USE OF NURSING DIAGNOSIS IN CALIFORNIA NURSING SCHOOLS AND HOSPITALS

January 2018
USE OF NURSING DIAGNOSIS IN CALIFORNIA NURSING SCHOOLS AND HOSPITALS

INTRODUCTION

As part of the effort to define the value of nursing, a common language continues to arise as a central issue in understanding, communicating, and carrying out nursing’s unique role in identifying and treating patient response to illness. The diagnostic process and evidence-based interventions developed and subsequently implemented by a practice discipline describe its unique contribution, scope of accountability, and value. The specific responsibility registered nurses (RN) have in assessing patient response to health and illness and determining evidence-based etiology is within the realm of nursing’s autonomous scope of practice, and is referred to as nursing diagnosis. It is an essential element of the nursing process and is followed by implementing specific interventions within nursing’s scope of practice, providing evidence that links professional practice to health outcomes.

Conducting a comprehensive nursing assessment leading to the accurate identification of nursing diagnoses guides the development of the plan of care and specific interventions to be carried out. Assessing the patient’s response to health and illness encompasses a wide range of potential problems and actual concerns to be addressed, many of which may not arise from the medical diagnosis and provider orders alone, yet can impede recovery and impact health outcomes. Further, it is critically important to communicate those problems, potential vulnerabilities and related plans of care through broadly understood language unique to nursing. The deliberate use of nursing diagnosis as an element in the nursing process elevates the invisible nature of nursing’s most important work in assessing and addressing people’s response to health and illness. The very use of nursing diagnosis language in care planning and communication makes visible the fundamental importance/contributions of nurses regardless of practice setting or care delivery model, and utilization of it is a key component that evidences the unique contribution and value of nursing.

The California Nursing Practice Act (Business & Professions Code, Chapter 6, Nursing Section 2725), the Standards of Competent Performance (California Code of Regulations, Title 16, Section 1443.5), and the California Code of Regulations (Title 22, Section 70215), all speak to the responsibility of RNs to formulate a nursing diagnosis for patients under their care. Yet there is wide variability between how schools teach it and how hospitals use it in practice. Providing evidence of nursing’s role in diagnostic processes with subsequent development of effective plans and targeted interventions to achieve clinical outcomes was explored in this study as one approach to demonstrating nursing’s largely invisible, unique contribution and value.
HealthImpact conducted a statewide survey in collaboration with the California Hospital Association (CHA) to explore how RN students in pre-licensure programs are taught and learn about the nursing diagnostic process, and how nurses working in hospitals utilize nursing diagnosis in practice, including written and verbal communication.

To inform the design of the questionnaire, a review of the literature was conducted to explore the prevalence, application, barriers and effectiveness of the nursing diagnostic process, and the use of nursing diagnosis terminology and various methods of documenting and communicating it. Topics reviewed addressed how nursing diagnoses may be linked to patient outcomes and the evolution and integration of interprofessional collaboration in planning care, along with potential for economic influence and impact. The importance of a common language to support professional collaboration and team effectiveness, as well as the implications for measuring nurse-driven outcomes were central themes.

Two survey questionnaires were designed, one intended for pre-licensure nursing programs (“school survey”) exploring how RN students were taught and learned about nursing diagnosis, and a separate questionnaire designed for hospitals (“hospital survey”) focused on how RNs in practice performed the nursing diagnostic process. While each survey instrument contained unique questions, a set of six core questions common to both surveys explored where there may be similarity or variation in perspectives and practices. Each survey included a combination of multiple choice questions, open-ended questions, and options for comments to be submitted.

An invitation and link to an online survey tool was disseminated by email the week of September 18th, with instructions to complete the survey within a 4-week period, by October 15th. The survey was left open an additional week to capture more responses, ultimately closing October 20th.

The school survey was disseminated to deans, directors, and/or chairs of 143 RN pre-licensure programs through California Organization of Associate Degree in Nursing (COADN)-North and –South, to 91 Associate Degree in Nursing (ADN) programs, and through California Association of Colleges of Nursing (CACN), to universities with 38 BSN and 14 Masters Entry Program in Nursing Programs (MEPN). Academic leaders were requested to identify one nursing faculty expert who was most knowledgeable about how nursing diagnoses are taught to nursing students in their pre-licensure programs, and request them to complete the questionnaire on behalf of the school. Thirty (30) responses were received for a 21.1% response rate.

