Funneling

evidence into practice

By JoAnn Mick, PhD, RN, NEA-BC

Every day in their practice settings, nurses encounter questions, problems, and patient needs that require effective clinical decision making for appropriate intervention. To address these situations, nurses have historically applied knowledge and skills acquired from various mechanisms, including healthcare instruction, ritual and tradition, and personal choice.[1]

In the early 2000s, a call for greater clinical effectiveness (outcomes) required healthcare providers to enhance their knowledge and skills by incorporating research-based evidence into decision making instead of relying only on what they already knew or had seen others doing. However, because evidence-based practice (EBP) wasn't fully included in nursing curricula until 2003, many tenured, experienced practicing nurses may be novices at utilizing EBP as a component of their practice.[2] Tenured nurses' lack of knowledge or

understanding of the EBP process may result in a shortage of strong role models for EBP skills development as a component of new nurses' professional nursing practice.

This article reviews the evolution of evidence-based nursing practice and provides a stepwise EBP process for integrating best practices into daily nursing care.

How nurses develop decision-making skills

In nursing school, nurses acquire knowledge and skills for performing nursing assessments and applying a sequence of steps when carrying out procedures. In the practice setting, patients are most likely to have good outcomes when

is demonstrated when newly hired nurses in a hospital setting go through an orientation period where they work under the guidance of a preceptor to learn about providing care to a specific patient population, or when graduate nurses are enrolled in a residency program where they're mentored by seasoned practitioners before they practice independently. The information provided in these learning experiences from other nurses often serves as a source of knowledge for clinical decision making as nurses encounter similar situations when caring for patients.

Information for decision making also comes from self-assessment, when nurses begin

healthcare providers are faced with the challenge of learning how to better integrate four sources of evidence into clinical decision making: clinical expertise, clinical context, patient outcomes and values, and best research evidence.[3] Although clinical expertise using knowledge acquired from education, tradition, and personal choice is readily assimilated by most nurses in practice, routinely including research evidence as a natural component of decision making remains a challenge for practicing nurses. Many experienced practicing nurses may remain novices unless they've pursued advanced education or attended classes or seminars to learn about the EBP process.[2]

The duty to share new knowledge with colleagues is a longstanding norm in the health professions.

this knowledge and sequencing are applied as nursing interventions are performed. Less than optimal outcomes, such as infection and skin breakdown, can occur when nurses skip steps in procedures or haven't yet mastered skill sets. Nurses often draw on past educational instruction as they make decisions about performance in their individual practices.

Another source of information for decision making involves the use of knowledge handed down from generation to generation as novice nurses join the profession. This handoff of knowledge

to reflect on their practice as they gain proficiency and can draw on knowledge gained from past experiences of applying interventions that resulted in good outcomes. Successful strategies are incorporated into an individual nurse's personal approach to providing patient care. Each of these mechanisms—healthcare instruction, ritual and tradition, and personal choice—provides information that nurses use to decide how to practice in various patient encounters during their workday.[1]

As information about EBP has become more readily available,

Healthcare organizations and leaders are under pressure to improve outcomes by creating a structure/culture/environment in which exploration of critical inquiry and the available body of evidence is an integral part of daily nursing practice. To achieve Magnet® recognition, for example, an organization must demonstrate that nurses are innovators and contribute to quality patient outcomes through EBP. The evolution of pay-for-performance and heightened focus on quality outcomes for regulatory bodies and payers continues to sustain the drive for EBP.

Overcoming barriers to EBP

Major barriers for nurses in adopting the EBP process as part of their daily practice are the high demands of providing patient care and limits on available time, resources, and structures. In addition, nurses within an organization may not yet have successfully demonstrated how having time and resources for EBP can support them in contributing in a meaningful way through improved patient outcomes and cost savings. Learning how to better link dollars to outcomes to portray a return on investment that demonstrates how EBP contributes to an organization's profit margin may justify additional investment in time and resources.

Administrators and educators continue to strive to encourage all nurses to perceive EBP as a consistent approach to providing patient care rather than an "extra" duty or project. However, the step of naturally including research evidence in decision making, instead of relying only on what nurses already know or have seen others doing, remains a complex issue in current nursing practice.

