The Patient Care Data Set

I. Code Set

The Patient Care Data Set (PCDS).

II. Development Organization

The Patient Care Data Set was initially developed by Judy Ozbolt at the University of Virginia, in collaboration with member institutions of the University HealthSystem Consortium. It is now undergoing revision at Vanderbilt University Medical Center (VUMC). Future versions will be developed and maintained at VUMC.

III. Status of ANSI Accreditation

The Patient Care Data Set is not ANSI accredited.

IV. Description

A. Purpose: The Patient Care Data Set (version 4.0, 1998) contains a data dictionary and sets of terms and codes representing specific values of Patient Problems (363 terms), Patient Care Goals (311 terms), and Patient Care Orders (1357 terms). It was recognized in 1998 by the American Nurses Association (ANA) as one of the vocabularies to be considered for use by nurses, and is included in the National Library of Medicine's Metathesaurus. The intent of the Patient Care Data Set is to serve as a set of standard terms to represent and capture clinical data for inclusion in patient care information systems.

The Patient Care Data Set was compiled and tested for validity and reliability in a project funded by the University HealthSystem Consortium (UHC) in 1994 and 1995. Nine hospitals contributed patient care planning and documentation materials from the full range of inpatient services plus the emergency department. Pre-coordinated phrases representing statements of Patient Problems, Patient Care Goals, and Patient Care Actions (later called Orders) were abstracted from these materials. Although many of the statements relate to nursing care, other disciplines, such as nutrition and respiratory therapy, were included when terms descriptive of the practice of those disciplines occurred. Validity and reliability studies were carried out on a sample of 465 patient records from 6 member hospitals of UHC. Auditors in the field, who achieved mean reliability scores of 86%, identified 18,995 items in the records as instantiations of Patient Problems, Patient Care Goals, and Patient Care Actions. They matched 91% of these items to codes in the Patient Care Data Set. The auditors sent the unmatched items verbatim to the University of Virginia team, where a further 8 per cent were matched, for a total of 99% coverage. Of the entire sample, 179 items had no match in the Patient Care Data Set.

In its original form, the Patient Care Data Set was a relatively comprehensive catalog of pre-coordinated terms used to name the key phenomena of patient care: problems, actions, and goals. In accordance with messaging standards for patient care data developed by Health Level Seven (HL7), patient outcomes are represented as Goal Evaluation Status. As many developers of clinical terminologies have pointed out, however, sets of pre-coordinated terms have the disadvantage of being relatively inflexible and cumbersome, requiring numerous additions to be comprehensive of variations in clinical practice. Consequently, the Patient Care Data Set is being revised. The pre-coordinated phrases are being parsed into atomic-level concepts, and rules are being established for combining those into more complex concepts. The result is a parsimonious set of atomic-level concepts that can be combined according to well-defined rules into a much larger set of post-coordinated phrases to represent clinical events.

B. Type of code set: Originally a catalog of pre-coordinated terms with a rudimentary hierarchical structure, the Patient Care Data Set is evolving into a .formal nomenclature with atomic-level representations of concepts, a combinatorial grammar, and a hierarchical structure permitting multiple parentage and multiple lines of descent.

C. Clinical topics addressed: The Patient Care Data Set includes patient problems, patient care orders, patient care goals, and goal achievement status.

D. Domain focus: The terms of the Patient Care Data Set were compiled from all inpatient clinical services and the emergency departments of 9 academic health care institutions from three geographic regions of the United States: the Atlantic coast, the Midwest, and the Southwest. Clinical services include labor and delivery, intensive care units of all types including neonatal, burn units, pediatrics (including adolescents), psychiatry, rehabilitation, and the various general and specialty services of medicine and surgery. Terms were not compiled from ambulatory or home care services. Thus, the Patient Care Data Set was developed and tested in acute care settings.

E. Update frequency: No schedule has been established. A major reworking to create a formal nomenclature of atomic-level concepts and relationships and rules for combining concepts will be completed in 1999.

F. Update distribution: Updates will be distributed to users as they become available.

G. Source of funding: Development and testing of the original version of the Patient Care Data Set was provided by the University HealthSystem Consortium and by the University of Virginia, as well as by the contributed time and effort of the auditors at the six test sites. Current revision is funded by VUMC's Center for Biomedical Informatics. An application (1 R01 LM-6020-01) is under review at the National Library of Medicine for further refinement and incorporation into VUMC's Patient Care Information System.