The hospital survey was disseminated to chief nursing officers representing 433 member hospitals in the California Hospital Association. Nursing executives were requested to identify one nurse expert who was most knowledgeable about education, monitoring, and/or evaluating how nurses utilize nursing diagnoses in their organization, and request them to complete the questionnaire on behalf of the hospital. Thirty-four (34) responses were received, for a 7.9% response rate (some respondents represented more than one hospital, with at least one respondent providing input from 21 hospitals).
Over three-fourths of the academic respondents completing the survey represented ADN schools of nursing. A majority of schools reported providing instruction in nursing diagnoses, with 28 (93.3%) RN pre-licensure programs indicating it was a formal part of their curriculum and only 2 (6.7%) indicating it was not formally taught. The two schools that reported not teaching nursing diagnosis were a community college ADN program and a private LVN to ADN program. Comments from programs teaching nursing diagnosis indicate teaching it initially as part of the nursing process in a nursing fundamentals course, then continuing to reinforce and utilize it in other courses throughout the academic program and with direct patient care during clinical education experiences.

Approaches to teaching students about nursing diagnosis in RN pre-licensure programs vary, as do methods to develop and communicate these. The NANDA (North American Nursing Diagnosis Association) International definitions and classification is the most common method being taught, as reported by 21 (70%) of programs. This taxonomic structure formulates nursing diagnoses through standardized statements with related factors and characteristics in the form of signs and symptoms. Six nursing programs (20%) reported using NANDA lists as a reference, with less formality applied in the expectations of students when forming, writing and communicating diagnostic statements, and one program (3.3%) indicated they do not specify or utilize a standard approach. Two programs (6.7%) indicated using variations of NANDA as well as incorporating concept
mapping throughout the curriculum. Concept maps are graphical tools for organizing and representing knowledge.

Nursing schools were asked when nursing diagnosis is first formally taught in their programs. While all programs report teaching nursing diagnosis, it is typically taught in a specific course during the first semester of the nursing program. Comments indicate students are expected to apply nursing diagnoses throughout all semesters of the program, and content can typically be found integrated in didactic courses and case studies as well as in clinical settings when caring for patients.

<table>
<thead>
<tr>
<th>Q6: When are nursing diagnoses first formally taught in RN pre-licensure programs?</th>
<th>(N = 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of a specific course, within the first year and first semester of the nursing program</td>
<td>22 (73.3%)</td>
</tr>
<tr>
<td>Part of a specific course, within the first year and second semester of the nursing program</td>
<td>4 (13.3%)</td>
</tr>
<tr>
<td>Part of a specific course, within the first year and third semester of the nursing program</td>
<td>0</td>
</tr>
<tr>
<td>Taught as part of a specific course within the second year of the nursing program</td>
<td>0</td>
</tr>
<tr>
<td>Part of the curriculum, but not formally taught as part of a specific course</td>
<td>4 (13.3%)</td>
</tr>
<tr>
<td>Not part of the curriculum, nor taught as part of a specific course</td>
<td>0</td>
</tr>
</tbody>
</table>

Various teaching methods and learning activities may incorporate nursing diagnoses specifically in different courses or assignments throughout a nursing program. Nursing programs were asked to identify the extent to which identifying, and utilizing nursing diagnoses are purposefully included in teaching methods in their program. Data patterns indicates a majority of programs incorporate nursing diagnosis in several ways; most commonly it is systematically integrated throughout curriculum across the program. Comments submitted attest to the intent that students utilize and apply nursing diagnoses in complex ways, addressing priorities for individualized care to achieve patient outcomes.

➢ In formulating the nursing diagnosis in patient care environments, the students consider the nursing assessment, secondary patient information, medical diagnosis and medical workup and focus. All of this is considered when developing their patient Nursing Diagnosis and plan of care.

➢ Students are taught to identify priorities of care for the patient that they are assigned to care for, and develop specific patient outcomes related to the diagnosis, incorporating what specific nursing actions they will implement to facilitate the patient achieving the outcome.

