store, retrieve, and process quality management data. Each type of error affects the nurse manager’s ability to identify significant patterns or trends that are amenable to intervention. There is no right way of constructing and implementing a quality improvement database; only an optimum balance between cost, complexity, and efficacy. SUMMARY AND CONCLUSIONS: Initial feedback from end uses has been positive. A three-year experience with a personal computer database suggests that the personal computer-based information technology is appropriate for small to medium applications and can support departmentwide CQI efforts. A case scenario using simulated data is included to illustrate the use of computerized reports in assessing and taking action on an increase in falls.

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**Whitman, Hamann, Vossler 1997**

Whitman, B.L.; Hamann, S.K.; Vossler, B.L.

A training plan for bedside computers.


**ABSTRACT:**

[Healthstar]

Computer assisted instruction; simulation; education; nursing process
As more hospitals implement bedside computer technology, staff development educators will be called on to develop complex training programs. This article describes a successful bedside computer training plan that includes use of a contract, pretraining activities, training methods, and training environment.

**SCHLAGWÖRTER:**
computer user training; education; hospital information system; point of care systems

**Wilke 1998**

Wilke, Helmut

*Systemisches Wissensmanagement.*

( = Grundwissen der Ökonomik - BWL)

**SCHLAGWÖRTER:**
knowledge management; knowledge organization

**Wilson, Fulmer 1998**

Wilson, R.; Fulmer, T.

*Home health nurses' initial experiences with wireless, pen-based computing.*


**ABSTRACT:**

[Healthstar]

Eight home health nurses from the Visiting Nurse Service of New York participated in a focus group discussion after their initial experiences using wireless, pen-based computing in the inner-city, home care environment. Transcripts of the nurses’ responses to open-ended questions were analyzed and central themes were found, following the method of concept analysis described by Strauss and Corbin (1990). The central concepts were "Readiness," "A thousand pounds on my back," "Call for support," "Problems with transmission," "Using the computer as an assistant," "Nurses discovered glitches," and "Everybody has to have a computer." These themes reflected the nurses’ initial experiences with the wireless computers and also revealed their concerns. This article will describe these themes and will discuss the implications of current improvements in wireless computing for health care.

**SCHLAGWÖRTER:**
attitude to computers; community health nursing; nursing records; nursing research; medical records systems

**Woodhead 1997**

Woodhead, S.


**ABSTRACT:**

[Healthstar]

Processing the vast amount of information required to provide quality nursing and health care today is an immense task. The Surgeon General of the Navy recently updated the Department’s "Vision for the Future." He challenged Navy medicine to become a leader in technology integration. Shifting toward a managed-care environment makes it imperative for health care organizations and their personnel to integrate data, information, and systems at all levels. Implementation of a coordinator to assist nursing users with this technology is proving essential. This essay describes how one nursing directorate at a Naval hospital implemented a full-time staff member as Nursing Informatics Coordinator to serve in this role. Receiving and using data and information in the practice of nursing is vital to the profession. Specific factors identifying the reasons for development of this role, impact achieved, opportunities encountered, and the future of the position are addressed.

**SCHLAGWÖRTER:**
medical informatics; computer communication networks

**Yensen 1996**

Yensen, J.

*Connecting points. Telemurining, virtual nursing, and beyond.*


**SCHLAGWÖRTER:**
telemedicine; nursing practice; computerization

**Young 2000**

Young, Kathleen M.

*Informatics for Healthcare Professional.*


**Ziel 1997**

Ziel, S. E.

*New frontiers in health care decision-making: information, decision-making, and divided loyalties.*


**SCHLAGWÖRTER:**
decision making; case management; medical records systems
Abu Jahl came to him and said, "O Abu Safwan! If the people see you staying behind though you are the chief of the people of the Valley, then they will remain behind with you." Abu Jahl kept on urging him to go until he (i.e. Umaiya) said, "As you have forced me to change my mind, by Allah, I will buy the best camel in Mecca. Abbas Saad (Arabic: عباس سعد‎; born 1 December 1967) is an Australian soccer manager and former player, who coaches Australian side Sydney Olympic. Born in Lebanon, Saad's family moved to Australia when he was a child. An attacking midfielder with a good eye for goal, he represented the Australian national team in a match against Russian club Torpedo Moscow and earned his first full cap against Malaysia two years later. After a six-year gap, he was recalled by then Socceroos coach Terry Venables for