Healthcare organisations in all countries of Europe are paying attention to electronic records and the data required to deliver and improve healthcare. As we work towards standard nursing terminology for these systems it is easy to forget the professional practice reasons for having common nursing diagnosis, interventions and outcomes. But these standards allow nurses to teach, research, evaluate and improve nursing practice; most importantly they support the delivery of evidence based care to citizens and populations.

ACENDIO was established in 1995 with the goal of ‘promoting a Common European framework for the description and classification of nursing practice, expressed as nursing diagnoses, interventions and outcomes’. As we look forward to the 7th European conference of the Association it is helpful to be reminded that effective clinical care is the real reason for our efforts. Professor Pesut who will speak at the opening of the conference will be presenting his views on the nature of the nursing process and the need to focus on outcomes (see page 6). Those concerned with common terminology are also concerned with how the practice concepts relate to each other and to the clinical process. This understanding needs to be shared with those designing electronic records and other information technology support for healthcare delivery. At this year’s conference and over the coming biennium, ACENDIO will continue to work towards bringing together the separate worlds of practice and technology through better understanding of nursing concepts and clinical processes.

Prof. Margareta Ehnfors, President of ACENDIO

From the President

All Members Invited to Attend General Assembly of ACENDIO

Members of ACENDIO will have the chance to decide on future work and priorities for the Association during the General Assembly to be held during the 6th European Conference in Amsterdam in April. A new President and several new Board Members will be elected—information on elections is included with this newsletter—you can nominate yourself or another member for these posts. Following the General Assembly in 2005, the Board has made the election process more formal for 2007. If you would like more information about the General Assembly or the elections please email the ACENDIO secretary Alex Westbrook:

Alex.Westbrook@rmh.nhs.uk

Thanks to Sponsor

The Board of ACENDIO expresses thanks to SEPP - the Association for Systematic Development of Professional Nursing in Austria - for supporting publication of the last ACENDIO Newsletter
NANDA International and Blackwell Publishing are pleased to announce Georgia Griffith Whitley, RN, EdD, as the new Executive Editor of the *International Journal of Nursing Terminologies and Classifications*, the official journal of NANDA International. NANDA International is committed to the development of nursing diagnostic terminology, based on a belief that ‘nursing terminology is the key to defining the future of nursing practice’.

The aim of the Association's work is ‘to provide nurses at all levels and in all areas of practice with a standardized nursing terminology with which to name client responses to actual or potential health problems, life processes, and wellness; document care for reimbursement of nursing services; contribute to the development of informatics and information standards, ensuring the inclusion of nursing terminology in electronic health care records; and facilitate study of the phenomena of concern to nurses for the purpose of improving patient care’. [www.nanda.org](http://www.nanda.org)

The Editor welcomes submission of articles that reflect knowledge development related to:

- nursing terminology and classification for diagnoses, interventions, and outcomes;
- use of nursing language in practice and education;
- the processes of clinical judgment and knowledge presentation;
- the use of nursing language and classification in research, practice, and education.

Manuscripts may be submitted electronically and time-to-publication is less than 6 months. Free online access to this journal is available within institutions in the developing world through the HINARI initiative with the World Health Organization (WHO). [www.blackwellpublishing.com](http://www.blackwellpublishing.com)

**COLLABORATION BETWEEN ICNP® AND SNOMED CT®**

The International Council of Nurses (ICN) and SNOMED International, a division of the College of American Pathologists (CAP) have announced a collaboration to complement each other’s terminologies, the International Classification for Nursing Practice (ICNP®), and SNOMED Clinical Terms (SNOMED CT®). They have issued a joint press statement identifying potential areas for collaboration based on the similarities and differences between the two international terminologies:

- **ICNP®** Version 1.0 is described as ‘a reference terminology that supports mapping between terminologies, a resource for the development of ICNP catalogues which are subsets of nursing diagnoses, interventions, and outcomes for select nursing specialties, areas of practice, and client conditions’.

- **SNOMED CT®** is ‘designed to support the entry and retrieval of clinical concepts in electronic systems and their communication in messages.

It has characteristics that support maps to other terminologies, as well as synonyms that make it useful for recording clinical care’.

The plan for collaboration is based around the development of ICNP catalogues. When these are implemented in electronic record systems, the concepts in the catalogues will be represented using codes. In places where SNOMED CT is the standard coded terminology it must be possible to represent the concepts in the ICNP catalogues using SNOMED CT. For example, the ICNP Catalogue “Partnering with Patients and Families to Promote Adherence to Treatment” includes nursing diagnoses, outcomes, and interventions to address this nursing concern – terms representing the specific concepts in the catalogue need to be present in SNOMED CT where this used and may need adding if they are not yet present.