H. User group: Nurses and technical personnel in the Departments of Information Management and Case Management at VUMC are involved in refining and implementing the Patient Care Data Set in the VUMC Patient Care Information System.

I. Copyright: Judy Ozbolt holds the copyright for versions 1-4 of the Patient Care Data Set. The copyright holder of the revised version will be VUMC.

J. Derivative works: N/A.

K. Relevant characteristics: The terms of the Patient Care Data Set are organized into 22 components, modified from those identified by Virginia Saba in the Home Health Care Classification. These components are as follows:

Activity
Circulation
Cognition
Coping and Mental Health
Fluids and Electrolytes
Gastrointestinal Function
Health Knowledge and Behaviors
Immunology
Medications and Blood Products
Metabolism
Nutrition
Physical Regulation
Pre-, Intra, and Post-Procedure
Respiration
Role Relationships
Safety
Self Care
Self Concept
Sensation, Pain, and Comfort
Tissue Integrity
Tissue Perfusion
Urinary Elimination

Within each component are three axes: Problems, Goals, and Orders. Each axis contains a set of defined atomic-level elements, which are the same for all components. The values that each element may assume, however, vary across components. The definitions of the elements on each axis and a depiction of their syntactical relationships follow, along with tables showing the permitted values on one axis, Activity.

a. Problems: Each problem statement in the patient record is composed of atomic-level elements. These elements are defined as follows:

- **Subject:** The recipient of care
- **Object:** The focus of care (e.g., pain, sleep, immune deficiency, etc.)
- **Likelihood:** The probability (i.e., confirmed, potential, suspected or rule out)
- that the subject has an object (e.g., pain) or a modification (as specified under Status) of the object
- **Status:** Health professional's assessment of the status of the object (e.g., deficient, disrupted, excessive, impaired, normal, etc.)
- **Degree:** Health professional's assessment of the magnitude of the object itself (such as mild, moderate, or severe disuse syndrome) or the magnitude of the modification of an object (e.g., mildly, moderately, or severely impaired mobility)
- **Duration** The length of time the subject has had the object or the modification of the object (e.g., acute, chronic, date and time of onset)
- **Value:** The measurement of the degree of an object or a modification of the object (e.g., percentage of normal range or motion, or rating of pain on visual analog scale)
- **Frequency:** The intervals at which the object or the modification of the object recurs (e.g., every 2 hours, monthly)
- **Body site:** The anatomical location of the object or the modification of the object on the body
- **Laterality:** The side of the body on which the object or the modification of the object occurs (left, right)

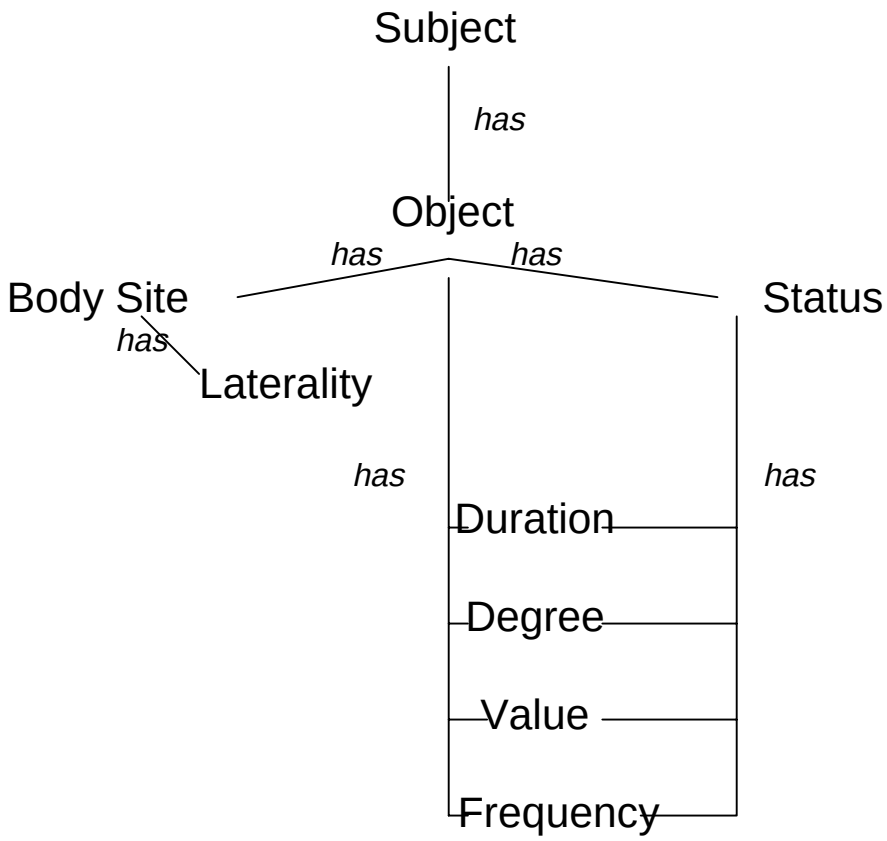
An example of a complete problem statement composed of these elements and their permitted values in the Activity component might be, "Patient has confirmed, chronic, moderately impaired range of motion (60% of normal) of left shoulder."

