Taxonomy of Error Root Cause Analysis *(TERCAP)*

EDUCATORS CAN UTILIZE PRACTICE BREAKDOWN CATEGORIES

This is the second article in a three-part series about the TERCAP. The first article may be found in the July 2009 Nursing Bulletin.

The Taxonomy of Error Root Cause Analysis, and Practice-Responsibility (TERCAP) project undertaken by the National Council of State Boards of Nursing identifies eight categories of practice breakdown related to nursing behaviors. Nursing programs and students can apply these categories to curriculum content, clinical performance, evaluation measures, and remediation of potentially unsafe nursing practices. The categories and how they can be applied to nursing education are listed below:

Safe medication administration: The nurse is an important safety net in a complex system of medication administration in health care facilities. Nursing students need to know the pharmacology, usual dosages, expected response of the patient and the nursing care associated with every medication their patient is receiving. All orders should be verified by both checking the original order and seeking information from a reliable pharmacology reference regarding usual dose, route, delivery method, and nursing care. Clinical instructors need to hold students accountable for this knowledge prior to administration of any medication.

Documentation: One area identified by employers of new graduates is the lack of knowledge in applying legal principles in documention of an account of care. Failure to document can lead to inappropriate administration of medication or faulty treatment. Incomplete documentation does not protect the nurse in the face of an adverse event. The patient record is the communication tool used between and among health care providers. Nursing instructors can assist students by critically examining student documentation before entry into the record. Students are accountable for applying the principles learned in the classroom to their care of clients. Instructors can serve as role models by applying the principles of documentation to educational records related to individual students and program evaluation.

Attentiveness/Surveillance: The nurse must continually monitor the patient in order to detect changes in status. Lack of attentiveness contributes to patient mortality and morbidity as the patient deteriorates before the nurse notices a change in condition. Attentiveness requires that the nurse look for the unexpected response and consider all possibilities in evaluating a patient's response. Nursing students are expected to consistently monitor their patient's condition. Taking frequent breaks or chatting with fellow students diverts the student's attention from the patient. Nursing instructors must also be attentive to student learning needs. The attentive instructor rounds frequently on students, anticipates their learning needs, looks for "teachable moments" and gauges learning in the classroom through frequent solicitation of student feedback.

Clinical Reasoning: This is also sometimes referred to as critical thinking. It is the ability to "put the pieces together" and form a hypothesis to explain patient observations. It also requires that the nurse verify the hypothesis and act upon an assessment of the situation. A frequent observation of newly licensed nurses is that they continue to gather assessment data while the patient is rapidly deteriorating. The new nurse or student may continue to take and document vital signs in the face of continuing hypotension without ever assigning a meaning to the data or taking action to rescue the patient. Nursing students need to be accountable for both the routine care of the patient and the meaning of any observations made. Instructors can assist by role-modeling their own reasoning processes. For example the instructor could ask a student to verbalize all she observes about a patient from the way he walks. A beginning student may say, "well, he is walking stooped over". The instructor would then respond, "that might make me question if he is in pain—what would you think about?"

Prevention: Prevention includes instituting interventions that ensure patient safety and prevent further illness/mishaps to the patient. Patient falls, skin breakdown, nosocomial infections, and wrong-site surgery have all been attributed to lack of prevention on the part of health care personnel. One of the most effective and least practiced preventive measures is hand washing. Students should be held strictly accountable for this simple act, yet many students seem to believe that once they have "checked out" on this skill, it is no longer needed. Hand washing is a habit, not a skill. Instructors can assist their students by role-modeling hand washing every time they enter and leave a patient room.

Intervention: Errors in practice are also made by faulty interventions. For example, a nurse gaving a bolus of remaining chemotherapy medication when an IV pump failed. While this may not result in patient harm for most drugs, it can be lethal for toxic drugs. Nursing practices need to be based on evidence, not ritual, convenience, or "usual practice". Students need to be well grounded in evidence based practice. Instructors can assist students to think of "the worst case scenario" before engaging in a questionable practice and apply evidence based methodologies to nursing practices.

Interpretation of Provider Orders: Nurses may either implement a faulty order or misinterpret a provider order. The chances for misinterpretation are lowered when the orders are typed and clearly follow best-practice guidelines. Disturbingly, some nurses will knowingly implement an unsafe order to avoid questioning a physician. Humans, including physicians, are fallible and all can make mistakes. Nurses are accountable for questioning provider orders that appear contrary to accepted procedures/ practices. Nursing programs can assist students by providing them with opportunities to talk with providers and role-play how to talk to a physician. A rigorous nursing program with solid grounding in evidence based practice assists the student in gaining the knowledge to determine a deviation in practice.

Professional Responsibility/Patient Advocacy: This category is strongly related to the concept of caring and duty to the patient. A nursing student is the agent for the patient by virtue of the knowledge gained in the program and the ability of the student to "do" for the patient what the patient cannot do. Cheating, covering up errors, failure to call a provider, boundary violations, and performing an act contrary to the best interest of the patient are all examples of breakdown in this category. Nursing students are accountable for adhering to the ethics of the nursing

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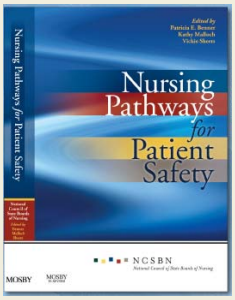
profession including honesty, integrity, beneficence, and selflessness. Instructors may assist students by clearly stating the expected behaviors and holding students accountable for breaches of ethics. Instructors also can role-model the ethics of the profession in their interactions with students.

