

# The NIC/NOC Letter

A publication of the Center for Nursing Classification  
Sponsored by Harcourt Health Sciences/Mosby Year Book

Nursing Interventions Classification/Nursing Outcomes Classification

Volume 8 No. 1 • February 2000

Nursing Interventions Classification (NIC) is a comprehensive standardized language to describe the treatments that nurses perform. Nursing Outcomes Classification (NOC) is a comprehensive standardized language to describe patient outcomes sensitive to nursing treatments. The Classifications are useful in planning and documenting care, in communicating the essence of nursing to others, and in the development of large databases for research on the effectiveness of nursing care. The research to develop the Classifications is facilitated by the Center for Nursing Classification at the College of Nursing, The University of Iowa. The purpose of this newsletter is to provide current information about the Classifications.

## ***NIC 3<sup>rd</sup> ed. and NOC 2<sup>nd</sup> ed. NOW IN PRINT***

NIC 3 includes 486 interventions and NOC 2 includes 260 outcomes. NIC has 58 new interventions and 98 revised interventions; NOC has 70 new outcomes and 20 revised outcomes. NIC 3 includes a new community domain with 2 classes of interventions and a new class in the family domain (for a total of 7 domains and 30 classes). NOC 2 has 7 domains and 29 classes including family and community health. The introductory chapters for each book have been totally revised and updated and updated linkages with NANDA diagnoses are included in both books. Both books include samples of implementation forms used in various practice and education facilities that have implemented the classifications. The two research teams wish to thank all those who submitted suggestions for new and revised outcomes and interventions. Individual names of submitters are included in each of the books. To obtain a copy of either book, call 800-545-2522 or fax your order to 800-568-5136. The cost of each book is \$37.95. ISBN#s - **NIC:** 0-323-00894-1/ **NOC:** 0-323-00893-3

## ***NOW AVAILABLE: NANDA, NIC & NOC LINKED TO RAP***

The Center has recently produced in booklet form a monograph that links NANDA diagnoses, NIC interventions and NOC outcomes with the 18 RAP (Resident Assessment Protocols) mandated for use in long term care. The monograph entitled "Standardized Nursing Language in Long-Term Care" was developed by Sister Ruth Cox, PhD, RN, President and CEO of the Alverno Health Care Facility in Clinton Iowa, with assistance from Center staff. The 1987 Omnibus Budget Reconciliation Act mandated that a uniform comprehensive assessment tool be developed for long term care facilities. The Resident Assessment Instrument, composed of a Minimum Data Set (MDS) and Resident Assessment Protocols (RAPs) was in use nationwide by 1991. On June 22, 1998 all long-term care facilities were required to transmit MDS data to a designated state agency via computer Intranet. State data are transmitted to the Federal repository for data warehousing. The national data set will be used for research, survey, and funding purposes. The

monograph assists those in long term care to identify appropriate nursing diagnoses, outcomes, and interventions for their patients once they have completed the assessment and identified the specific RAP. It is available from the Center for \$10. To order, send prepayment to: Center for Nursing Classification, The University of Iowa, NB 407, Iowa City, IA 52242-1121. A sample linkage is included here:

**RAP:** Delirium

**NANDA DIAGNOSIS:** Confusion, Acute

**NOC OUTCOMES:**

Cognitive Ability  
Cognitive Orientation  
Information Processing  
Memory

**NIC INTERVENTIONS:**

Delirium Management  
Delusion Management  
Hallucination Management

## ***CORRECTIONS IN NIC 3 and NOC 2***

Unfortunately there are some errors that have been discovered in the 3<sup>rd</sup> edition of NIC and the 2<sup>nd</sup> edition of NOC. These will be corrected in the next printings, but if you have a first printing copy of either book, please note these corrections:

### **NIC 3**

- p. 93 Feeding Class D, should be 1050 (not 0150)
- p. 95 in Class I, 2620 Neurological Monitoring should be Neurologic Monitoring
- p. 103 Vehicle Safety Promotion should be 9050 (not 6660) and should be cross referenced with d (Community Risk Management), not V; intervention should be removed from class V (Risk Management) page 100
- p. 103 in Class d, 8820 Community Disease Management should be Communicable Disease Management
- p. 251 Developmental Care should be 8250 (not 6824)
- p. 253 Developmental Enhancement: Adolescent should be 8272 (not 7052)
- p. 254 Developmental Enhancement: Child should be 8274 (not 7050)
- p. 773 Triage: Disaster should be 6362 (not 6360)

### **NOC 2**

- p. 121 Blood Glucose Control (2300) -Class is incorrect; should be Therapeutic Response (a). Listed correctly in the NOC taxonomy on page 89.
- p. 198 Dignified Dying (1303)-Indicator codes incorrect on two indicators: 7th indicator (Exchanges affection with others) should have code number 130307 (not 030307); 8th indicator (Disengages gradually from significant others) should have code number code 130308 (not 030308).

We apologize for these mistakes and appreciate your understanding of how difficult it is to keep this all straight. If you find additional errors we appreciate your notifying us.

### ***NANDA, NIC AND NOC REPRESENTATIVES MEET TOGETHER***

The Principal Investigators of NIC and NOC enjoyed a visit by Dottie Jones, President of NANDA, and Joe Braden from Nursecom, in late January. The representatives of NANDA, NIC, and NOC spent a day discussing the evolution of nursing language development and the impact of external groups such as HL7 and SNOMED on our work. Strategies to enhance collaboration between the groups were outlined. These strategies will now be discussed by the Boards of NANDA and the Center and then presented at the upcoming NANDA conference in April.

### ***14<sup>th</sup> NANDA BIENNIAL CONFERENCE***

Brochures are available for the forthcoming conference, "NANDA: Forging Links to the Future" to be held at the Sheraton World Resort in Orlando, FL. April 5-8. The conference will focus on new developments in nursing diagnosis. Dottie Jones, NANDA President will open the conference with a talk entitled "Nursing Language: Moving into the Next Century." A panel the first day will include Joanne McCloskey Dochterman and Marion Johnson from the Center from Nursing Classification. The keynote address, "The Relationship Between Language and Knowledge Development in Nursing: A Methodological Perspective: will be delivered by Theo Dassen, Professor and Director of the Department of Nursing Science at the University of Berlin. Marjory Gordon and Martha Craft-Rosenberg will be presenting the Diagnostic Review Committee Report and an update on the work of the Nursing Diagnosis Extension and Classification (NDEC) Team. Numerous other speakers and special events are included. For more information call 800-647-9002 or e-mail: ken.cleveland@nursecominc.com.

### ***2<sup>nd</sup> INFORMATICS/CLASSIFICATION INSTITUTE —JUNE 10-13, 2000***

The program for the second institute has been finalized and the brochure will be available shortly. The institute will be held in Iowa City, June 10-13, 2000. Registrations will be limited to 50. Keynotes for the institute will be delivered by Charles Mead, Chief Technology Officer, Simione Central Holdings, Inc. in Atlanta Georgia and Co-Chair HL7 Patient Care Technical Committee and Judy Ozbolt, Professor, School of Nursing Vanderbilt Medical Center in Nashville, TN. Other speakers include Judy Lee, Executive Director for the Institute for Comprehensive and Alternative Nomenclature who will speak on reimbursement to alternative providers and Sal Bognanni, Vice President for Health Management, Well Inc. Blue Cross, Blue Shield of Iowa who will address the Wellmark BCBS Strategy for documenting performance improvement. Presentations will be made by implementation champions in practice: Sister Ruth Cox, Alverno Health Care Facility in Clinton Iowa; Cindy Scherb, Immanuel-St. Joseph's—Mayo Health System, in Mankato Minnesota; Kathy Smith and Vivienne Smith, University Hospital, University of Colorado Health Sciences Center, Denver, Colorado; and Kathleen Parris, County of Orange Health