Table 1 contains the atomic-level elements and their values for problem statements in the Activity component. Figure 1 shows the relationships of these elements to one another

Table 1. PCDS Elements on the Problems Axis and Their Values in the ACTIVITY Component

Subject	Likelihood	Duration	Degree	Judgment	Object	Value	Frequency	Laterality	Body Site
Patient	Confirmed	Acute	Mild	Deficient, Inadequate	Activity	Percentage of normal		Left	*Not defined- Use some standard*
Spouse	Potential	Chronic	Mildly	Disrupted	Activity: Activity Tolerance			Right	
Significant Other	Suspected, Rule Out	Date of onset: mmddyyyy	Moderate	Excessive	Activity: Ambulation				
Family		Time of onset: hh:mm	Moderately	Impaired	Activity: Energy				
Adult Child(ren)			Severe	Inappropriate	Activity: Exercise				
Child(ren)			Severely	Incorrect	Activity: Fatigue				
Infant			1+	Pathologic	Activity: Mobility				
Fetus(es)			2+	Restricted	Activity: Rest & Sleep				
Parent(s)			3+		Musculoskeletal Function				
Mother			4+	Adequate, Sufficient	Musculoskeletal: Disuse Syndrome				
Father				Appropriate	Musculoskeletal: Muscle Tone				
Guardian(s)				Correct	Musculoskeletal: Range of Motion				
Grand-parent(s)				Health-Promoting, Therapeutic					
Lay Caregiver				Normal					
				Unrestricted					

Figure 1.
The Patient Care Data Set:
Elements and Relationships on the PROBLEMS Axis



b. Goals: A goal statement in the patient record is composed of the following atomic-level elements:

- **Subject:** The recipient of care
- **Object:** The focus of care (e.g., pain, sleep, immune deficiency, etc.)
- **Performance:** The verb that tells what the subject will do (e.g., will achieve, will adhere to, will conserve, etc.)
- **Level of performance:** The criterion on which goal achievement will be assessed (e.g., adequate, as prescribed for subject, minimal or no, etc.)
- **Equipment:** Devices the subject will use to carry out the performance (e.g., wheelchair, orthotic devices, assistive devices, etc.)
- **Manifestations:** Observable or measurable behaviors that specify what the subject is doing when performing at the criterion level (e.g., uninterrupted 60-90 minute sleep cycles, voluntary limitation of activities, specified percentage of normal)
- **Goal Evaluation Status:** Goal performance as assessed by the health professional according to the following scale: Achieved, Progressing Ahead of Schedule, Progressing on Schedule, Progressing Behind Schedule, Not Progressing, Regressing, Goal Abandoned

An example of a Goal statement in the Activity component might be, "Patient will achieve range of motion within acceptable range (80 – 90% of normal) by use of appropriate equipment." Goal Evaluation Status would be determined at specified dates and times.

Table 2 contains the atomic-level elements for goal statements and their values in the Activity component. Figure 2 shows the relationships of these elements to one another.