➢ We recognize that medical diagnosis is a necessary part of formulating nursing diagnosis. The medical diagnosis informs or suggests commonly identified nursing diagnoses. Our students are required to identify the pathophysiology of the disease as part of the diagnostic statement (etiology). Students may identify other diagnoses - particularly developed for patient-centered care. All students are required to have a minimum of 5 interventions unique to the patient.
Q7: Identify the extent to which identifying, developing, and utilizing nursing diagnoses are specifically and purposefully included in various teaching methods

<table>
<thead>
<tr>
<th>Teaching Method</th>
<th>Never</th>
<th>Occasionally or Optionally</th>
<th>Regularly</th>
<th>Always Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient case studies or reviews</td>
<td>0%</td>
<td>16.7%</td>
<td>60.0%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Clinical simulation</td>
<td>0%</td>
<td>40.0%</td>
<td>50.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Integrated into curricula for selected specialty courses</td>
<td>6.7%</td>
<td>6.7%</td>
<td>60.0%</td>
<td>26.7%</td>
</tr>
<tr>
<td>Systemically integrated throughout curriculum across program</td>
<td>0%</td>
<td>6.7%</td>
<td>60.0%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Course assignments to develop defined care plans</td>
<td>0%</td>
<td>3.3%</td>
<td>43.3%</td>
<td>56.7%</td>
</tr>
<tr>
<td>Utilized in course work and related assignments but not in providing direct care</td>
<td>13.3%</td>
<td>33.3%</td>
<td>43.3%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Identified and developed based on direct care provided to assigned patients</td>
<td>0%</td>
<td>6.7%</td>
<td>33.3%</td>
<td>60.0%</td>
</tr>
<tr>
<td>In direct patient care-based predominantly on medical diagnoses, typical standard nursing diagnoses and interventions</td>
<td>13.8%</td>
<td>41.4%</td>
<td>37.9%</td>
<td>10.3%</td>
</tr>
<tr>
<td>In direct patient care-based on nursing assessment, patient data, including etiology, to inform specific nursing interventions</td>
<td>0%</td>
<td>3.3%</td>
<td>30.0%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Developing diagnostic competencies occurs over time for RN pre-licensure students, with further expertise continuing to develop following RN licensure in practice. To determine the relevant etiology for nursing diagnoses, nursing students must accurately interpret patient responses to their health problems, which can be complex and diverse, requiring critical thinking skills. Pre-licensure nursing programs report students exhibit a range of nursing competencies considering common patients part of their curriculum and student experiences, with a majority indicating students are either at a beginner or competent level upon graduation.

Q8: Identify the level of competency nursing students typically have upon graduation and RN licensure

<table>
<thead>
<tr>
<th>Competency</th>
<th>Novice</th>
<th>Beginner</th>
<th>Competent</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding and utilizing nursing diagnoses based on medical problems observed or reported</td>
<td>6.7%</td>
<td>33.3%</td>
<td>53.3%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Identifying and formulating nursing diagnoses based on individualized nursing assessments of patient response to illness</td>
<td>6.7%</td>
<td>30.0%</td>
<td>46.7%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Determining the specific etiology of the nursing diagnoses from which specific nursing responsibilities and interventions follow</td>
<td>10.0%</td>
<td>30.0%</td>
<td>50.0%</td>
<td>10.0%</td>
</tr>
</tbody>
</table>
Reviewing and evaluating the accuracy of nursing diagnoses based on the presence of evidence-based findings which support it | 10.0% | 30.0% | 46.7% | 10.0%
---|---|---|---|---
Evaluating the effectiveness of nursing interventions associated with the identified nursing diagnoses | 6.7% | 30.0% | 46.7% | 16.7%

Responsibilities pre-licensure students have in utilizing nursing diagnoses and patient care plans when providing direct care to patients in clinical facilities varied by school, with an indication that clinical facilities also contribute to determining this. Levels of student responsibility most frequently reported by nursing programs were:

- 36.7% of schools report students discuss and contribute to the identification of nursing diagnoses or patient problem lists, and assist with developing interventions and plans of care without documenting these in the medical record
- 20% of schools report in addition to contributing and assisting (as above), their students also document these following collaboration with an RN or faculty
- 20% of schools indicate their students function in a more limited role, only referring to nursing diagnoses and following established patient care plans

Schools were asked to share the most significant challenges or barriers to teaching nursing diagnoses and / or for students to learn and develop competencies in the diagnostic process within their scope of nursing practice. Responses submitted in open text box format (Q10) were reviewed and synthesized, with the most frequently reported findings summarized as follows:

- Terminology (“language” or “vocabulary”) is challenging to learn, not used in practice
- Working with RNs that predominantly utilize the medical model more than nursing diagnosis model inhibits application of learning and limits addressing patient response not linked with medical diagnoses
- Most health care team members focus on medical diagnoses and overlook nursing diagnoses
- Clinical facility restrictions on accessing EMR inhibit application of learning process
- Limited time to formally teach it
- Student engagement negatively impacted when nursing diagnoses and nursing focused plans of care are not visibly used in practice
- Critical thinking and decision making, “thinking like a nurse”
- Typically taught 1st semester when students lack clinical experience to relate to it
- Distinguishing medical and nursing diagnoses
- Despite trying concept maps, discussion, work sheets, care plans, and interactive sessions, this remains challenging for students
- Hospital practices pre-set and utilize a limited number and type of nursing diagnoses
- Learning differences between an actual or potential problem, identifying data (evidence) to support it
• Limitation of (some) EMR systems to utilize, connect, and convey this
• Individualized and holistic application versus standardized application
• Variation in documentation processes and modification of practices across settings
• Faculty competency and experience in clinical practice

Schools were then asked to identify success strategies and teaching methods that best support or guide student engagement, and learning and development of diagnostic competencies within the scope of nursing practice. Responses submitted in open text box format (Q11) were reviewed and synthesized, with the most frequently reported findings summarized as follows:

• Use of case studies
• Engaging discussion among students, working in groups and post conference, support prioritization with input and ideas
• Technology enhanced nursing process experiences (simulation, You Tube)
• Utilize nursing diagnoses in theory, skills lab, and clinical to integrate and apply knowledge, establish consistent expectation and repetition across courses and learning opportunities
• Introduction to concept mapping prior to care plan development
• Experience-based learning, progressive development, varied clinical cases
• Assignments to develop and submit care plans
• Guide and coach identification of primary patient need to include problems beyond the medical diagnoses alone
• Breaking the nursing diagnoses statement apart, beginning with the medical diagnoses and also identifying common areas of concern
• Begin various approaches early, in first semester
• Simplify the language, de-emphasize formal writing and increase focus on the diagnostic process
• Compare and contrast patients with the same medical diagnoses that have different etiologies and response to illness
• Provide resources, references, examples, mentors (3rd semester students coach 1st semester students)

The introduction to the survey stated that “utilization of nursing diagnoses (specifically) is a key component that evidences the unique contribution and value of nursing.” Upon completing the questionnaire, a majority of respondents (70%) either fully or somewhat agreed with that statement.
This same statement and final question were posed in both the hospital and nursing school surveys, and the distribution of responses by level of agreement or disagreement was found to be comparable. Comments received from schools provide further insight into this question, represented by these examples:

“The body of knowledge related to nursing diagnoses is not large; there is more evidence related to implementation of nursing practice and actions.”

“As a practicing nurse for over 23 years, I observe that developing plans of care to meet patient specific needs remains a priority, yet plans of care are rarely fully utilized.”

“Agree they are an important part of patient care, yet hospitals predominantly adopt the medical model and common patient problem language.”

“Nursing process and nursing diagnoses reinforce the independent functions of the professional nurse. Basing nursing practice solely on the medical model limits scope of practice and range of patient needs to be met.”

“As technology has merged some roles in healthcare, I see less distinction. Nursing has a unique role and function in healthcare, but I am not convinced it will be captured or valued through nursing diagnosis.”

“The biggest barrier to nursing providing and documenting care has been the electronic health record, with nursing assessment and interventions confined to check boxes rather than descriptive notes. Valuable information is found in physician progress notes.”