Standard sets of SNOMED CT codes representing ICNP catalogue content will be needed to support consistency of recording and avoid each SNOMED CT user or organization from constructing their own SNOMED CT representation for each ICNP catalogue. The mechanisms for the development and maintenance of these catalogue representation subsets needs to be further explored and will in part depend on the current development of the international SNOMED Standards Development Organization – see page 3.

*Nursing and Informatics for the 21st Century*

edited by Charlotte Weaver, Connie Delaney, Patrick Weber and Robyn Carr and launched at NI2006 in Korea has won the 2006 HIMSS Book of the Year Award.
**ICNP® NEWS**

**ICNP® Software Agreement**

The International Council of Nurses (ICN) has agreed terms with Medicos Na Internet (MNI) to incorporate the International Classification for Nursing Practice (ICNP®) into its software products. The use of ICNP® in MNI software supports the vision of ICNP® to be an integral part of the global information infrastructure enlightening health care practice and policy for improved patient care worldwide.

“This type of partnership with industry is important to advance use of the ICNP® in nursing practice,” explained Judith Oulton, ICN’s Chief Executive Officer. “Using ICNP® will provide data to support clinical, administrative and policy decision-making, thus enhancing the safety and quality of care to patients and families. With the current shortage of human resources in health care, there is an urgent need to understand and evaluate how nursing practice impacts patient outcomes.”

**Growth of ICNP® Centres**

A fourth ICNP® Centre has received ICN accreditation: The ICNP® Research and Development Centre at the University of Wisconsin-Milwaukee College of Nursing, USA. The major focus of the Milwaukee Centre will be to integrate ICNP® with the work of the Knowledge-Based Nursing Initiative, is a partnership involving a health care enterprise of hospitals, clinics, home care and other delivery settings (Aurora Health Care), a healthcare information software vendor (Cerner Corporation) and the University of Wisconsin-Milwaukee College of Nursing. The purpose of the initiative is to accelerate and expand the use of nursing knowledge and evidence in nursing practice through information systems technology. The Director of the new centre is Norma Lang, PhD, RN, FAAN, FRCN.

The German Speaking User Group (Deutschsprachige ICNP Nutzergruppe) has completed its three-year self-study and has been re-accredited by ICN for the next four years (2007–2010). Along with continuing its work with the Version 1.0 translation, the Centre is involved with ICNP® catalogue development and is working with a software vendor to place ICNP® in clinical information systems. It has also developed a web-based, open source translation tool, which it hopes to share with others who want to conduct ICNP® translations.

**ICNP® catalogue development news**

A prototype ICNP® catalogue, titled “Partnering with Clients and Families to Promote Adherence to Treatment” is nearing completion, according to the latest ICNP bulletin. This catalogue will model the catalogue framework to guide development of catalogues and will include a statement of the significance of the phenomenon to nursing; related diagnoses, outcomes and interventions and their ICNP® codes; examples of use in practice (case studies, an assessment tool); references; and a user survey. ICN is encouraging worldwide participation in ICNP® catalogue development and the ICNP® Programme can assist groups working in similar areas to network. The programme supports the objective of delivering ICNP® catalogues or nursing data subsets for specified health concerns to support building health information systems ‘with all the benefits of being part of a unified nursing language’.

**ICN Workforce Action**

An International Centre for Human Resources in Nursing has been set up by the ICN and the Florence Nightingale International Foundation. The Centre aims to inform policy-making and building capacity in the areas of nursing human resources planning, management and development.

[www.ichrm.org](http://www.ichrm.org)

**SNOomed International Organisation Progress**

Representatives from countries continue to work with SNOMED International in the creation of an international standards development organization (SDO) for the maintenance, development, quality assurance and release of SNOMED Clinical Terms. College of American Pathologist President Thomas Sodeman said: “As international adoption and use of SNOMED CT has grown, it has become apparent that it would be in everyone’s interests - patients, clinical caregivers, national governments, software developers, etc. - for SNOMED CT to have an international governance structure that would be open and accessible to the entire global healthcare community.” Countries in discussion include Australia, Canada, Denmark, Lithuania, The Netherlands, New Zealand, Sweden, the UK and US. The SNOMED nursing working group is seeking assurance from the new SDO that nursing will be well represented in the governance structures and that international collaboration will continue around nursing content of SNOMED CT.
**Country Reports**

**News from South-West Europe**

**Andorra**

Progress is being made in health informatics with a recent meeting organised by the University of Andorra devoted to Health care systems and Information and Communication technologies. The meeting was attended by politicians, managers, IT professionals and health professionals.