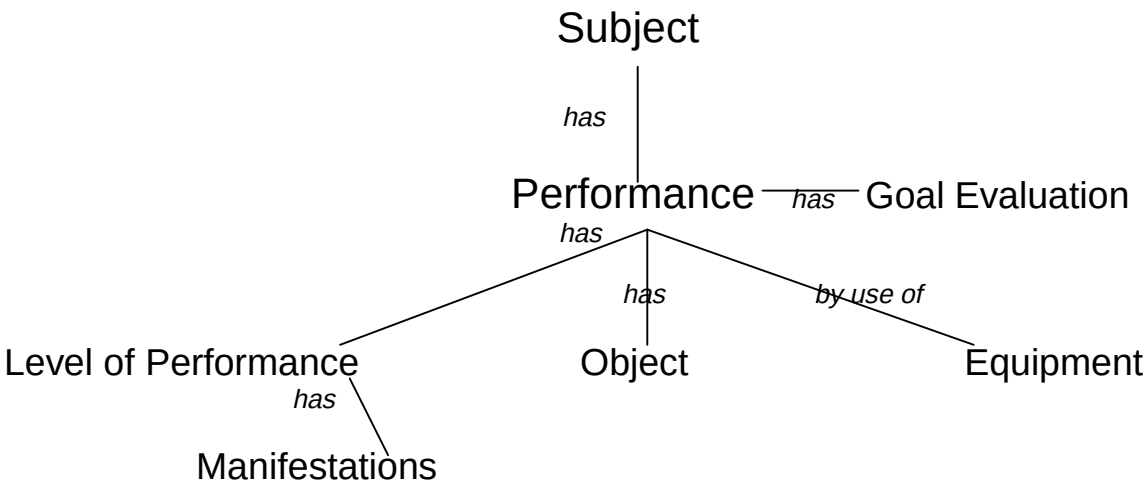
Table 2. PCDS Elements on the Goals Axis and Their Values in the ACTIVITY Component

Subject	Performance	Level of Performance	Object	Equipment	Manifestations	Evaluation
Patient	Will achieve	Adequate	Activity	By use of appropriate equipment	Rest periods	Achieved
Spouse	Will adhere to	As prescribed for subject	Activity: Activity restrictions	By use of assistive devices	Uninterrupted 60-90 minute sleep cycles	Progressing ahead of schedule
Significant Other	Will conserve	Baseline	Activity: Activity tolerance	By use of orthotic devices	Usual sleep patterns	Progressing on schedule
Family	Will experience	Minimal or no	Activity: Ambulation	By use of wheelchair	Voluntary limitation of activities	Progressing behind schedule
Adult Child(ren)	Will express satisfaction with	Physically independent	Activity: Energy			Not progressing
Child(ren)	Will incorporate into daily activities	Verbally independent	Activity: Exercise			Regressing
Infant(s)	Will maintain	Within acceptable range for subject	Activity: Fatigue			Goal abandoned
Fetus(es)	Will progress beyond		Activity: Immobilization			
Parent(s)	Will progress toward		Activity: Mobility			
Mother	Will recall & describe		Activity: Rest and Sleep			
Father	Will regain		Musculoskeletal Function			
Guardian(s)	Will report		Musculoskeletal: Body alignment			
Grandparent(s)	Will tolerate		Musculoskeletal: Muscle tone, strength, and mass			
Lay Caregiver			Musculoskeletal: Range of motion			
			Musculoskeletal: Required positioning			

PCDS: Elements on the Goals Axis and Their Values in the COPING AND MENTAL HEALTH Component

Subject	Performance	Level of Performance	Object	Manifestations
Patient	Will achieve	Appropriate	Coping	Acceptance of limitations
Spouse	Will demonstrate	Appropriate range of	Decision making	Acceptance of need for help
Significant Other	Will experience	Appropriate to age	Diversional activity	Behavior commensurate with developmental age
Family	Will identify	Appropriate to situation	Frustration tolerance	Carrying on activities with little hindrance
Adult Child(ren)	Will mobilize personal resources to manage	Effective	Grieving	Communication of feelings
Child(ren)	Will progress toward	High	Impulse control	Completion of responsibilities
Infant(s)		Moderate	Thought process	Decisions consistent with values, satisfying to subject
~~Fetus(es)~~		Realistic, Commensurate with reality		Deliberative selection of actions
Parent(s)		Partly effective	Mood or affect	Demonstrations of awareness of stress
Mother		Satisfying to subject	Time management	Expression of concerns
Father			Social & emotional development	Focusing on other issues
Guardian(s)			Trust	Greater ability to take pleasure in daily life
Grandparent(s)				Knowledge of coping mechanisms
Lay Caregiver		Within acceptable range for subject	Problem solving	Prudent problem solving
				Realistic, age-appropriate thought processes
			Psychological adjustment patterns	Reliance on others
			Management of anxiety or fear	Remaining calm
				Resumption of activities and responsibilities
			Social support	Stabilization of mood
				Tending toward lower levels of sadness, anxiety, anger
			Relief of anxiety of fear	Verbal & behavioral demonstration of restraint
				Verbal and behavioral expressions, demonstrations