“The nursing process and utilizing nursing diagnoses help students in their critical thinking process, in addressing the overall needs of the patient, not just those associated with the medical diagnosis.”
Hospitals and Hospital Systems

Hospital respondents completing the survey included 34 acute care hospitals and hospital systems across California, representing various sizes and types of acute care hospitals. Single hospitals as well as hospitals that were part of larger health systems provided input to the survey, with one large health system that represented 21 hospitals in California responding.

The term “nursing diagnosis” used throughout the survey referred to the specific responsibility RNs may have in assessing patient response to health, determining evidence-based causes, and making decisions regarding interventions to be implemented within the scope of nursing practice. Various approaches are identified to express and communicate nursing diagnoses, while professional practice methods and hospital expectations in

Q4: Which Method(s) If Any, Has Your Organization Adopted?

- NANDA: 12.1%
- NANDA as reference, less formal: 12.1%
- Free-test approach: 3.0%
- Use expected, no specific approach: 36.4%
- Do not expect use of nursing diagnoses: 12.1%
- Other: 24.2%
using a specific method also differ. Hospitals responding to the survey most frequently (36%) indicated that while they expect nurses to utilize nursing diagnosis, the organization had not identified a specific method or approach to be adopted.

(Q 5) Hospitals provided information about approaches used for planning and documenting patient care that typically involve electronic health records, and may include an interprofessional team approach in addition to the nursing plan or in place of it. The small sample size and variation of responses limited quantitative analysis; however, a sample of descriptive findings is summarized.

- Electronic health records provide a blended approach of medical diagnoses and evidence-based human responses aligned with nursing diagnoses to support potential or actual health problems through templates provided
- Clinical practice guidelines linked to the electronic health record, with reference to Nursing Interventions Classification (NIC) noted on some electronic health record templates
- Patient problem list is used in addition to nursing diagnoses
- Patient problem list is used instead of nursing diagnoses
- Utilize (standard) care plans based on medical diagnoses, with a reference list of common problems
- Patient plan of care does not use nursing diagnoses, and is interprofessional
- Nursing process screen within the electronic health record contains a list of potential assessment findings outside normal defined parameters; nursing selection reflects identified needs
- Utilize NANDA’s Nursing Interventions Classification (NIC) and Nursing Outcomes Classification (NOC) in electronic health record workflow management software; however, terminology is not face up or evident
- Software integrates an interprofessional approach to a patient plan of care
- Electronic health record uses lists of nursing diagnoses with attached patient problem lists and interventions that the nurse selects from

(Q 6) The majority of hospitals (88.2%) reported capturing nursing data sets and interventions electronically from electronic medical records, rather than relying on manual documentation methods, with a small number (8.8%) reporting nursing data sets are only available manually. The extent to which such data is captured and accessible influences the potential of utilizing it to review nursing practice, care delivery processes and systems, and evaluate effectiveness evidenced by clinical outcomes.

The level of responsibility RNs have in identification of nursing diagnoses as part of the nursing process show a prevalence of referring to nursing diagnosis reference lists or sources, and selecting or following standard pre-planned interventions as the basis for care planning, while having the option to individualize and prioritize interventions as indicated and as the condition of the patient and needs change.
Q7: What level of responsibility do RNs typically have in identification of nursing diagnoses as part of the nursing process in your organization: (N = 34)

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses refer to nursing diagnoses reference lists (or menus) and follow standard (pre-planned) interventions as the basis of decisions in planning care.</td>
<td>8.8%</td>
</tr>
<tr>
<td>Nurses formulate nursing diagnoses, independently self-identify nursing diagnoses, and make decisions on interventions to be implemented in establishing plans of care unique to each patient</td>
<td>44.1%</td>
</tr>
<tr>
<td>Nurses formulate nursing diagnoses, references, and independently self-identify nursing diagnoses, making decisions on interventions, to be implemented in establishing plans of care unique to each patient, including regularly evaluating the accuracy of the nursing diagnoses and effectiveness of the interventions in achieving health outcomes.</td>
<td>17.7%</td>
</tr>
<tr>
<td>RNs in this organization do not refer to or utilize nursing diagnoses</td>
<td>11.8%</td>
</tr>
</tbody>
</table>

Most hospitals agree that newly licensed RNs have beginning competence in understanding and using nursing diagnosis in practice. A minority of hospitals thought newly licensed RNs were fully competent in the application of nursing diagnoses.