This was the first meeting ever celebrated in Andorra to talk about the requirements of an electronic information system for the Health care. There were relevant speakers coming mostly from the neighbour Country, Spain, and participants found the discussions extremely useful. The Chancellor of the University of Andorra announced at that meeting that the University will be offering a postgraduate course on Health Informatics that will begin in February 2007.

**Spain**

The Spanish Association for Nursing Taxonomies AENTDE celebrated the VI International Symposium of Nursing Diagnoses, under the title of “Gestión, liderazgo y resultados” (Management, leadership and Outcomes). The venue was Granada, a most beautiful city in the South of Spain. Around 600 participants heard international speakers including Sue Moorhead, principal investigator for the NOC project, Heather Hermann and Dickon Weir-Hughes, President and President elect of NANDA-International, together with some National Nursing leaders from Spain.

This was a special occasion for AENTDE, because they were celebrating their tenth anniversary as an organisation, one of the oldest in Europe in this field. ACENDIO, congratulates them again for all their achievements. More information can be found at www.AENTDE.com.

**France**

AFEDI (the Association Francophone Européenne des Diagnostics, Interventions et Resultats Infirmiers) held a very successful 16th conference “Diagnostics, Interventions et résultats infirmiers: un enjeu humain avant tout” in Paris last November. AFEDI is the oldest nursing diagnosis organisation in Europe: its objectives were agreed by the General Assembly in 1991 and modified in 2000. They are to:

- Développer le Diagnostic, l’Intervention et le Résultat Infirmier comme un concept
- Contribuant à la promotion de la qualité, de la reconnaissance et de la gestion des soins infirmiers.
- Participer à la recherche internationale Sur les Diagnostics, Interventions et Résultats Infirmiers.
- Développer des réseaux d’échange Et être garantie de la scientificité, Interventions et Résultats des Diagnostics Infirmiers.

www.afedi.com

Carme Espinosa

**News from Ireland**

The first nursing workshop run by the National Standards Authority of Ireland (NSAI) and the Health Informatics Standards Committee (HISC) was held in Dublin in 2006. The workshop began with an introduction to standards relevant to nursing and the surrounding structures within which NSAI and HISC operate. Dr. Padraig MacNeela of University College Galway gave an overview of the Clinical Judgement and Decision Making Study Board. This study, being run from 2002-2006 is the first national programme for nursing and received €1,000,000 for its completion.

The presentation focused on one particular output from this study the Irish Nursing Minimum Dataset (INMDS) and its potential use for nursing in Ireland in the future. The workshop concluded with a one-hour discussion as to how best to proceed with the establishment and development of a nurse expert group within NSAI-HISC. A number of key decisions were made including the establishment of an expert panel to review relevant ISO standards as well as the establishment of a networking group with representation across the country. ACENDIO is represented on this group by Dr. Fintan Sheerin.

Pam Henry
SHORT ARTICLES

SWISS NURSINGDATA PROJECT COMPLETED

The Swiss project NURSINGdata project was completed in June 2006. This work began in 1998 with the aim of identifying a national nursing information system to make it possible to collect nursing data in the three main sectors of health care – home care, nursing homes and hospitals - for all specialities (according to the subdivision of the medical activity) and in the three linguistic areas (French, German and Italian). This system is compatible with the other Swiss information systems, such as medical statistics and classifications and must also allow international comparisons, taking into account the legislation on data protection. Two sub-projects were at the centre of the development:

1. the definition of the minimum data set to be collected for federal medical statistics, called Swiss Nursing Minimum Data Set (CH-NMDS). Within this framework, NURSINGdata worked out the basis for the collection of comparable and standardized nursing data, usable in all the fields of the Swiss health care system in which nursing is present

2. the development, for Switzerland, of two reference classifications supporting the description, analysis and inclusion in national statistics, what nurses do (nursing interventions) and why they do it (nursing phenomena). The first objective was determining the relevant data to describe nursing; the second to specify the definition of these items. The result is expressed in the three national languages.

