Key Term Review

- **Electronic health records** have simplified the process of medication administration, reduced the number of incorrect or unnecessary medications, and decreased treatment delays.
- **Evidence-based practice** requires tracking the best evidence for a specific procedure.
- **Information technology** is the use of computerized systems to assist nurses and other healthcare workers in making good decisions and delivering safe care.
- The **Nursebot Project** developed personal robotic assistants for older adults.
- **Nursing informatics** combines computer science, information science, and nursing science to assist nurses in their practice.
- **Personal digital assistants** are handheld devices that are compact and powerful and make voluminous amounts of clinical information easily accessible.

Leadership Development Exercises

Leadership Development Exercise 15-1

Join with at least three other colleagues, and discuss the importance of IT to the transformation of health care. Include information from this chapter to provide a rationale for your statements.

Leadership Development Exercise 15-2

Join with at least three other colleagues to discuss the relationship between evidence-based practice and nursing informatics, and provide specific examples described in this chapter. Also go to the Web and Google "evidence-based practice and nursing informatics," and see what comes up.

Leadership Development Exercise 15-3

Join with at least three other colleagues to develop a plan for providing clinician input into one technology system and its implementation.

Leadership Development Exercise 15-4

Join with at least three other colleagues to discuss the advantages of electronic health records.

Optional: If a unit in your agency is using electronic health records, speak to at least two staff members and find out the glitches, the advantages, and the things that need to be changed in the system. If possible, share your findings with the class and/or a nurse leader in your agency.

Leadership Development Exercise 15-5

Join with at least three other colleagues to plan the purchase and use of handheld devices for your agency or hospital.

a. Decide (by volunteering or flipping a coin) who will visit each of the four Web sites that follow and bring back information:
   - General technology information and product reviews: http://www.cnet.com
   - Online vendor for handheld clinical software: http://www.skyscape.com
   - Miscellaneous Palm software and accessories: http://www.palmgear.com
   - PDA resources for healthcare professionals, including software and a discussion forum: http://www.pdacortex.com
b. Using the information obtained on the Web sites, decide which model to purchase based on price, usability, and staff and unit factors.
c. Report back to the class, or write a paper on what you learned.

■ Leadership Development Exercise 15-6

Choose one exercise from the list below:

a. Interview a nurse leader who has implemented a change. Be sure to cover the seven strategies for managing technology change and involving staff that appear in this chapter. If the nurse leader did not attend to all seven, inquire why he or she did not use a specific strategy. Report back your findings to the class or another group.
b. Join with two to three other colleagues, and devise a plan for implementing handheld technology or some other technology change not now in operation on a unit with which you are familiar. Be sure to be specific about exactly how the plan will be implemented. Present your findings to the class and/or to a nurse leader who is currently contemplating a technology change.

Advanced Leadership Development Exercises

■ Leadership Development Exercise 15-7

Teach about IT:

a. Plan a hypothetical in-class situation or a real situation to teach peers or less experienced learners about using one type of IT that's appropriate for their use.
b. Write up your findings.
c. Share your results with your colleagues, or submit a paper on your results for publication or as part of your course grade.

■ Leadership Development Exercise 15-8

Design a problem statement to study an informatics issue, and obtain feedback from a more seasoned nurse researcher or at least three colleagues about whether your problem statement can be tested. Revise your statement depending on that feedback.

■ **Leadership Development Exercise 15-9**

Develop a research project to study an informatics issue, and obtain feedback from a more seasoned nurse researcher or at least three colleagues about whether your design has flaws. Revise your research project depending on that feedback.

References

American Nurses Association. (2001). *Scope and standards of nursing informatics practice*. Washington, DC: Author.

Bradley, C. (2003). Technology as a catalyst to transforming nursing care. *Nursing Outlook*, *51*, pp. S14–S15.

Domrose, C. (2004). Gadget gurus. *NurseWeek News*. Retrieved June 19, 2007, from http://www.nurseweek.com/news/Features/04-10/HiTech_print.html

First, S. E. (1990, April). All systems go: How to manage technological change. *Working Woman*, 47–48, 52.

Kirkley, D., & Rewick, D. (2003). Evaluating clinical information systems. *Journal of Nursing Administration*, *33*, 643–651.

Koeniger-Donohue, R. (2007). Optimizing clinical use of handheld technology: PDAs for NPs. *American Journal for Nurse Practitioners*, *11*, 22–33.

Malloch, K. (2007). The electronic health record: An essential tool for advancing patient safety. *Nursing Outlook*, *55*, 159–161.

Matthews, J. (2005). *Research abstracts*. Retrieved November 15, 2007, from http://cre.nursing.pitt.edu/htmlabstracts/matthewsabs.html

McBride, A. (2005). Nursing and the informatics revolution. *Nursing Outlook*, *53*, 183–191.

Mooney, S. (1998a). Computerized patient record bridges gap between costly ED visits and urgent care center. *Clinical Data Management*, *5*(5), 7–8.

Mooney, S. (1998b). Focus on computerized patient records. *Clinical Data Management*, *5*(5), 4–5.

Perlin, J. B., & Roswell, R. H. (2004). Why do we need technology for caregiving of older adults in the U.S.? *Public Policy and Aging Report*, *14*, 22.

Pravikoff, D. S., Pierce, S. T., & Tanner, A. (2005). Evidence-based practice readiness study supported by academy nursing informatics expert panel. *Nursing Outlook*, *55*, 49–50.

Priselac, T. M. (2003). Information technology's role in improving practice environments and patient safety. *Nursing Outlook*, *51*, pp. S11–S13.

Riner, M. E., Cunningham, C. J., & Johnson, A. (2004). Public health education and practice using geographic information system technology. *Public Health Nursing*, *21*, 57–65.

Whitten, P., Doolittle, G., Mackert, M., & Rush, T. (2004). Telehospice: End-of-life care over the lines. *Nursing Management*, *34*, 36–39.

Zellner, W. L. (2006, November 29). *UPMC St. Margaret offers key lessons for community hospitals adopting electronic health records*. [Press release]. Pittsburgh, PA: University of Pittsburgh Health Sciences News Bureau.