One strategy to reframe nurses' understanding of the types of information used for clinical decision making is to categorize information garnered from empirical, ethical, personal, and aesthetic sources of professional nursing practice.[4]

• *Empirical evidence* is information acquired by observation or experimentation. It evolves from scientific research and comprises *the science of nursing* component of professional nursing practice.[4] Data are recorded and analyzed by researchers who make practice recommendations and/or recommendations for conducting additional studies. Empirical evidence is found in published documents that provide background information, methods used to conduct the study, study findings, and a discussion of how the results may be used in practice.

• *Ethical evidence,* based on nurses' knowledge of, and respect for, patients' unique values and preferences, is practiced as *the ethics of nursing*.[4] Nurses have the ability to influence patient care outcomes by using their nursing knowledge and skills, their individual understanding of ethical principles, the nurse-patient and nurse-healthcare team relationships they establish, and good communication skills. An understanding of ethical principles, such as autonomy, beneficence, and justice, is used by nurses in all aspects of caring; respect and honesty established within the nurse-patient relationship positively influence the actions and behaviors of others.[5]

• *Personal evidence* evolves from nurses' individual experiences while caring for particular patients and is based on *the interpersonal relationships of nursing*.[4] Whether nurse-patient relationships last a few hours or continue long-term, they're used to support a patient, promote healing, and preserve or enhance function. Therapeutic relationships are health-focused, patient-centered, and have boundaries that distinguish them from social relationships. Nurses must be able to respect another person's beliefs and be nonjudgmental even when a patient's beliefs differ from their own world views.[6]

• *Aesthetic evidence* is based on the nurse's intuition, interpretation, understanding, and values; considered *the art and practice of nursing*.[4] Aesthetic knowing addresses the nurse's perception of significant elements of a patient's behavior and life circumstances. The nurse can use this information to individualize the care plan so that proposed interventions can be successful.

Empirical, ethical, personal, and aesthetic ways of acquiring, processing, reflecting, and evaluating nursing knowledge are important for helping nurses form a comprehensive clinical perspective that can be used to accomplish best-possible outcomes.[7] Nurses can be mentored to balance their personal professional practice scale by incorporating the four types of nursing evidence when gathering information for clinical decision making.

Integrating evidence into practice

Reframing EBP using components that define how professional nurses practice aligns with the description of EBP as an integration of clinical expertise with the best available external clinical research evidence and patients' unique values and circumstances. This approach is congruent with the definition of EBP as the conscientious, explicit, and judicious use of current best evidence in making clinical practice and policy decisions.[8] The steps for the EBP process guide healthcare providers to clarify the clinical topic of interest (*ask*), *gather* and *appraise* evidence, incorporate best practice recommendations in current practice (*act*), and *evaluate* outcomes.

Leaders of nursing EBP have advocated that a culture of clinical inquiry is essential to actualize EBP in nursing.[9] They recommended

adding Step 0 to the original five steps to highlight that an organization must create an environment where nurses have authority to openly question current practice. These authors also added a sixth step: Dissemination of the EBP process to support the need for professional nurses to contribute to the body of evidence that guides nursing practice.[10]

Disseminating EBP through clinical inquiry

Clinical inquiry has been defined as the ongoing process of questioning and evaluating practice and advancing informed practice.[11] Clinical inquiry should raise questions about the practice of an individual or a group of nurses in a practice setting and can lead to creating (innovating) and implementing practice changes through research utilization and experiential learning.

Clinical inquiry can be thought of as the nurse's inner voice that consistently questions: "Am I offering everything that's currently available to achieve the best outcome?" or "What else can be done?" when best outcomes aren't being achieved with current prac-

tice. Clinical inquiry should be sparked whenever nurses express rationales for their practice such as, "It's the way we do things here," "We've always done it that way," "It's how I was shown," "It's what I saw everyone doing," or "It's how the physician/nurse prefers to do it." To be evidence-based, care discussions and decision making need to center on evidence in relation to outcomes, not merely traditional practices and current knowledge.[12]

Clinical inquiry can be addressed by three different methodologies: EBP, research, and quality improvement (QI). Clinical inquiry should be first addressed by the EBP process to develop the clinical question and gather and appraise evidence. (See *Follow the evidence to advance nursing practice*.) Research or QI methodologies may be used in Step 4 (*act*) of the EBP process when implementing or testing new strategies or interventions that were identified during Steps 1 to 3 of the EBP process.[13]

Acknowledging that nurses often more easily understand and incorporate ethical, personal, and aesthetic information into

practice can support a focus for determining how to more naturally include empirical evidence in everyday practice. By assimilating clinical inquiry and use of the EBP process steps as a natural way of practicing nursing, nurses can begin to actualize EBP.