The general design of the project is published on Internet site www.isesuisse.ch/nursingdata. This document represents the synthesis and the final stage of the Swiss Nursing Minimum Dated Set (CH-NMDS). It brings basic information on the project itself, on the CH-NMDS, on the two reference classifications - classification of "nursing phenomena", classification of "nursing interventions" - as well as the main directives and basic rules making it possible to collect the data in an adequate way.

Anne Berthou

PFLEGEASSESSMENT MITTELS EINER ELEKTRONISCHEN PFLEGEDOKUMENTATION

Zusammenfassung

Es werden die Zielsetzungen, Vorgehensschritte und Vorgaben eines Projektes zur Einführung eines Pflegeassessments anhand der elektronischen Pflegedokumentation vorgestellt. Das Ziel dieses Projektes war, ein elektronisches Pflegeassessmet-Tool zu entwickeln, welches den Ansprüchen einer laufenden Erfassung, Ergänzung und Überprüfung standhält. Das aus dem Projekt hervorgegangene Anforderungsprofil zeigt die inhaltlichen Kriterien auf, welches ein standardisiertes Pflegeassessment in der elektronischen Pflegedokumentation zu erfüllen hat, um direkt zu wählbaren Pflegediagnosen zu gelangen.

Einleitung/Fragestellung

In den bestehenden elektronischen Pflegedokumentationssystemen werden die Elemente des Pflegeprozesses bis jetzt für sich häufig alleine abgebildet, das bedeutet, diese Elemente sind nicht intelligent miteinander verknüpft [1, 2]. Ein Eintrag in dem Bereich des Pflegeassessments bewirkt keine direkte Reaktion in den anderen Bereichen der Software. Eine Eingabe im Pflegeassessment Bereich sollte aber die Pflegenden bei der Auswahl möglicher Pflegediagnosen unterstützen. Hier dominiert vorwiegend Freitexteingabe, was zu ungenauen Pflegediagnosen führt [3]. Diese Vorgabe hat aber weniger mit den Möglichkeiten der Software zu tun, als mit den Ressourcen bei der Entwicklung solcher Systeme. Die Vorteile eines elektronischen Systems werden bisher nicht oder nur ansatzweise genutzt [4]. Größtenteils bilden diese so genannten elektronischen Systeme nur bereits bestehende Papierversionen elektronisch ab. Das neu entwickelte Pflegeassessment-Tool bietet Möglichkeiten, um Pflegende bei der Erfassung von Patientendaten zu unterstützen und diese Daten dann auch auszuwerten [5, 6].

Dabei wurde die Taxonomie II der NANDA hinterlegt [7, 8]. Das Projekt hat zum Ziel, einen Beitrag zur Schliessung der Lücke zwischen elektronischer Datenerfassung und Datenauswertung darzustellen und eine praxistaugliche, elektronische Pflegedokumentation zu entwickeln, welches pflegewissenschaftlichen Kriterien standhält.

Ergebnisse

Carme Espinosa interviewed Professor Pesut who is the keynote speaker for the opening of the 6th European Conference of ACENDIO in Amsterdam in April. Below is an extract from the interview which was first published on the AENTDE website.

Professor Pesut is very well known for his work on nursing education as well as in mental health nursing. His research interests are psychosomatic voluntary regulation, clinical reasoning and leadership development. This interview focused on the development and implementation of the OPT Model (Outcome Present-stae Test), which is a clinical reasoning model.

In your book, *Clinical Reasoning - the art and science of critical and creative thinking*, you defined the OPT model as the third generation in the nursing process. Why do you think this change has occurred? What advantages are there in the OPT model, in regard to the traditional model?

The traditional nursing process used in the United States has changed over time and has moved from a focus on problems to outcomes. Another factor that has contributed to this change is the knowledge explosion related to nursing informatics and standardized nursing diagnoses, interventions and outcomes. Today the health industry is most interested in specification and measurement of outcomes rather than the assessment and identification of problems. Nursing care that is problem focused is not necessarily outcome specific. Outcomes focus on an end result or desired states. Outcome specification is central to care and case management.

In the USA one can trace the development of ways nursing educators used to structure and teach clinical thinking. For example nursing process models of the past did not explicitly deal with outcome specification. The first generation (1950-1970) focused on problems and process. The second generation (1970-1990) highlighted diagnosis and reasoning. As the profession moves into third generation nursing process models (1990-2010) the ability to manage and think about how problems and outcomes are related represents more complex thinking and reasoning.