Care Agency, Santa Ana, California. There will be on site visits to two facilities using standardized language in their information systems. One half day will feature a panel discussing issues in informatics. There will be time to talk with developers of NANDA/NDEC, NIC and NOC. A unique feature of this year's institute is a scheduled time for sharing with each other; participants are asked to bring materials and ideas to share. To get your name on the mailing list for the brochure, call Jennifer Clougherty at 319-335-7119 or e-mail [jennifer-clougherty@uiowa.edu](mailto:jennifer-clougherty@uiowa.edu).

### ***DETERMING COST FOR NURSING INTERVENTIONS***

*(Submitted by Jane Brokel - Executive Director, CARE Management Institute, North Iowa Mercy Health Network)*

Mercy Medical Center – North Iowa (Mercy), a rural referral health care system, needed to cost out all functions for inpatient and outpatient settings. There were no electronic methods to record nursing interventions used within existing information systems. In the past year and half, Mercy implemented Eclipse's Sunrise Decision Support Manager (SDSM). The complex software allows the consolidation of various data from legacy systems for cost accounting, managing contracts, analyzing clinical resource utilization and clinical path, budgeting and more. Now when data are collected systematically, there can be aggregation with other collected data elements within the organization into SDSM. Nursing data needed to be a part of the main decision support system through an existing system. The major issues to using nursing interventions in existing system were designing steps to: 1) identify NIC interventions provided, 2) use a consistent costing method, 3) establish an easy collection process, and finally 4) provide analysis using NIC interventions. The Cardiac Cath Lab was chosen as a pilot site to collect and cost out nursing interventions identified by nurses. The nurses first reviewed the list of activities for each published NIC intervention. The 16 chosen NIC interventions accurately accounted for the daily and/or occasional activities nurses currently document into the medical record. Medication Administration, Pain Management, Teaching: Procedure/Treatment and Code Management were some of the 16 NIC interventions used. The next step was meeting with the Finance Analyst, manager and lead registered nurse on assigning general time spent completing the activities for the intervention and clarifying the job code(s) participating in completing the intervention. An activity-based costing method was used. This method of costing provided a method that would be consistent in various settings as home care, clinic practices, or case management. The collection process was designed within the order communications application an existing information system. Data from the existing SMS software system is fed or extracted into the Sunrise Decision Support Manager. The Nursing Interventions can now be a part of Phase of Care and Episode of Care studies, utilization and resource management analysis, clinical indicator and clinical pathway analysis and departmental cost accounting. For more information, contact Jane Brokel at: [brokymas@netins.net](mailto:brokymas@netins.net)

**VISIT THE CENTER WEBSITE**  
<http://www.nursing.uiowa.edu/cnc>

### **USE OF STANDARDIZED LANGUAGE AT UIHC**

*(Submitted by Gloria Dorr, Informatics Clinical Nursing Specialist, University of Iowa Hospitals and Clinics, Iowa City, Iowa)*

The nurses on 33 units at the University of Iowa Hospitals and Clinics (UIHC) use NIC to do their care planning and documenting. In December 1999, an improved method for users to select and utilize NIC interventions was implemented. It is now easier and faster for the user to select a NIC intervention through the pathways of the NIC alpha list, NIC domains and classes, and care plan categories, such as “respiration”. The implementation of improved selection methods also involved the implementation of standardized patient population titles. Expert clinicians at UIHC developed a list of approximately 200 patient population titles. These titles cover medical conditions, surgeries or other invasive procedures, major symptoms, etiologies, or ages that identify groups of patients. The expert clinicians associated NIC interventions and NANDA/NDEC nursing diagnoses to each patient population title. This helps the user to easily see which interventions and nursing diagnoses may be standard for each patient population. Expert users validated the list of interventions and nursing diagnoses associated with each patient population title. Each patient care unit chooses patient population titles for inclusion on the unit-specific screen that allows users easy access to content for typical patient populations. In addition, it is simple for the user to access patient population titles in other ways. The user can choose the following pathways to access other patient population titles from the unit-specific screen:

- Etiology—alpha list of etiologies or causes/related factors
- Title—alpha list of all patient populations
- Title type—list of patient populations sorted by type: behavioral, medical, procedural, surgical and other.

