

## USING THE PNDS FOR BENCHMARKING

*Ann Altaffer, RN, MSN, CNAA; Nadine Bobick, RN, CNOR; Carol Cappella, RN, MSN, CNOR; MaryEllen Kosturko, RN, BSN, CNOR; Del Lor Lisitano, RN; Sandra Schirmer, RN, MSN, CNOR; Sharon Ormstedt, RN, CAPA; Carol Schramm, RN, MSN, CNOR; and Geri Viola, RN, BSN*

The publication of the PNDS by AORN and subsequent workshops and conferences have heightened awareness of targeted perioperative quality improvement strategies among perioperative nurses across the United States. The PNDS, the first perioperative nursing model of its kind, provides uniformity in the use of perioperative nursing vocabulary as well as definitions of perioperative nursing processes. These are significant steps in demonstrating that perioperative nurses make a difference in the achievement of enhanced patient outcomes.

In the fall of 2001, perioperative nursing leaders and educators from Connecticut formed a small work group to explore the application of the PNDS as a model for future intra-hospital benchmarking of perioperative nursing services. The work group supported use of the full

PNDS, but wanted to focus on a smaller subset that would be manageable and inclusive of JCAHO and regulatory requirements for perioperative nursing leaders in the proposed benchmarking project.

This article describes the process the work group is following to evaluate the PNDS and select a subset of measures. The evaluation process is ongoing, but the group has reached initial consensus about a subset of measures. The group will now seek additional input and ultimately hopes to use these measures in state-wide benchmarking activities. The steps followed by this work group were consistent with other performance improvement initiatives, specifically the employment of the PLAN-DO-CHECK-ACT process.

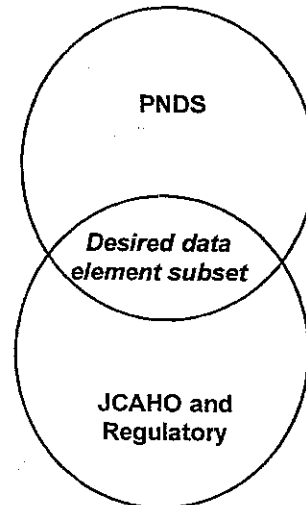


TABLE 4-14

**PNDS DATA ELEMENT SUBSET — DATA COLLECTION TOOL**

Use this checklist to assess the data elements being captured by your current intraoperative record.

Code	Diagnosis/Intervention/Outcome	Yes	No	Comments
X29	<b>Diagnosis: Risk for injury related to transfer and transport.</b>			
I26	Intervention: Confirms identity before the operative or invasive procedure.			
I126	Intervention: Verifies operative procedure			
I60	Intervention: Identifies baseline tissue perfusion.			
I65	Intervention: Identifies physiological barriers to communication			
I66	Intervention: Identifies physiological status			
I59	Intervention: Identifies baseline cardiac function			
I64	Intervention: Identifies physical alterations that may affect procedure-specific positioning <i>Outcomes: Verbalizes comfort related to transfer/transport.</i>			
X4	<b>Diagnosis: Risk for anxiety related to knowledge deficit and stress of surgery.</b>			
I13	Intervention: Assesses coping mechanisms based on psychological status			
I27	Intervention: Continuity of care.			
I30	Intervention: Develops individualized plan of care			
I57	Intervention: Identifies and reports philosophical, cultural, and spiritual beliefs and values.			
I85	Intervention: Minimizes the length of invasive procedure by planning care			
I101	Intervention: Provides care to each individual in a manner that preserves and protects the patient's autonomy, dignity, and human rights.			
I106	Intervention: Provides instruction based on age and identified need			
I56	Intervention: Explains expected sequence of events			
I50	Intervention: Evaluates response to instructions. <i>Outcomes: Verbalizes/indicates decreased anxiety, ability to cope, understanding of procedure and sequence of events Questions answered.</i>			
X38	<b>Diagnosis: Risk for acute/chronic pain.</b>			
I24	Intervention: Collaborates in initiating patient-controlled analgesia			
I51	Intervention: Evaluates response to medications.			
I61	Intervention: Identifies cultural and value components related to pain			
I69	Intervention: Implements alternative methods of pain control			
I71	Intervention: Implements pain guidelines.			
I108	Intervention: Provides pain management instruction			
I16	Intervention: Assesses pain control			
I54	Intervention: Evaluates response to pain management interventions.			
O20	<i>Outcomes: Demonstrates adequate pain management.</i>			
X28	<b>Diagnosis: Risk for infection</b>			
I3	Intervention: Administers care to invasive device sites			
I21	Intervention: Assesses susceptibility for infection.			

In step one of the process (PLAN), the members brainstormed on the work group's purpose and anticipated outcomes. The consensus of the group was that it would outline a process to allow for the future benchmarking of perioperative services in Connecticut's hospitals. To do so, the group agreed that it would need to

- ◆ familiarize itself with the perioperative nursing data sets including terminology and the AORN universal documentation tool;
- ◆ familiarize itself with current perioperative

nursing documentation tools and processes;

- ◆ establish a data collection tool and means to promote uniformity in collection; and
- ◆ establish measurable outcomes for future data sharing and benchmarking in Connecticut.