Figure 2.
The Patient Care Data Set:
Elements and Relationships on the GOALS Axis



c. Orders: A patient care order in the patient record is composed of the following atomic-level elements:

- **Subject:** The recipient of care
- **Object:** The focus of care (e.g., pain, sleep, immune deficiency, etc.)
- **Action:** What the health professional is to do (e.g., assess, monitor, provide, teach, encourage, manage)
- **Indicators** Factors to be assessed or monitored (e.g., pattern and level of activity, energy, fatigue)
- **Method:** Modes of care that the health professional is to provide, teach, or encourage (e.g., daily schedule of activities, periods of structured physical activity, rest periods, prescribed activities)
- **Risk Factors:** Factors that could disrupt achievement of the goal to which the order relates. Risk Factors may be Objects in their own right (e.g., anxiety or emotional distress, pain, perceived responsibilities or demands, etc.). In an electronic patient care information system, individual risk factors could be hyperlinked to their representations as Objects for the construction of problem statements, goal statements, and orders, facilitating the development of individualized plans of care.

An example of an order set composed of values of these elements in the Activity component, and specifically for the Object "Activity Restrictions," might be

1. Assess patient's patterns and levels of activity.
2. Assess patient's understanding of activity restrictions and rationale.
3. Teach patient nature of restrictions and rationale.
4. Encourage patient's letting go of some responsibilities.
5. Encourage patient's asking persons to provide assistance.
6. Encourage patient's maintaining verbal independence.
7. Counsel patient about perceived responsibilities and demands.

Orders are complex. The values associated with these elements for each combination of subject and object represent clinical knowledge of the relevant indicators and risk factors and the probably effective methods of care. To capture the relationships among these values, it is necessary to create separate tables for each Object. Table 3 contains the elements and their values for the Object "Activity Restrictions" in the ACTIVITY component on the Orders axis. Figure 3 depicts the relationships among these elements.

Table 3. PCDS Elements on the Orders Axis and Their Values in the ACTIVITY Component

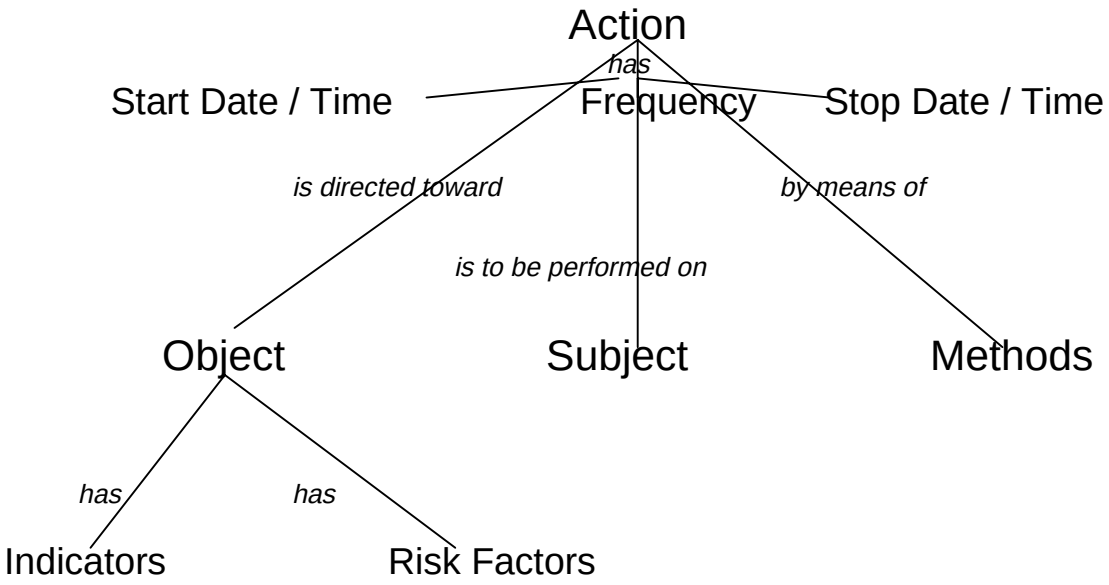
For the Object "Activity"