The nursing informatics revolution has also influenced the way we teach and learn clinical thinking. I believe clinical reasoning that focuses on outcomes is more valuable and cost-effective than clinical reasoning that focuses on problems. The OPT Model is unique in terms of its explicit focus on outcomes.
Side by side comparisons of outcomes with present state information of clients creates a contrast state or test condition from which evidence can be derived and meanings attributed to the evidence. Such judgment can then be subjected to a reflection check.

Could you brief us on the basics of this model?

The Outcome-Present State-Test (OPT) Model provides a structure for clinical reasoning that includes both problems and outcomes and in nursing practice. OPT emphasizes pattern detection and recognition that involves relationships among many nursing diagnoses. Through creating a web of relationships one often finds a focus that is more important in the context of the dynamic pattern of relationships.

The model uses the facts associated with a client’s story to give meaning to (frame) issues. Clinical decision-making in this model is defined as choosing nursing actions. A clinical judgment is the conclusion or meaning one gives data drawn from a comparison of client present state data to specified outcome criteria. Reflection on judgments suggests the need for reframing situations or creating new tests, making different intervention decisions or choices.

Clinical reasoning involves concurrent, creative, critical, and systems thinking.

The model suggests nurses simultaneously consider relationships among diagnoses, interventions and outcomes with attention to the evidence used to make judgments. The model is not a step-by-step problem-solving model that focuses on one problem at a time. The OPT requires one to consider many problems at the same time, and discern which problem or issue is most important. Once this “keystone issue” is determined efforts are put into specifying the outcome and evidence for outcome achievement.

To know whether the outcome has been achieved one needs a metric or other measure to note changes in the evidence or criteria used to determine success. For example if the nurse is taking care of a diabetic patient and has gotten blood glucose level back from the lab of 290, the nurse mentally creates a “test” in her head.

She knows the normal value is 80-120.

Thus the juxtaposition of the present state of 290 is compared with the desired outcome of 80-120. The difference in blood glucose is 170 points greater than the desired outcome. The difference in the actual and desired blood glucose represents a comparative analysis or a “test”.

In order to make a judgment the nurse must conclude what blood glucose of 290 means for the patient. Her conclusion or the meaning she/he gives to this evidence is a judgment about the “test”. Clinical judgment is the process of drawing conclusions based on the test of the comparison of present state (Blood glucose of 290) to a specified outcome state (Normal blood glucose 80-120). Judgments involve what I call the four Cs:

1) Contrast between a present and desired state,
2) Criteria and clinical indicators;
3) Concurrent consideration of the problem, interventions and outcomes;
4) Conclusion meaning yes, the outcome has been achieved, no the outcome has not yet been achieved or one needs to think again and reframe the problem or outcome.

Reflection and clinical decision-making continue until there is a satisfactory judgment that supports a match between the evidence of achieving a client’s desired outcome state and present state. If a match exists, the nurse concludes she or he has achieved the outcome and exits the reasoning task.

This side-by-side comparison of present to desired future states creates a “test” or an evidence gap that needs to be filled in order to make a judgment about achievement of the outcome. This “test” is the deliberate comparison of the present state to the outcome state. The goal of nursing care is to bridge the gap between present state and desired outcome states. For example how does one help the client achieve a desired state of a normal blood glucose level? There are many nursing interventions choices the nurse can make when working with the diabetic client. These represent clinical decisions based on the context of the story.

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**Aim** Use of standardized terminologies facilitates measurement of nursing’s contribution to care. This systematic review examined the effects on documentation of assessment quality, frequency, accuracy and completeness of nursing diagnoses, and on coherence between nursing diagnoses, interventions and outcomes.

**Method** A Medline, CINAHL, and Cochrane Database search (1982-2004) was conducted and enhanced by the addition of primary source and conference proceeding articles. Thirty-six articles were selected according to preset criteria and thematic content analysis carried out; a level of evidence and grades of recommendations were assigned.

**Findings** Nursing diagnosis use improved the quality of documented patient assessments (n=14 studies), identification of commonly occurring diagnoses within similar settings (n=10), and coherence among nursing diagnoses, interventions, and outcomes (N=8). Four studies employed a continuing education intervention and found statistically significant improvements in the documentation of diagnoses, interventions and outcomes. Limitations in diagnostic accuracy, reporting of signs/symptoms, and etiology were reported (14 studies). One meta-analysis showed no evidence that standardized electronic documentation of nursing diagnosis and related interventions led to better nursing outcomes.