Six steps to EBP

Clinical inquiry leads naturally to the five steps of the EBP process—*ask, gather, appraise, act, and evaluate*—plus a sixth step, *disseminate*. Learning these EBP process steps can support nurses' ability to describe EBP just as other acronyms, mnemonics, and prompts are used to describe other practices. For example, when asked how to operate a fire extinguisher, nurses can recall the acronym PASS and describe how they pull, aim, squeeze, and sweep to extinguish a fire.[14]

Similarly, by remembering the six steps of the EBP process, nurses can describe how they address clinical problems or situations. For example, when a problem is identified, application of clinical inquiry naturally leads to development of a clinical question as Step 1 of the EBP process: *ask*. Keywords and the question topic are used to *gather* evidence from scientific sources as Step 2. In Step 3, all retrieved evidence is *appraised* and best practice recommendations or interventions are identified. This information is used for Step 4, *act,* by comparing current practice to what was identified in empirical evidence and offering the best practice recommendations and strategies in the nursing care provided. Step 5, *evaluate,* is carried out to determine if the best patient outcomes are being achieved. In Step

---

Follow the evidence to advance nursing practice

Goals of conducting EBP projects, nursing research studies, or QI projects are to contribute to the scientific knowledge base of nursing and thereby improve nursing practice and optimize patient outcomes. Incorporating the steps of the EBP process as a component of daily practice helps nurses meet the professional obligation identified in the American Nurses Association Code of Ethics for Nurses Provision 7.3: to advance the nursing profession through knowledge development, dissemination, and application to practice. Provision 7 identifies that "the nursing profession should engage in scholarly inquiry to identify, evaluate, refine, and expand the body of knowledge that forms the foundation of its discipline and practice," that "ongoing scholarly activities are essential to fulfilling a profession's obligations to society," and that "all nurses working alone or in collaboration with others can participate in the advancement of the profession through the development, evaluation, dissemination, and application of knowledge in practice."[29]

6, *disseminate*, the findings are shared with nursing colleagues to advance nursing practice. Dissemination planning should be included in the initial project or study planning phase.

Step 1: Ask. Consider the importance of asking the "right" question.[15,16] As problems emerge from clinical situations in which there's uncertainty or a knowledge gap regarding how best to respond, they can be formatted as questions and addressed from a variety of angles, such as:

• diagnosis. What information do healthcare providers need to know when providing care for patients diagnosed with an illness?

• therapy. Which nursing intervention is most effective, or what is an effective treatment given a particular health disorder?

• harm/etiology. Is a particular intervention likely to have harmful effects, or how can harmful effects be avoided?

• prognosis. What's the patient's likely course of disease, or how do we screen for an illness or reduce risk?

• prevention. How can patients' risk factors be adjusted to help reduce the risk of disease?

• experience. What are the experiences or values of patients, caregivers, or nurses?

• education. What are the best teaching strategies for colleagues, patients, or family members?[8]

To develop a clinical question, nurses can create an outline using the PICO(T) acronym to ensure the question is searchable and answerable.[15] PICO(T) stands for population, intervention, comparison, outcome, and time frame, if appropriate. The nurse writes information under each header to describe the situation being addressed and the desired outcome being pursued; for example:

Population
Pediatric critical care patients
Intervention
Best practice recommendations for safe and accurate nasoduodenal tube insertion
Comparison
Current practice compared with best practice recommendations
Outcome
To promote patient safety and comfort.

Comparisons should address comparing best practice recommendations with current nursing practice to determine if a change in practice is warranted. Addressing topics within the nursing scope of practice is an important consideration when developing a PICO question. For example, comparing medications to identify which medication should be prescribed would be outside of the scope of nursing practice.

Outcomes should be related to improving nursing practice or patient outcomes and need to be stated using words that define what "improved patient outcomes" actually means.

Once the PICO outline is developed, the PICO question can be formatted using the template: Among (population), what are best practice recommendations for (intervention) to achieve (outcome). For example, "Among pediatric critical care patients, what are best practice recommendations for safe and accurate nasoduodenal tube insertion to promote patient safety and comfort?" The assumption is that current practice will be compared with the evidence gathered and appraised, so comparison doesn't need to be stated in the PICO question.