This taxonomy of nursing error may be utilized by educators as well as the practicing nurse. A recent publication (See below) provides a thorough description of each of the practice breakdown categories as well as case studies which demonstrate the breakdown.

This article is adapted from the Arizona Board of Nursing Newsletter which was authored by Pamela Randolph RN, MS Associate Director Education and Evidence Based Regulation, Arizona Board of Nursing.

Presenting an Innovative Approach to Practice Breakdown



National Council of State Boards of Nursing's (NCSBN®) new book *Nursing Pathways for Patient Safety* was published Oct. 1, 2009. Written by a distinguished panel of experts seeking to create a change in the current state of health care safety management, this book examines the issues surrounding practice breakdown in a way that looks beyond individual errors and instead, examines practice breakdown from multiple perspectives, including systems issues.

The book provides an introduction to NCSBN's Practice Breakdown Initiative, including the TERCAP® (Taxonomy of Error Root Cause Analysis Practice-responsibility) assessment tool, and a systematic review of eight types of practice breakdowns, such as those involving medication administration and attentiveness/surveillance. Additionally, the book provides compelling case studies in each chapter based on actual instances of practice breakdown.

Nursing Pathways for Patient Safety is an essential tool for all individuals in health care management positions or those currently studying for a career in the field.

For more information, contact Dawn M. Kappel, Director, Marketing & Communications, at **dkappel@ncsbn.org**.

Legislative Update - continued from page 5

Advance Directives: The bill allows the use of a digital or electronic signature for signing an advance directive or a written revocation of an advance directive. The bill defines a digital or electronic signature and outlines requirements for a valid digital or electronic signature. The bill also permits the principal, in lieu of signing in the presence of the witnesses, may have the signature acknowledged before a notary public. A person may not sign an advance directive or a written revocation of an advance directive using a digital or electronic signature before January 1, 2010.

HB 2626 Author: Naishtat
Effective: 6/19/2009
Forensic Examination of Sexual Assault Victims: Expands victim rights by providing the right to a forensic medical examination to victims of sexual assault who have not reported the assault to a law enforcement agency, if the forensic exam is otherwise conducted at a health care facility within 96 hours of the assault. Requires DPS to pay for the exam. Establishes procedures for transfer and preservation of evidence. Sexual assault nurse examiners will need to be aware.

HB 4471 Authors: Kolkhorst
Effective: 6/19/2009
Nursing Shortage Reduction: The bill provides criteria for grant expenditures by limiting use of monies to: enrolling additional students; nursing faculty enhancement; encouraging innovation in the recruitment and retention of students, especially Spanish-speaking and bilingual students; and providing the most effective utilization of resources.

SB 328 Author: Carona
Effective: 9/1/09
Extraction of Blood Samples: Bill provides civil liability and licensing/accrediting protections in taking blood samples at request of peace officer or pursuant to a search warrant.

SB 347 Author: Nelson
Effective: 9/1/2009
Immunization Registry in a Disaster: DSHS will release registry data to other registry databases if a person has relocated due to a disaster and will accept immunization information from a health authority of another state if a person has evacuated as a result of a disaster, thus helping to protect the state's public health system. Nurses working with immunization records or during times of disaster or emergency response will need to know and conform.

SB 381 Author: Van de Putte
Effective: 9/1/2009
Physician Delegation to Pharmacists: Amends Medical Practice Act to allow physician delegation of implementation and modification of a patient's drug therapy to a pharmacist acting under protocol.

SB 532 Author: Patrick
Effective: 9/1/2009
Prescriptive Authority: Allows APRNs to prescribe controlled substances in Schedule 3-5 for 90 days rather than the current 30 days. Requires physicians who delegate prescriptive authority to register with Medical Board. Expands definition of primary practice site to include a site for an APRN or PA who practices on-site with the physician more than 50% of the time and to voluntary charity care at a nonprofit clinic. Extends location requirement for alternate sites to within 75 miles of physician's primary practice site or residence. Alternate sites require physician to be on site 10% of hours of operation of the site each month. Expands to four the number of APRNs a physician can delegate prescriptive authority to in certain sites. Expands options for Medical Board to grant waivers.

SB 904 Author: Williams
Effective: 6/19/2009
Controlled Substances: Authorizes a prescribing practitioner to issue multiple prescriptions under certain conditions for a Schedule 2 controlled substance for up to a 90-day supply. Adds carisoprodol (soma) to Schedule IV.

SB 911 Author: Williams
Effective: 9/1/2009
Pain Management Clinics: Amends Occupations Code to prohibit pain management clinics from operating in this state without a license. License expires every two years. Requires Texas Medical Board to adopt rules to ensure quality of patient care and personnel requirements for clinic, including requirements for a physician to practice at a clinic. Provisions for discipline of the owner/operator of the clinic. Nurses who practice in these settings need to be aware.

SB 1171 Author: Nichols
Effective: 6/19/2009
Health Information: Relating to certain health-related reports, records, and information. Provides guidance on the release of the minimal necessary data from reports, records, and information from any source related to confidential health conditions.

SB 1409 Author: Shapleigh
Effective: 6/19/2009
First Responder Definition and Immunization Registry: Defines a first responder and any related support personnel who may respond to a disaster for the purposes of an immunization registry. Nurses who may be first responders will need to know and conform.

100-Yr. Posters Now Available

The Texas Board of Nursing, in recognition of the 100-Year Anniversary of Regulation of Nursing in Texas, produced a banner poster that notes significant events which shaped and changed the profession of nursing from 1909 to present. Copies of the poster are available for purchase on the order form at the following link:
www.bon.state.tx.us/about/pdfs/pubform.pdf
The cost of the posters is $9.74, including shipping and tax.