Object	Subject	Actions	Indicators	Methods	Risk Factors
Activity	Patient	Assess	Pattern & level of activity		
	Spouse	Monitor	Energy		
	Significant Other		Fatigue		
	Family				
	Adult Child	Encourage		Daily schedule of activities	
	Child	Teach		Activity prescribed or recommended for subject	
	Infant	Provide		Periods of structured physical activity	
	Fetus				
	Parent(s)	Manage			Anxiety or emotional distress
	Mother	Counsel about			Care activities
	Father				Environmental stimuli
	Guardian(s)				Interactions with other persons
	Grandparent(s)				Pain or discomfort
	Lay Caregiver				Perceived responsibilities or demands
					Other factors that increase risk of not adhering to activity restrictions or prescriptions

Table 3. PCDS Elements on the Orders Axis and Their Values in the ACTIVITY Component for the Object "Activity Restrictions"

Object	**Subject**	**Actions**	**Indicators**	**Methods**	**Risk Factors**
Activity Restrictions	Patient	Assess	Patterns and levels of activity		
	Spouse	Monitor	Understanding of restrictions and rationale		
	Significant Other		Adequacy of assistance provided to subject		
	Family		Satisfaction with alternative ways to perform roles and achieve goals		
	Adult Child(ren)				
	Child(ren)	Teach		Nature of restrictions and rationale	
	Infant(s)	Encourage		Alternative ways to perform roles and achieve goals	
	Fetus(es)			Letting go of some responsibilities	
	Parent(s)			Identifying persons to provide assistance	
	Mother			Asking persons to provide assistance	
	Father			Accepting assistance as needed	
	Guardian(s)			Maintaining verbal independence	
	Grandparent(s)				
	Lay Caregiver	Manage			Care activities
		Counsel re:			Pain or discomfort
					Anxiety or emotional distress
					Interactions with other persons
					Perceived responsibilities or demands
					Environmental stimuli
					Other factors that increase risk of not adhering to activity restrictions

Figure 3.
The Patient Care Data Set
Elements and Relationships on the ORDERS Axis



L. Comparison to others:

a) Differences from the Home Health Care Classification (HHCC) and the Omaha System: Although these vocabularies, like the PCDS, were derived from actual patient care documents, these represent home care, whereas the PCDS represents acute care. When terms were found in acute care settings that matched the HHCC terms, this was indicated in the original version of the PCDS by the footnote 2. Because the revised version of the PCDS does not contain pre-coordinated statements, overlap with the HHCC is no longer an issue.

b) Differences from the North American Nursing Diagnosis Association (NANDA) and the International Classification of Nursing Practice (ICNP). The original version of the PCDS included NANDA terms (designated by the footnote 1) as these were discovered in patient care documents. The PCDS also included more than 200 additional terms that nurses in acute care settings use to name patient problems. Again, because the revised version of the PCDS does not contain pre-coordinated statements, overlap with pre-coordinated NANDA terms is no longer an issue.

The ongoing revision of NANDA now also includes atomic-level elements, as does the ICNP. Synonyms and common terms for these elements are presented below.