Step 2: Gather. After the PICO question has been developed, the next step of the EBP process is to gather evidence. In this step, information can be gathered from empirical, ethical, personal, and aesthetic sources. Information shouldn't be gathered from Internet search engines, such as Google, or from nonprofessional sources, such as Wikipedia; instead, look for scientific sources of credible information that can be used to provide patient care. Recommended sources of evidence include scientific databases (PubMed, CINAHL), The Cochrane Library, National Guideline Clearinghouse, professional nursing practice standards, and organizational policies and procedures.[16]

Step 3: Appraise. Appraising evidence involves reviewing all sources of information identified to develop an understanding of the current body of knowledge available to guide nursing practice. An evidence summary table can be a useful tool to help synthesize evidence for comparison.

In an evidence summary table, each evidence source is documented and key information about the purpose, level of evidence, results, and practice recommendations is recorded so that the findings can be reviewed and patterns in the evidence can be identified.[17] For example, a review of an evidence table that shows numerous authors making the same recommendation to achieve the best outcome can be easily understood as strategies that should be used in current practice. A variation in recommendations may demonstrate the need for additional studies before a best practice recommendation can be made.

Grading tools, such as Critical Appraisal Skills Programme and Appraisal of Guidelines for Research and Evaluation, are available for reviewing specific types of research design and/or practice guidelines when appraising evidence.[17-19]

During the *appraise* step, the nurse is interpreting and synthesizing evidence, and drawing conclusions about the usefulness of the information for the current situation.[20,21] Some of the considerations at this step may be as follows.

changes in practice are warranted, the nurse can move to the next step.

Step 4: Act. In this step, the nurse assures his or her colleagues that current nursing practice has been confirmed as offering interventions that provide the best opportunity to achieve good outcomes, or that a strategy or practice recommendation that needs to be added to nursing practice in a specialty area has been identified.[22] To make a change in practice, the nurse must decide to use QI or research methodology to

better using the new intervention.

A nurse must complete Human Subjects Protections training and develop a protocol for submission for Institutional Review Board approval before conducting a study.[23] The support of an experienced mentor in conducting a study can help a novice nurse researcher make an important contribution to the body of knowledge that guides nursing practice.

Step 5: Evaluate. In this step, the nurse compares the QI project or nursing research study results with the outcome identified in the

Evidence has shown that up to 2 decades may pass before the findings of original research become part of routine clinical practice.

• Is current nursing practice already incorporating all of the identified best practice recommendations or has a strategy been identified that may be added to current practice?
• Should the practice recommendation or strategy be implemented in current practice?
• Will making the practice change improve nursing practice and/or clinical outcomes?
• Could making the change improve patient or nurse satisfaction?
• Will the change improve unit operations or reduce the cost of care?

After determining if the evidence confirms that current practice is already at best practice standards or identifying that

implement the change.[13] With QI methodology, the nurse will assess the appropriateness and feasibility of the recommendation and create an action plan to pilot the practice change and evaluate outcomes. Evaluation will be accomplished by collecting baseline data that show the outcomes achieved with current practice, then comparing those findings with the results achieved after implementing the new intervention.

The nurse may also consider using research methodology to test an intervention. For example, the nurse may develop a protocol to implement the intervention with a group of patients and compare outcomes with the outcomes of patients receiving the current care to determine if outcomes are

PICO question to determine if the work helped address the original question and met the desired outcome.[24] An important consideration for this step is to evaluate results using instruments found in the initial literature review to gather pre- and postintervention data rather than creating new instruments for data collection. Building on published instruments with established reliability and validity supports the ability to synthesize evidence by letting the nurse compare outcomes of projects and studies that used similar measures in various practice settings and draw meaningful conclusions for practice recommendations.

Step 6: Disseminate. The final step of a project or study is to

share the results. The duty to share new knowledge with colleagues is a longstanding norm in the medical and allied health professions and is commonly expressed in professional codes of conduct.[25]

Dissemination planning conducted during the initial project or study planning phase ensures that project or research progress and findings are shared with study/project participants, agencies and service providers, professional specialty communities, or other appropriate individuals.

Practice gap and possible solutions

Evidence has shown that up to 2 decades may pass before the findings of original research become part of routine clinical practice.[26] Barriers to EBP include lack of knowledge and awareness, negative views of EBP (extra work) or fears of research, the large amounts of information in professional journals, the lack of time and resources to search for and appraise evidence, and pressure to continue with practices steeped in tradition.