**Conclusion** The review suggests that nursing diagnostics improved assessment documentation, the quality of interventions reported, and outcomes attained. Educational measures to enhance diagnostic accuracy are recommended. The relationships among diagnoses, interventions and outcomes require further study as does the relationship between the quality of documentation and practice.


**Aim:** This study uses mapping methodology to examine the applicability of the Nursing Interventions Classification and the International Classification of Nursing Practice to nursing practice in a Korean Oriental-medicine hospital.

**Method:** Data were collected from the nursing records of 56 stroke patients in one unit, and intervention statements were mapped into NIC and ICNP.

**Results:** Of 147 unique nursing intervention statements extracted, 136 (92.52%) could be mapped into NIC and 99 (67.35%) statements could be completely mapped into ICNP.

**Conclusion:** Using mapping methodology, this study validates that both NIC and ICNP would be useful for documenting nursing care in a Korean hospital, but it also identifies additional concepts that need to be represented in both of these standardized nursing languages. It is recommended that nurses be more careful in documenting their interventions and also that SNLs be developed further to more completely represent nursing practice.


**Aim:** The International Standards Organization's (ISO) International Standard IS 18104 should assist the nursing profession to integrate their terminologies into computer systems and healthcare reference terminologies. The ISO standard was used to test the degree to which three terminologies could be cross-mapped to each other.

**Method:** Concepts and terms were selected, their equivalence determined by experts, and the specific concepts were dissected or broken down to their constituent parts.

**Results:** Based on experts’ selections from the three classifications, equivalent concepts were identified. Those concepts deemed equivalent were dissected, thus revealing whether the components of the nursing diagnostic concepts such as focus, judgment, and other attributes of the ISO standard matched. Based on the dissection of each diagnosis, the decision was made whether mapping was possible or not.

**Conclusion:** The dissection revealed that several nursing diagnostic concepts can easily be interchanged, while others cannot or can be mapped only for specific purposes (e.g., clinical or aggregate use). This implies that for some concepts it does not matter which terminology is used, and in other cases it does because of different meanings.

Abstract: The International Classification of Functioning, Disability and Health (ICF) provides a comprehensive and internationally acknowledged framework for the description of human functional health, which covers all aspects of health and some health-related elements of well-being. The ICF is part of the classification family of the World Health Organisation (WHO) and can be used by different health care disciplines as well as for different purposes.

In order to promote the discussion about ICF within the nursing profession, the German speaking working group "ICF and Nursing" developed a position statement that critically reflects both the potentials and the restrictions of the ICF for use in nursing care, particularly for diagnostical purposes.


Aim: Many standardized healthcare languages have been mapped to the Systematized Nomenclature of Medicine Clinical Terms known as SNOMED CT.. This study describes a methodology for detecting misassigned concepts from source systems to SNOMED CT and presents the results of applying this methodology to a subset of concepts from two standardized nursing languages, the Nursing Interventions Classification and the Nursing Outcomes Classification.

Method: The methodology is based on comparing the knowledge representations of a set of nursing concepts between source systems (nursing languages) and SNOMED CT. If any nursing concept differs in knowledge representation in the target system compared with the source system, editorial misassignment of the concept was declared and recommendations for target system developers were made.

Results: In a total of 75 nursing concepts used to test this method, five misassigned concepts(6.6%) were found in SNOMED CT.

Conclusion: This method can be used to validate other healthcare languages.


Aim: This study aimed at reviewing the knowledge produced about the Nursing Interventions Classification (NIC) available in the scientific literature from January 1980 to January 2004. NIC is a taxonomy with activities performed by nurses.

Results: The works found referred to the application of NIC to practice, the languages used in information systems, the use of NIC in these systems and the presentation, construction, development and validation of a taxonomy, among others.

Conclusion: Authors concluded that there are several possibilities related to the production of knowledge on NIC in Brazil and that it is necessary to encourage studies on this taxonomy, raising questions and generating new knowledge to contribute to the improvement of Brazilian Nursing.


Aim: to present our perspectives on healthcare information analysis at a conceptual level and the lessons learned from our experience with the development of a terminology-based enterprise electronic nursing record system - which was one of components in an EMR system at a tertiary teaching hospital in Korea - using an object-oriented system analysis and design concept.

Method: the department of nursing constituted a system modeling team comprising a project manager, systems analysts, user representatives, an object-oriented methodology expert, and healthcare informaticists (including the authors). A rational unified process (RUP) and the Unified Modeling Language were used as a development process and for modeling notation, respectively.