UIHC is beginning the field-testing and implementation of NOC. A project leader has been assigned and work is progressing to identify the priority NOC outcomes for UIHC.

### **HOSPITAL DEVELOPS “PAPERLESS”COMPETENCE SYSTEM**

*(Submitted by Sharon LaDuke, BS, RN, Hepburn Medical Center, Ogdensburg, NY)*

Hepburn Medical Center has revised all job descriptions so that they are competency based. The skills for each job description were chosen based upon standards of practice, competency statements or other guidelines from the professional society corresponding to the job title. In the case of nursing, NIC and the work to identify core interventions used by 39 specialties (now published in NIC 3<sup>rd</sup> ed.) were used to determine the skills that would be placed in the job descriptions. The job description is now used by job candidates and their prospective managers to conduct and document a pre-hiring competence assessment; by preceptors to guide and document the orientation assessment process; and by managers to guide the ongoing,

annually documented competence assessment process. Several benefits have been noted since the system was implemented last June. These include: 1.) Managers benefit because competence assessment and performance evaluation are reduced to one process and one piece of paper. 2.) Human Resources does not have to deal with dozens of checklists for hundreds of employees. 3.) Staff say they are now receiving the most objective evaluations they have ever had. 4.) Nurses applying for jobs in specialty areas, after reading the NIC-based job description, recognize that they are novices not ready for such complex practice and have withdrawn applications, preventing self-defeating experiences and waste of hospital resources in an unsuccessful orientation. 5) Use of NIC to define competencies has assisted RNs, managers, and administrators to make the transition from thinking of nursing skills in terms of discrete, psychomotor tasks, to thinking of them in terms of ongoing, complex patient management skills that may be invisible to the observer. The job description/performance appraisal forms are available on the web: <http://preview.best4health.org/solutions/innovation/ei21.cfm>.

### **GUIDELINES FOR SHORTENING NIC ACTIVITIES IF NEEDED**

While things are changing, some computer systems still restrict space, thereby not allowing for the number of characters necessary for including the entire length of the NIC activities. If this is the case, we would first advise requesting more space. However, for whatever reason this is not possible, the following guidelines should be used to decrease the length of the activities. If these guidelines are followed all activities should be less than 125 characters.

#### Guidelines:

1. Eliminate all “as appropriates” and “as needed” found after a comma at the end of some activities.
2. Remove all e.g.s found inside of parentheses.
3. Delete words or dependent clauses that describe other parts of an activity.
4. Use the abbreviation pt. for patient and nse. for nurse.
5. Do NOT create new language and do not replace words.

We have decided not to suggest additional word abbreviations upon what is already in NIC as most agencies have an agreed upon list of abbreviations that they are required to use; these lists are not uniform across agencies and creating yet another list may lead to further confusion.

### **GIFT SUPPORT RECOGNITION**

We thank the following individuals who have contributed to the Center for Nursing Classification endowment since the October issue:

Barkauskas, Violet, Ann Arbor, MI  
 Brokel, Jane & David, Rockwell, IA  
 Brown, Billye, Manchaca, TX *In Honor of Myrtle Aydelotte Bulechek, James R, and Gloria M., Solon, IA*  
 Callan, Laurie, Clinton, IA  
 Clark, M. Kathleen & Richard Valentine, Iowa City, IA  
*In Honor of the Marriage of Joanne McCloskey and Bruce Dochterman*  
 Clougherty, Jennifer, Iowa City, IA  
 Creason, Nancy, Johnson City, TN