To overcome these barriers, nurses can conduct a self-assessment using EBP beliefs and implementation scales to better understand the personal perspective that influences how they practice.[27] Some questions for self-examination of beliefs include: What do you believe about EBP? Does EBP lead to quality care? Is EBP a part of your decision-making process? Do you view EBP as an "add-on-to" or a "part of" your current practice? To what extent is the care you provide evidence-based? How much knowledge of the EBP process do you possess and how much do you use in your everyday practice?

To help nurses better understand how they practice EBP, questions include: In the past 8 weeks, have you: used evidence to guide your clinical practice?, used an EBP guideline or systematic review to change clinical practice where you work?, evaluated the outcomes of a practice change that employed an evidence-based strategy?, shared evidence from a research study with a patient/family member or a multidisciplinary team member?

After gaining an understanding of their own personal beliefs and approach to EBP, nurses can strive to create and support a culture of inquiry within their organizations, advocate for making evidence in databases and journals readily available for access, adopt an EBP model to guide nursing practice, identify EBP/research/QI mentors and champions, pursue comprehensive EBP education in nursing curricula and/or new graduate residencies, attend EBP workshops or conferences, participate in EBP programs or fellowships, form a journal club, develop a personal EBP portfolio of professional contributions, request organizational recognition of EBP projects, or participate in EBP research councils or committees.

As healthcare leaders, nurses have a key role in translation of research evidence through the practice of evidence-based nursing practice to improve health outcomes for patients. Nurses have been recognized as being at the forefront of primary care by ensuring coordinated healthcare, providing patient education, and promoting better health outcomes.[28] To truly achieve evidence-based nursing practice, nurses need to come to a full understanding that EBP is integral to everyday nursing practice. Implementation of evidence-based nursing practice supports nurses in practicing to the full extent of their education and scope of practice, and in being full partners with other healthcare professionals in redesigning healthcare. **NM**

REFERENCES
1. Kent B, Fineout-Overholt E. Teaching EBP: part 1. Making sense of clinical practice guidelines. *Worldviews Evid Based Nurs*. 2007;4(2):106-111.
2. Stevens KR. The impact of evidence-based practice in nursing and the next big ideas. *Online J Issues Nurs*. 2013;18(2):4.
3. Salmond SW. Advancing evidence-based practice: a primer. *Orthop Nurs*. 2007;26(2):114-123.
4. Jones T. Translating evidence into practice: is nursing the missing link? www.uams.edu/ANGELS/perinatal_conference/Presentations/2010/Jones,%20Tammy%20-%20Translating%20Evidence%20into%20Practice%202.pdf.
5. Parker FM. Ethics: the power of one. *Online J Issues Nurs*. 2007;13(1).
6. Sheldon LK. Establishing a therapeutic relationship. http://samples.jbpub.com/9781449691776/9781449691776_CH05_Pass2.pdf.
7. Pipe TB, Wellik KE, Buchda VL, Hansen CM, Martyn DR. Implementing evidence-based nursing practice. *Urol Nurs*. 2005;25(5):365-370.
8. Sackett DL, Straus SE, Richardson WS, Rosenberg W, Haynes RB. *Evidence-Based Medicine: How to Practice and Teach EBM*. 2nd ed. Philadelphia, PA: Churchill Livingstone; 2000.
9. Melnyk BM, Fineout-Overholt E, Stillwell SB, Williamson KM. Evidence-based practice: step by step: igniting a spirit of inquiry: an essential foundation for evidence-based practice. *Am J Nurs*. 2009;109(11):49-52.
10. Melnyk BM, Fineout-Overholt E, Stillwell SB, Williamson KM. Evidence-based practice: step by step: the seven steps of evidence-based practice. *Am J Nurs*. 2010;110(1):51-53.
11. Kaplow R. AACN Synergy Model for Patient Care: a framework to optimize outcomes. *Crit Care Nurse*. 2003;(suppl):27-30.

12. Titler MG. The evidence for evidence-based practice implementation. In: Hughes RG, ed. *Patient Safety and Quality: An Evidence-Based Handbook for Nurses.* Rockville, MD: Agency for Healthcare Research and Quality; 2008.

13. Mick J. Addition of a decision point in evidence-based practice process steps to distinguish EBP, research and quality improvement methodologies. *Worldviews Evid Based Nurs*. 2015;12(3):179-181.

14. U. S. Department of Labor. Occupational Safety and Health Administration. Evacuations plans and eTool. https://www.osha.gov/SLTC/etools/evacuation/portable_use.html.