PCDS	NANDA	ICNP
Subject	Unit of Care	
Object	Diagnostic Concept	Focus of Care
Status	Modifier	Judgment
Likelihood	Potentiality	Likelihood
Duration	Acuity/Chronicity	Chronicity
Degree		Degree
Value		Value
Frequency		Frequency
Laterality		Laterality
Body Site		Body Site

c) Differences from the Nursing Interventions Classification (NIC): The statements of Patient Care Orders of the PCDS (whether pre-composed or post-composed) are at the approximate level of granularity of the Activities of NIC. Rather than being identified by a consensus method, as were the NIC Activities, the Orders of the PCDS were derived from those in use in a national sample of 9 hospitals. The finer level of granularity in the Orders of the PCDS captures more detail in the process of care. In the future, it might be worthwhile to map the Orders to NIC intervention labels, as a way of interpreting the intent of the action.

d) Differences from the Nursing Outcomes Classification (NOC): By developing valid and reliable measures of patient conditions and behaviors, the NOC work is contributing to a more precise science of clinical care. The PCDS differs from NOC by defining patient outcomes as the relative level of achievement of each therapeutic goal. Recording and studying Goal Evaluation status enables studies of care effectiveness targeted to the specific goals of care.

e) A further distinction needs to be made from the Home Health Care Classification. The Components of the HHCC were determined by statistical analysis to be clusters of diagnoses or interventions that predicted resource utilization in home care. In Spring 1992, during the very early work on the PCDS, Ozbolt asked Saba's advice about how to organize the growing list of terms. Saba proposed the Components of the HHCC. Ozbolt adopted these, with modest modifications. Immunology and Metabolism were split into two components, and the component Pre-, Intra-, and Post-Procedure was added. The component called Bowel in the HHCC has been renamed "Gastrointestinal Function" in the PCDS because it also includes issues related to upper GI function. But whereas the Components of the HHCC represent a meaningful and statistically validated classification of home care data, the use of the Components in the PCDS is a mere heuristic device. The use of the Components, with permission from Saba and acknowledgement by Ozbolt, makes it easier for humans to search the PCDS.

V. Readiness

A. Completeness: Tests by Ozbolt, Russo, and Stultz (*Proceedings of the AMIA Fall Symposium,* 1995) and by McDaniel (*Computers in Nursing,* 1997) indicate that the PCDS is relatively comprehensive of terms used to describe patient care problems, actions, and expected outcomes or goals in acute care settings. Statements of Problems and of Goals have been parsed into atomic-level elements, as described above. The parsing of the statements of Orders will be completed in 1999.

B. Under development: A coding scheme for the revised version of the PCDS will be devised in 1999. The revised version is being incorporated into the Patient Care Information System at Vanderbilt University Medical Center.

C. New versions available: No dates have been established.

D. Obtaining set: Contact

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E. Tools available: Resources:

a. Publications:

a) Ozbolt, J. G. (1997). From minimum data to maximum impact: Using clinical data to strengthen patient care. *MD Computing*, *14*, 295-301. Reprinted with revisions by permission from *Advanced Practice Nursing Quarterly, 1*(4), 62-69.

b) Ozbolt, J. G., Russo, M., & Stultz, M. P. (1995). Validity and Reliability of standard terms and codes for patient care data. In R. M. Gardner (Ed.), *Proceedings of the 19th Annual Symposium on Computer Applications in Medical Care,* 37-41.

c) Ozbolt, J. G., Fruchtnicht, J. N., & Hayden, J. R. (1994). Toward data standards for clinical nursing information. *Journal of the American Medical Informatics Association, 1,* 175-185.

d) McDaniel, A. M. (1997). Developing and testing a prototype patient care database. *Computers in Nursing, 15,* 129-136.

b. Workshops and consultation: Contact Judy Ozbolt at the address above.

E. Organizational maintenance: The revision and updating of the PCDS is led by Judy Ozbolt with the participation of faculty members from the Division of Biomedical Informatics and of nurses and technical personnel from the Departments of Information Management and of Case Management, all at Vanderbilt University Medical Center.

F. Tools provided with set: This profile and the publications listed above. In addition, we will provide a full set of tables of values of atomic level elements for composing statements of problems, goals, and orders.

G. Tools required: N/A.

H. Obtaining tools: N/A.

I. User guide: .

J. User guide approval:

L. Other indicators exist: N/A.

VI. Indicators of Market Acceptance

A. Vendor adoption: Premature. The revised version of the PCDS, with atomic-level elements and rules for combining them, will be implemented and tested at VUMC. After successful use has been demonstrated at the home institution, VUMC will offer the PCDS to vendors.