In step two (DO), the work group successfully reviewed the full PNDS and AORN universal documentation tool. The outcome of this step included the conversion of the AORN tool into a checklist that could be used to assess the documentation

TABLE 4-14 (continued)

**PNDS DATA ELEMENT SUBSET — DATA COLLECTION TOOL**

Use this checklist to assess the data elements being captured by your current intraoperative record.

Case ID: _____		Date: _____		
Code	Diagnosis/Intervention/Outcome	Yes	No	Comments
I22	Intervention: Classifies surgical wound			
I94	Intervention: Performs skin preparation.			
I31	Intervention: Dresses wound at completion of procedure. <i>Outcomes: Patient's surgery performed using aseptic technique and in a manner to prevent cross contamination</i>			
<b>X29</b>	<b>Diagnosis: Risk for injury.</b>			
I11	Intervention: Applies safety devices.			
I39	Intervention: Evaluates for signs and symptoms of injury to skin and tissue.			
I72	Intervention: Implements protective measures to prevent injury due to electrical sources.			
I73	Intervention: Implements protective measures to prevent injury due to laser sources.			
I77	Intervention: Implements protective measures to prevent skin/tissue injury due to mechanical sources.			
I93	Intervention: Performs required counts.			
I84	Intervention: Manages specimen handling and disposition.			
I112	Intervention: Records devices implanted during the operative or invasive procedure.			
O1	<i>Outcomes: Patient is free from signs and symptoms of physical injury.</i>			
<b>X40</b>	<b>Diagnosis: Positioning injury.</b>			
I38	Intervention: Evaluates for signs and symptoms of injury as a result of positioning.			
I39	Intervention: Evaluates for signs and symptoms of injury to skin and tissue.			
I77	Intervention: Implements protective measures to prevent skin/tissue injury due to mechanical devices.			
O1	<i>Outcomes: Patient is free from signs and symptoms of physical injury.</i>			
<b>X30</b>	<b>Diagnosis: Knowledge deficit.</b>			
I19	Intervention: Assesses readiness to learn based on physiological status.			
I20	Intervention: Assesses readiness to learn based on psychological status.			
I79	Intervention: Includes family and support persons in preoperative teaching.			
I103	Intervention: Provides information and explains Patient Self-Determination Act.			
I67	Intervention: Identifies psychological barriers to communication.			
I63	Intervention: Identifies individual values and wishes concerning care.			
I30	Intervention: Develops individualized plan of care.			
I104	Intervention: Provides instruction about prescribed medications.			
I105	Intervention: Provides instruction about wound healing and wound care.			
O16	<i>Outcomes: Patient demonstrates knowledge of the physiological responses to the operative or other invasive procedure.</i>			

of specific perioperative nursing diagnoses, interventions, and outcomes. The work group also reviewed current documentation tools and processes and discovered that many variations existed in actual documentation tools, the use of automation versus hardcopy, and the application of the PNDS model.

The work group further enhanced its familiarization with the PNDS by creating case scenarios and detailing the use of specific perioperative nursing diagnoses, interventions, and outcomes. Four cases were selected to compare variations of

procedure complexity and patient age. These included an uncomplicated minor procedure (D and C), and an uncomplicated major procedure, (hip replacement). During the case scenario review, the group identified variations in perioperative nursing diagnoses, interventions, and outcomes based on procedure complexity and patient age. Most importantly, it was noted that while each scenario involved some unique perioperative nursing diagnoses, interventions, and outcomes, there were many more that were common to each. Ultimately, this activity built the foundation for the data "subset" (diagnosis, interventions, and

outcomes) that would lead to the opportunity for data collection and benchmarking of perioperative nursing care.

After step two (DO), the group reached a plateau and sought guidance in identifying the next steps for the project. Dr. Suzanne Beyea, Director of Research of AORN, was invited to participate in the third meeting. She shared experiences from other groups that have used the PNDS and acknowledged the unique approach of this work group in desiring to utilize the PNDS to benchmark perioperative nursing services.

Based on the outcomes of steps one and two and the AORN consultation, the work group moved forward on the project with renewed vigor. Specifically, the work group extrapolated a subset of data elements from the PNDS, including those that were common to the case scenario reviews and those that were JCAHO or regulatory-based, that would be manageable for the data collection and analysis steps of the proposed benchmarking project. This data element subset is actually a combination of nursing diagnoses, interventions, and outcomes as defined by the PNDS. As a final activity for this step, the work group converted this data element subset to a checklist (Table 4-14), once again that could be used for data collection.

The work group is currently at step three of the process (CHECK). The plan is to present the PNDS data element subset checklist—the data collection tool—to other perioperative nursing leaders for feedback, complete a pilot test of the tool using selected but controlled cases, validate the tool, and modify as necessary. Step four (ACT), the ultimate purpose of this work group project, is to roll out the tool and offer Connecticut hospitals the opportunity to participate in a perioperative nursing services benchmark project based on the nationally accepted PNDS model.

The group believes that this future benchmarking project will help health care facilities enhance patient safety, reduce risks for adverse events, and monitor nurse sensitive issues, such as medication error, wound infection, pressure ulcers, and skin integrity. Of equal importance, the group believes this project could be used to study staffing and patient outcomes in each OR suite, which would link to the JCAHO standards assessing staffing effectiveness.

## NOTES

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