15. Stillwell SB, Fineout-Overholt E, Melnyk BM, Williamson KM. Evidence-based practice, step by step: asking the clinical question: a key step in evidence-based practice. *Am J Nurs*. 2010;110(3):58-61.

16. Stillwell SB, Fineout-Overholt E, Melnyk BM, Williamson KM. Evidence-based practice, step by step: searching for the evidence. *Am J Nurs*. 2010;110(5):41-47.

17. LoBiondo-Wood G, Haber J. *Nursing Research: Methods and Critical Appraisal for Evidence-Based Practice*. 8th ed. Philadelphia, PA: Elsevier-Mosby; 2014.

18. Critical Appraisal Skills Programme (CASP). Cohort study checklist. http://media.wix.com/ugd/dded87_e37a4ab637fe46a0869f9f977dacf134.pdf.

19. Siering U, Eikermann M, Hausner E, Hoffmann-Eßer W, Neugebauer EA. Appraisal tools for clinical practice guidelines: a systematic review. *PLoS One*. 2013;8(12):e82915.

20. Fineout-Overholt E, Melnyk BM, Stillwell SB, Williamson KM. Evidence-based practice step by step: critical appraisal of the evidence: part I. *Am J Nurs*. 2010;110(7):47-52.

21. Johnston L, Fineout-Overholt E. Teaching EBP: the critical step of critically appraising the literature. *Worldviews Evid Based Nurs*. 2006;3(1):44-46.

22. Gallagher-Ford L, Fineout-Overholt E, Melnyk BM, Stillwell SB. Evidence-based practice, step by step: implementing an evidence-based practice change. *Am J Nurs*. 2011;111(3):54-60.

23. National Institutes of Health. Human subjects protections training. https://humansubjects.nih.gov/resources.

24. Fineout-Overholt E, Johnston L. Evaluation: an essential step to the EBP process. *Worldviews Evid Based Nurs*. 2007;4(1):54-59.

25. Fineout-Overholt E, Gallagher-Ford L, Mazurek Melnyk B, Stillwell SB. Evidence-based practice, step by step: evaluating and disseminating the impact of an evidence-based intervention: show and tell. *Am J Nurs*. 2011;111(7):56-59.

26. Feifer C, Fifield J, Ornstein S, et al. From research to daily clinical practice: what are the challenges in "translation"? *Jt Comm J Qual Saf*. 2004;30(5):235-245.

27. Melnyk BM, Fineout-Overholt E, Mays MZ. The evidence-based practice beliefs and implementation scales: psychometric properties of two new instruments. *Worldviews Evid Based Nurs*. 2008;5(4):208-216.

28. Wilson A, Whitaker N, Whitford D. Rising to the challenge of health care reform with entrepreneurial and intrapreneurial nursing initiatives. *Online J Issues Nurs*. 2012;17(2):5.

29. American Nurses Association. Code of ethics for nurses. www.nursingworld.org/codeofethics.

30. Newhouse RP. Diffusing confusion among evidence-based practice, quality improvement, and research. *J Nurs Adm*. 2007;37(10):432-435.

JoAnn Mick is a nurse researcher at the Clinical Innovation & Research Institute, Memorial Hermann-Texas Medical Center in Houston, Tex.

For more than 144 additional continuing education articles related to management topics, go to NursingCenter.com/CE.

CE CONNECTION

Earn CE credit online:
Go to http://www.nursingcenter.com/CE/NM and receive a certificate *within minutes*.

INSTRUCTIONS
Funneling evidence into practice

TEST INSTRUCTIONS
• Read the article. The test for this CE activity is to be taken online at **ceconnection.com/NM**.
• You'll need to create (it's free!) and login to your personal CE Planner account before taking online tests. Your planner will keep track of all your Lippincott Williams & Wilkins online CE activities for you.
• There's only one correct answer for each question. A passing score for this test is 12 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
• For questions, contact Lippincott Williams & Wilkins: **1-800-787-8985**.
• Registration deadline is **July 31, 2019**.

PROVIDER ACCREDITATION
Lippincott Williams & Wilkins, publisher of *Nursing Management*, will award 1.0 contact hour for this continuing nursing education activity.

LWW is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 1.0 contact hour, the District of Columbia, Georgia, and Florida CE Broker #50-1223. Your certificate is valid in all states.

Payment: The registration fee for this test is $12.95.