B. Healthcare institution use: The revised version of the PCDS is being incorporated into the VUMC Patient Care Information System. This work is still in the early stages.

C. Health care professional society reference: The original version of the PCDS was recognized in 1998 by the American Nurses Association as meeting its criteria for use in clinical nursing practice.

D. Governmental agency use: The original version of the PCDS was incorporated into the National Library of Medicine's Metathesaurus in 1998.

E. Use in other countries: No. The PCDS was compiled from terms actually used by nurses in the United States. Merely translating it to other languages or transposing it to other countries might not be valid, as patient care may be conceived and practiced differently elsewhere. Careful validity checks, and probably modifications, would be needed before the PCDS could be used in other countries.

F. Other relevant indicators: Recognition by the ANA is an indicator of market acceptance. In addition, the PCDS is consistent with standards for patient care data established by Health Level Seven (HL7), in having terms and codes to represent patient problems, goals, goal evaluation status, and orders. Finally, by having atomic-level elements on multiple axes with rules for combining them into complex statements of problems, goals, and orders,

the PCDS is consistent with current trends and recommendations in the development of clinical terminologies and nomenclatures.

VII. Level of Specificity

A. Clinical specificity: The original version of the PCDS was a catalog of terms used by nurses and others to plan patient care and to document clinical events. Its concreteness and specificity thus matched current clinical usage. Parsing this set of pre-coordinated terms into atomic-level elements increases the specificity and the flexibility, as the elements can be combined in many ways to represent clinical phenomena more precisely.

B. Reference with other code sets: May be used with other code sets. In the validity tests of the original PCDS, coded data from the PCDS were combined with the discharge abstract data collected on the same individuals to demonstrate the feasibility of using these combined data for studies of quality, effectiveness, and cost of care (Ozbolt, 1997).

C. Describe other code sets: The discharge abstract data which was combined with the PCDS data in the study referenced above included patient demographics, ICD9-CM codes, CPT codes, total charges, and length of stay.

VIII. Relationships with Other Code Sets/Vocabularies

A. Relationships: For relationships to other nursing vocabularies, see IV.L. It should be noted that the Patient Care Data Set is not exclusively a nursing vocabulary. Some of the documents from which terms were originally derived were multidisciplinary care plans and pathways. Thus, some terms in the PCDS relate to health services provided by other disciplines, such as nutrition, respiratory therapy, physical therapy, and others.

The revised version of the PCDS will be resubmitted to the American Nurses Association for recognition. The developers will also consider it in relation to evolving standards for clinical terminologies.

B. Coordination: With the goal of achieving a clear goal and convergent efforts for the development of standard terminology for nursing and other types of patient care, Vanderbilt University will host the Nursing Vocabulary Summit Conference June 10-13, 1999. The approximately 40 participants at this invitational conference will include all of the authors or organizations whose vocabularies have been recognized by the ANA, as well as experts on language and standards and representatives of professional organizations, federal agencies, and the health informatics industry. Products of the meeting will include recommendations and guidelines for further development of nursing terminologies. Funding is provided by the National Library of Medicine, the Division of Nursing of the Health Resources and Services Administration, the Nursing Working Group of the American Medical Informatics Association, the Cerner Corporation, Lexical Technology, McKessonHBOC, Oceania, Shared Medical Systems (SMS), SNOMED International, and Vanderbilt University Medical Center.

C. Portion of set affected: Potentially all.

D. Conditions assumed for coordination: To be determined at the conference.

D. Gaps among related data sets: The data sets are limited in the provision of specific terms for assessment data and observations. This gap and others are being assessed at the conference and in various standards-developing organizations.

F. Describe work to address gaps: To be determined at the conference.

IX. Relationship to Message Format Standards

A. Use in specific message format standards: The PCDS is consistent with HL7 standards for patient care data.

B. Specification in standards: N/A.

C. Adoption within a vendor system: N/A.

D. Links between code set and specific message formats: N/A.

E. Message format organization participation: N/A.

X. Identifiable Costs

A. Cost of licensure: To be determined by VUMC when the PCDS is ready for export.

B. Cost of acquisition: To be determined.

C. Cost of tools: See V E.

D. Cost/time for education: To be determined.

E. Cost/time for implementation: To be determined.

F. Additional cost considerations: To be determined

XI. Contact for more information:

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