Cullen, Laura, Iowa City, IA  
 Denehy, Janice, Iowa City, IA  
 Eland, Joyce, Solon, IA  
 English, Ann & John, Summit, NJ  
**GIFT SUPPORT -- Continued**  
 Heick, Merle & Harold, Iowa City, IA  
 Hoskins, Lois & Paul, Ashton, MD  
 Keenan, Gail & William, Ann Arbor, MI  
*In Honor of the Marriage of Joanne McCloskey and  
 Bruce Dochterman*  
 Koeppen, Kay, Newton, IA  
 Kruckeberg, Thomas & Johanna, Solon, IA  
*In Honor of the Marriage of Joanne McCloskey and  
 Bruce Dochterman*  
 McCabe, Linda, Burlington, IA  
 McCloskey, Joanne, Swisher, IA  
 Rakel, Barbara, Iowa City, IA  
 Riesch, Susan, Middleton, WI  
 Rose, Dolores, Solon, IA  
 Rosenberg, Guy & Martha Craft-Rosenberg, Iowa City, IA  
 Scherb, Cindy & Glenn, Kiester, MN  
 Tripp-Reimer, Toni, Iowa City, IA

*A permanent source of funding is necessary to provide a base of support for the Center to ensure ongoing stability. The endowment support has now reached \$430,000 with a goal of \$1million. All monetary gifts are welcome including deferred estate gifts. All gifts qualify as charitable contributions. The Center is one of the College's initiatives for the nursing centennial campaign and is designated as one of the College's identified areas for the new university campaign. To make a contribution contact Wes Butterfield, Director of Development at 319-335-7006 or e-mail wes-butterfield@uiowa.edu. Checks can be made out to Nursing Classifications Fund—Account #30-612-071 and mailed to the University of Iowa Foundation, C/O Wes Butterfield, P.O. Box 4550, Iowa City, IA 52244-4550.*

The NIC/NOC Letter, is published three times a year in February, June, and October. The newsletter is currently mailed to over 1,600 individuals in 49 states plus Washington, DC and Guam and 22 foreign countries, including Australia, Austria, Belgium, Brazil, Canada, China, Denmark, France, Germany, Iceland, Japan, Korea, Netherlands, New Zealand, Norway, Saudi Arabia, Spain, South Africa, Sweden, Switzerland, Taiwan, and the United Kingdom.

### **RECENT PUBLICATIONS OF INTEREST**

Johnson, M., Maas, M. (1999). Nursing-sensitive patient outcomes: Development and importance for use in assessing health care effectiveness. In E. Cohen & V. DeBack (Eds.). *The Outcomes Mandate, Case Management in Health Care Today*, (pp. 37-48). St. Louis: Mosby.

LaDuke, S.(2000). NIC puts nursing into words. *Nursing Management* 31(2), 43-44.

Maas, M., Moorhead, S., Specht, J., Schoenfelder, D., Swanson, E.A., Johnson, M. (2000). Concept development of nursing-sensitive patient outcomes. In B. Rogers & K.

Knafel (Eds.). *Concept Analysis in Nursing Research*, (pp. 387-400). New York: Springer Publishing Company.

Schoenfelder, D., Swanson, E., Specht, J., Johnson, M. & Maas, M. (2000). Outcome indicators for direct and indirect caregiving. *Clinical Nursing Research* 9(1),47-69.