Results: From the scenario and RUP approach, user requirements were formulated into use case sets and the sequence of activities in the scenario was depicted in an activity diagram. The structure of the system was presented in a class diagram.

Conclusion: This approach allowed us to identify clearly the structural and behavioral states and important factors of a terminology-based ENR system (e.g., business concerns and system design concerns) according to the viewpoints of both domain and technical experts.

Aim: To describe the phenomenon of stress overload as a nursing diagnosis.

Method: A qualitative study using case study method was conducted with nine adults experiencing stress overload to fully describe the experience and identify possible defining characteristics. Literature on stress and its related factors were examined to support stress overload as a nursing diagnosis for inclusion in the NANDA classification.

Findings: Stress overload, defined as excessive amounts and types of demands that require action, is a human response that is experienced as a problem and contributes to the development of other problems. The proposed defining characteristics are perceives situational stress as excessive, expresses a feeling of tension or pressure, expresses difficulty in functioning as usual, expresses problems with decision-making, demonstrates increased feelings of anger and impatience, and reports negative effects from stress such as physical symptoms or psychological distress.

Practice Implications. Nursing interventions such as active listening and decision-making support are needed to help people reduce stress levels. Studies are needed to further validate the defining characteristics and related factors.


Aim: This descriptive, exploratory, retrospective survey, carried out at a family planning service, aimed to identify nursing phenomena during nursing visits according to the ICNP, Beta version 2.

Method: Data were collected based on 52 records of nursing visits. To conduct the cross-mapping process, all identified nursing phenomena were joined, organized and compared according to the ICNP's terms.

Results: Of the 51 identified nursing phenomena/diagnoses, 46 (90.2%) showed exact and partial concordance.

Conclusion: The identified nursing phenomena can be used to assist nurses to provide care for clients in family planning services. The ICNP showed to be a comprehensive program, although some terms need to be reviewed and others enhanced.


Aim: This qualitative study aims to understand the meanings nurses at a university hospital attribute to the implementation process of the Nursing Diagnosis Classification System (DEn) as a phase in the Nursing Care System (NCS).

Method: Data were collected through interviews with eight nurses from the Medical Clinical Unit, who participated in the creation of an instrument to implement the DEn in the NCS.

Results: In their reports, the respondents expressed a positive change in their feelings, from initial discomfort and adverse perception of the change proposal.

Conclusion: The stepwise appropriation of the process stages allowed them, besides the sharing of feelings, decisions and responsibilities for the results, to develop the belief that they would able to overcome the difficulties.


Aim: To analyze the degree to which standardized nursing language was used by baccalaureate nursing students completing Outcome-Present State-Test (OPT) model worksheets in a clinical practicum.

Method: A scoring instrument was developed and 100 worksheets were retrospectively analyzed.

Findings: NANDA nursing diagnoses were correctly stated in 92% of the OPT models. Nursing Outcomes Classification (NOC) outcomes were explicitly stated in 22%, and implied in 72%. Interventions matched appropriate Nursing Interventions Classification (NIC) activities in 61%.

Conclusion: NANDA, NIC, and NOC (NNN) language was used inconsistently by students in this sample.

Implications for Practice: If NNN language is to advance nursing knowledge, its promotion, representation in curriculum development, and active use is necessary. Educational research is needed on the facilitators and barriers to NNN language use.
Klinische Entscheidungsfindung: Förderung des kritischen Denkens im pflegediagnostischen Prozess durch Fallbesprechungen

Maria Müller-Staub, Diplomierte Pflegefachfrau, Berufsschullehrerin Pflege, Supervisorin BSO, Pflegewissenschafterin MNS, Phd(c).

Ursula Stuker-Studer, Diplomierte Pflegefachfrau, Berufsschullehrerin Pflege, Supervisorin BSO.

Zusammenfassung

Pflegediagnostische Fallbesprechungen, die sich auf reale Patientensituationen beziehen, sind eine Form klinischer Entscheidungsfindung, welche kritisches Denken von Pflegenden fördern.

Der Artikel beschreibt Methode und Verlauf von Fallbesprechungen in der Weiterbildung von Pflegenden. Diese Methode der Fallbesprechung basiert auf der Fallsupervision nach Balint, wurde weiterentwickelt und mit dem pflegediagnostischen Prozess verbunden. Die Fallbesprechung weist verschiedene Arbeitsphasen auf: Vorphase, Aushandlung, Fallschilderung und Fallbearbeitung. Die Falleinbringerin schildert die Patientensituation durch freies Erzählen, was der Gruppe ermöglicht, Hinweise und Zeichen zu analysieren, thematisch zu bündeln, Pflegediagnosen zu stellen und Pflegeinterventionen abzuleiten. Durch Theoriebezug und kritische Stellungnahme der Falleinbringerin werden die Resultate der Fallbesprechung validiert.