Q8: Identify the typical level of competency of newly licensed RNs in their first year of practice

<table>
<thead>
<tr>
<th>Competency Area</th>
<th>Novice</th>
<th>Beginner</th>
<th>Competent</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding and utilizing nursing diagnoses based on medical problems observed or reported</td>
<td>32.3%</td>
<td>32.3%</td>
<td>25.8%</td>
<td>0%</td>
</tr>
<tr>
<td>Implementing or formulating nursing diagnoses based on individualized nursing assessments of patient response to illness</td>
<td>25.8%</td>
<td>48.4%</td>
<td>16.1%</td>
<td>0%</td>
</tr>
<tr>
<td>Determining the unique etiology of the nursing diagnosis from which specific nursing responsibilities and interventions follow</td>
<td>43.3%</td>
<td>33.3%</td>
<td>10%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Reviewing and evaluating the accuracy of nursing diagnoses based on the presence of evidence-based findings which support</td>
<td>48.4%</td>
<td>22.6%</td>
<td>16.1%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

To determine accurate nursing diagnoses, nurses consider medical diagnoses, nursing assessment findings, and relevant etiology based on sources of patient information and related data to accurately interpret patient responses to their health problems. (Q 9) Over half of the hospitals responding to the survey (58.8%) report they have not reviewed, evaluated, or validated the accuracy of nursing diagnoses and associated interventions used with patients. Hospitals that do report doing so (41.2%) indicate they validate the accuracy through:

- RN shift report and handoff
- Review by charge RNs and interdisciplinary team at least weekly
- Supervision and competency validation process with new nurses’ practice and review of documentation by experienced RNs
• Conduct peer reviews
• Periodic audits of a sample of active health records as part of quality monitoring and accreditation readiness determine plans reflect the current clinical presentation of the patient (report 65-80% accuracy). While electronic health record retains data sets, the care planning functionality is not ideal.
• Review of assessment, practice, and interventions for key indicators such as falls, pressure ulcers, central line infections, and ventilator associated pneumonia
• Review existing standard plans and develop new plans based on feedback from nurses, intra- and interfacility review

Hospitals were asked to share the most significant challenges or barriers for RNs in developing competencies in the diagnostic process within the scope of nursing practice. Responses submitted in open text box format (Q10) were reviewed and synthesized, with the most frequently reported findings summarized.

• Limited time, time management, and competing priorities practicing in fast-paced complex environments
• Lack of critical thinking skills and experience, limited clinical judgement
• Limited advanced practice and education resources, professional development at point of care
• Limited assessment skills and differentiating etiology sufficient to inform correct nursing diagnoses
• Variation in how students are trained and how nursing diagnosis is carried out in practice
• Lack of standardized approach to identification of patient needs
• Organizational culture
• Nurses do not utilize the diagnostic process or formulate nursing diagnoses when using standard lists and templates based on clinical practice guidelines. These may or may not have links to evidence based nursing diagnoses.
• Process guides the selection of the best fit standard plan of care
• Focus is on carrying out interventions and tasks rather than utilizing the diagnostic process
• Practice is driven largely by medical orders, established policy and procedure, and regulatory requirements. Intent to practice establishing patient goals and carrying out interventions within scope of independent function is essentially managing risk versus health.

Hospitals were asked to identify success strategies and methods that best support or guide RN engagement, and skills developing nursing diagnostic competencies within the scope of nursing practice. Responses submitted in open text box format (Q11) were reviewed and synthesized, with the most frequently reported findings summarized.