### **QUESTIONS SOMETIMES ASKED ABOUT NIC AND NOC**

*The following information is adapted from 3rd edition NIC (Iowa Interventions Project, 2000) and 2nd edition NOC (Iowa Outcomes Project, 2000)*

#### **How do I explain to the administrator at my institution that a license is needed?**

It is only use in an information system that requires a license and a fee. If you want to use NIC or NOC manually or for a particular project that does not violate copyright, please go ahead. In our experience it is nurses and not health care administrators who are unfamiliar with licenses and fees. Most other health care classifications are copyrighted and fees are required for use. For example, the CPT (Current Procedural Terminology) is copyrighted by the American Medical Association, DSM (Diagnostic and Statistical Manual of Mental Disorders) is copyrighted by the American Psychiatric Association, and SNOMED (Systematized Nomenclature of Medicine) is copyrighted by the College of Pathologists. Health care institutions regularly pay license fees of which most nurses are not aware. In one tertiary care hospital that we know of, 97 vendor software products are installed with licensing fees of more than \$1,220,000 annually.

License fees are often included as a part of software costs. NIC and NOC can be licensed from Mosby for incorporation in an existing information system or purchased from a vendor with software covered by a license. As more nurses understand the advantages of using standardized language and request them for updated information systems, more vendors will include NIC and NOC in their products.

In nursing, none of the professional organizations have the resources to maintain NIC and NOC so another avenue was needed. An advantage of having the Classification housed in a university setting versus the professional organizational model is that politics are less likely to come into play. Ongoing development and maintenance, however, require resources. Classifications and other works in the public domain are often those for which there will be no upkeep—you can use what is there but don't expect it to be kept current. We have attempted to make NIC and NOC as accessible as possible but need to collect fees so that we can have a revenue stream to finance the maintenance work that must continue.

#### **Why is it necessary for nurses to have their own list of outcomes?**

NOC outcomes are patient, family, and community level outcomes that are responsive to nursing interventions. They are not intended to be unique to nursing. Clearly most, if not all, patient outcomes are influenced by multiple health care providers, as well as by other patient, family, and community/population characteristics, and by environmental factors. However, it is vitally important for nurses to measure the effects of the interventions on patient outcomes. The NOC provides indicators for each outcome that are more sensitive to nursing interventions. Thus, whereas the team expects all disciplines to use the majority of the outcomes, different indicators will be of most use to different health care disciplines. Without discipline-specific indicators for shared outcomes, it will be impossible to monitor the accountability of each discipline for its contribution to outcome improvement or deterioration. To ensure that the contributions of nursing interventions to patient, family, and community level outcomes are not credited to other health care providers, standardized nursing data elements must be included in clinical data bases. Large data sets that include these data along with

other salient system; patient, family, or community level and provider characteristics; are necessary to isolate the independent effects of nursing interventions on patient outcomes.

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**HOW TO CONTACT THE CENTER FOR NURSING CLASSIFICATION**


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 E-mail: [classification-center@uiowa.edu](mailto:classification-center@uiowa.edu)  
 Website: <http://www.nursing.uiowa.edu/cnc>

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**SUBMISSIONS TO NEWSLETTER WELCOME**


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We welcome submissions to the newsletter. Please send them via e-mail or on disk to Barbara Head ([barbara-head@uiowa.edu](mailto:barbara-head@uiowa.edu)), Center for Nursing Classification, College of Nursing, The University of Iowa, Iowa City, IA. 52240-1121. Please indicate who is submitting the contribution, title and credentials, and how to contact someone for further information. Sharing of information assists all of us in the continued use and development of the classifications. All contributions will be reviewed and possibly edited by newsletter staff.

**MOSBY CONTACTS**

Current contacts at Mosby related to purchasing, licensing, and copyright needs are as follow:

Barbara Cullen, NIC and NOC Executive Editor 215-238-8305

Permissions: Julie Lawley (Information - 215-238-7869;

Requests - FAX - 215-238-8483)

NOTE: Permission takes 4-6 weeks to process

Licenses: Barbara Cullen 215-238-8305

Marketing: Teresa Hajdu. 215-238-7856. FAX 215-238-8495.

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**Moving?** Please call, e-mail, or make changes on the address below and mail this panel or photocopy to the Center for Nursing Classification.

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**Center for Nursing Classification**
**The NIC/NOC Letter**

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