Lerneffekte der Fallbesprechungen wurden anhand schriftlicher, qualitativer Auswertungen evaluiert und in Anlehnung an Mayring analysiert. Die Analyse ergab folgende Kategorien:

a) Pflegeprobleme werden aus Patienten naher Sicht erkannt, treffende Pflegediagnosen gestellt und wirksame Pflegeinterventionen implementiert.

b) Pflegerische Aufgaben werden gezielter betrachtet und klarer benannt.

c) Beziehungsgestaltung, Kommunikation und würdiger Umgang mit Patientinnen werden differenziert wahrgenommen.

Die theoretischen Grundlagen sind im Artikel „Klinische Entscheidungsfindung und kritisches Denken im pflegediagnostischen Prozess“ beschrieben.

Summary

Case studies, based on actual patients’ situations, provide a method of clinical decision making to foster critical thinking in nurses. This paper describes the method and process of group case studies applied in continuous education settings. This method bases on Balints’ case supervision and was further developed and combined with the nursing diagnostic process. A case study contains different phases: Pre-phase, selection phase, case delineation and case work. The case provider narratively tells the situation of a patient. This allows the group to analyze and cluster signs and symptoms, to state nursing diagnoses and to derive nursing interventions. Results of the case study are validated by applying the theoretical background and critical appraisal of the case provider.

Learning effects of the case studies were evaluated by means of qualitative questionnaires and analyzed according to Mayring. Findings revealed the following categories:

A) Patients’ problems are perceived in a patient centred way, accurate nursing diagnoses are stated and effective nursing interventions implemented.

b) Professional nursing tasks are more purposefully perceived and named more precise.

c) Professional nursing relationship, communication and respectful behaviour with patients were perceived in differentiated ways.

The theoretical framework is described in the paper „Clinical decision making and critical thinking in the nursing diagnostic process“.

The association for Common European Nursing Diagnoses, Interventions and Outcomes is a membership organisation that was established in 1995 to promote the development of nursing’s professional language and provide a network across Europe for nurses interested in the development of common terminology to describe the practice of nursing.

**Organisational membership**

Professional, Educational or Corporate Organisations may wish to support ACENDIO in its mission ‘to promote a Common European framework for the description and classification of nursing practice, expressed as nursing diagnoses’. Benefits of Institutional membership include the information, networking and advertising opportunities that ACENDIO can provide.

**WHAT CAN ACENDIO OFFER YOU?**

ACENDIO supports the process of terminology development by providing:

- Conferences, publications, website and presentations to advance understanding and collaboration
- A network for nurses in different European countries so that they can share knowledge about developments
- Resources such as reference lists and sample methodologies for developing and evaluating nursing terminologies via an international network of expert nurses
- Interpretation of international standards for terminologies and classifications

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**Membership for two years is payable in £ sterling:**

Individual £45, Student £20, Organisation £450

**CONTACT ACENDIO**

For more information contact:
Alex Westbrook
ACENDIO Secretary
Alex.westbrook@rmh.nhs.uk

**EVENTS**

<table>
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<tr>
<th>Date</th>
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| 19-21 April 2007 | 6th European Conference of ACENDIO  
Amsterdam The Netherlands  
www.acendio.net |
| 27-28 April 2007 | American Nursing Informatics Association Conference  
Las Vegas, Nevada, USA.  
www.ania.org/Conference 2007.htm |
| 22-24 May 2007   | AMIA Spring Congress  
Orlando, Florida, USA  
www.amia.org |
| 27 May-1 June 2007 | ICN International Conference,  
Japan www.icn.ch |
| 11-13 June 2007   | 2007 Institute on Nursing Informatics and Classification  
The University of Iowa, US  
www.uiowa.edu/cnc |
| 18-21 July, 2007,  | 17th Annual Summer Institute in Nursing Informatics  
Baltimore, MD, USA.  
http://nursing.umaryland.edu/informatics/  |
| 20-24 August 2007 | Medinfo  
Brisbane, Australia.  
ww.medinfo2007.org |
| 23-25 October 2007 | World of Health IT Conference and Exhibition,  
Vienna, Austria.  
http://cfp.worldofhealthit.org/2007/ |