• Working within the functionality of the electronic health record templates, encourage nurses to tailor these based on assessments of patient’s clinical presentation by selecting pertinent interventions (rather than simply adopting everything in the standard template)
• Care pathways
• To develop relevant diagnostic skills, nursing diagnosis language needs to be referenced when operationalizing care in interprofessional settings
• Findings from nursing assessments and diagnoses should guide and inform applicable care by various members of the interprofessional team
• Case scenarios, chart reviews, one-on-one support and education, clinical practice rounds
• Emphasize development of assessment skills as a foundation to accuracy in diagnostic processes
• Value of nursing diagnostic competencies should be recognized, supported, and acknowledged in leading to improved outcomes
• Need to embed the diagnostic process as essential in practice and adopt within workflow processes regardless of technology or type of electronic health record system
• Ensuring RNs know their scope of practice and guiding development and understanding of the difference between medical diagnoses and nursing diagnoses

Factors that influence diagnostic competency within the scope of nursing practice include initial teaching as a nursing student, length of clinical experience, level of decision making responsibility, and frequency of studying and validating nursing diagnoses. Hospitals were asked what processes and activities their organization had adopted to support professional development in identifying or formulating nursing diagnoses.
(Q 13) One approach to measuring the quality of nursing care that contributes to patient outcomes is to link nursing diagnoses with associated interventions and evaluate patient outcomes in that context. A majority of hospital respondents (61.8%) indicated their organizations do not utilize such aggregate data documented on nursing diagnoses and nursing interventions with groups of patients to identify nursing’s contribution to and impact on patient outcomes. Of the 6 (17.7%) hospitals that indicated they utilize aggregate nursing data to evaluate patient outcomes, five of these were large hospitals and part of multi-hospital systems. Explanations provide evidence of the type of aggregate data collected and analyzed, highlighting the capability that some electronic health records have in their design, and the intent in these organizations to correlate nursing care provided with patient outcomes.

- Reports, alerts and dashboards are created for monitoring patient outcomes prospectively and retrospectively using data elements selected from the electronic health record including: nursing assessments, interventions, and medications
- Aggregate data sourced from the electronic medical record can be set up to be population specific, singularly targeted data, and /or aligned with specific quality initiatives or regulatory standards. Nursing specific care integral to the hospital and unit-based patient quality and safety outcomes
• Data on nursing interventions and impact on patient outcomes are obtained
• Nursing diagnosis and patient outcomes are linked and evaluated
• Aggregate data is utilized but only pertaining to patient outcomes-driven acuity-based staffing

In the introduction to the survey, it was stated that “utilization of nursing diagnoses (specifically) is a key component that evidences the unique contribution and value of nursing.” Upon completing the questionnaire, a majority of respondents (78%) either fully or somewhat agreed with that statement.

This same statement and final question were posed in both the hospital and nursing school surveys, and the distribution of responses by level of agreement or disagreement was found to be comparable. Comments received from hospitals provide further insight into this question, represented by these examples:

“Nursing diagnosis provides the clinical decision support framework for selecting and implementing individualized evidence-based interventions and outcomes resulting from the nurse assessment. It is fundamentally an important development pathway for stimulating clinical reasoning as new nurses enter the profession. Nursing diagnoses guide the humanistic and holistic care unique to our profession.”

“The approach to patient care and problem identification is interprofessional.”

“Proving nursing impact on health outcomes remains very difficult, and increasingly the only substantive evidence of nursing contribution is by publishing data sets to large national databases (NDNQI), and examining nursing sensitive indicators. If nursing collectively and consistently stated nursing sensitive indicator data in terms of nursing diagnostic statements, these could then be considered more salient in proving nursing impact.”

“Nursing diagnosis is a necessary component of nursing science. It provides direction for interventions and evaluation of their effectiveness in the care of the patient.”

“The entire nursing process, especially the independent functions, demonstrate the value of nursing.”
“Our method of documentation is based on clinical practice guidelines, which include human response selections similar to the traditional nursing diagnoses and medical diagnoses selections. These clinical practice guidelines have elements of nursing diagnoses built in. Our state nurse practice act requires nursing diagnoses as part of nursing care, so we stress the inclusion of these within our clinical practice guidelines. We approach this more from the evidence behind the clinical practice guidelines and the impact of evidence-based nursing practice. Outcomes achieved measured against health system goals and national benchmarks demonstrate the unique contribution and value of nursing in the current environment. The nursing diagnosis component of clinical practice guidelines emphasizes the contribution of nursing in our patient/family centered care model.”

“There are many facets that contribute to the value of nursing. Nursing diagnosis is key and helps organize and standardize nursing interventions in planning care within the scope of nursing practice.”

“If nursing diagnoses were utilized, there could be an effort to define and measure the actions and interventions which could validate the contribution of nursing on positive clinical outcomes.”

“Today’s nurses do not associate nursing diagnosis with the care of the patient. We are seeing nurses fall into task-oriented roles and not becoming leaders.”

**CONCLUSIONS**

This statewide survey examined how nursing students in pre-licensure programs are taught and learn about nursing diagnoses, and how nursing diagnoses are utilized by nurses practicing in hospitals in California. This study was conducted as part of the overall work to define the value of nursing, by exploring how the nursing diagnostic process is used and its specific contribution. Findings from the surveys may not be representative of nursing programs and hospitals in California overall due to the low response rate. It is possible that those responding to the survey invitation may have a particular interest in nursing diagnosis, which could also influence the findings. With these considerations in mind, the data obtained and comments received provide insights for considering how using nursing diagnosis can support the value of nursing and may even influence how RNs themselves conceive of their overall role.

Schools of nursing providing RN pre-licensure programs report introducing nursing diagnosis early in the curriculum, typically as part of a nursing fundamentals course, and within the context of learning the overall nursing process. The majority (93.3%) of respondents indicated teaching nursing diagnosis as a formal part of the curriculum that continues to be reinforced in other courses and clinical education experiences applied throughout the academic program. While approaches to teaching students about nursing diagnosis in RN pre-licensure programs vary, the NANDA International definitions and classification is the most common evidence-based method, being taught by 70% of nursing programs reporting. Learning is typically supported through review of case studies, assignments and activities, and application when providing direct patient care. Nursing programs indicate diagnostic competencies are an essential part of the nursing process that relies on the integration of emerging knowledge and critical thinking skills developed over time. Schools report that how they teach (and students learn and use nursing diagnosis) is important to the development of diagnostic competencies needed to accurately identify evidence-based plans of care and interventions as part of the nursing process. Schools also report experiencing wide variation across affiliated clinical sites where students are scheduled in how nursing diagnoses may be utilized in practice, integrated in plans of care and captured in electronic health records.
Hospitals responding to the survey most frequently (36%) indicated that while they expect nurses to utilize nursing diagnosis, their organization has not identified a specific method or approach to be adopted. The widespread implementation of electronic health records and their continued evolution have influenced how patient data is captured, how care and services are documented by various health professionals, and how records are utilized by the interprofessional team in coordinating and carrying out plans of care. Some electronic health records provide a blended approach of medical diagnoses and evidence-based human responses aligned with nursing diagnoses to support potential or actual health problems through templates provided as interprofessional plans of care, though most do not.

Hospitals report nursing practice trends emphasizing standardized plans and associated interventions to be carried out largely driven by medical orders, policy, and regulatory and safety concerns. Contributing factors may include low-level competency in newly licensed RNs related to nursing diagnoses, the expectations of the professional practice environment nurses work within, the short lengths of stay in which only priorities of care can be addressed, and organizational processes and systems that limit or support the effective development and efficient integration of the nursing process in care delivery. While most hospitals report lack of visible formal nursing diagnosis statements or language being used, there is evidence some have formally integrated NANDA or other sources and standards into the electronic health record programming. Further, in these instances assessment findings guide the development of problem lists (which may incorporate nursing diagnoses) and selection of specific interventions that support the autonomous nursing role leading to the determination of individualized plans of care and specific interventions. While the small survey size discourages broad conclusions, it seems there is clearly an opportunity to build on the majority opinions of survey responders from both education and practice that utilization of nursing diagnosis (specifically) is a key component that evidences the unique contribution and value of nursing. With nursing diagnosis currently more embedded in nursing education in California than in practice settings, it is incumbent on practice leaders and practitioners to determine how best to close this gap and expose the unique, but invisible, work of professional RNs.

While a majority of hospitals (88.2%) reported capturing nursing data sets and interventions electronically from electronic medical records, only 17.7% indicate using such data to evaluate nursing outcomes. There is further opportunity to strengthen the evidence linking nursing diagnostic processes with the identification and development of effective plans and targeted interventions to clinical outcomes demonstrating nursing’s unique contribution and value.