VA Nurses' Opinions Regarding the Use of Evidence-Based Practice

Andrea R. Jennings-Sanders, DrPH, RN; Lucy A. Jury, MSN, CNP; and Christopher J. Burant, PhD

The use of evidence-based practice (EBP) is essential for clinicians to provide the best possible care to their patients. These authors examined VA nurses' opinions of EBP and whether they felt confident obtaining research evidence and incorporating it into their practice.

he VHA is the largest organized health care system in the United States. Because of its many complexities and challenges, the implementation of evidence-based practice (EBP) is paramount to achieving optimal outcomes for all patients who utilize the VA's health care services. Specifically, EBP is vital to the quality and excellence in nursing services. On a regular basis, nurses are responsible for making important decisions that will impact patient outcomes; thus EBP has become increasingly important and provides a framework for clinical problem solving. According to the American Nurses Association, EBP is regarded internationally as the gold standard for delivering the highest quality of care and also characterizes nursing excellence in Magnet organizations.1

EBP has various definitions in the literature, including (1) a systematic approach to problem solving for all health care providers, characterized by the use of the best evidence currently available for clinical decision

Dr. Jennings-Sanders and Ms. Jury are nurse researchers, and Dr. Burant is a senior statistical analyst, all in the Geriatric Research, Education and Clinical Center at the Louis Stokes Cleveland VA Medical Center in Ohio. In addition, Dr. Burant is an assistant professor in the School of Nursing at Case Western Reserve University in Cleveland, Ohio.

making, to provide the best possible care to patients,² and (2) a problem-solving approach to clinical decision making that integrates scientific evidence with experiential evidence.³ Regardless of the exact wording, all definitions emphasize the use of EBP to attain positive outcomes for patients and their families.

For nurses, there is a continuous struggle to utilize EBP because of demanding patient loads and the plethora of clinical literature available. There is a real disconnect between accessing nursing research evidence and then translating it into nursing practice. According to Shirey, only 15% of the nursing workforce routinely practices within an evidence-based framework.⁴

It is essential for nurses to be knowledgeable of and follow the key steps of EBP, which include (1) asking a relevant clinical question, (2) collecting the best and most relevant evidence to answer the clinical question, (3) critically appraising the evidence for its validity, (4) integrating the evidence within one's clinical practice, and (5) evaluating the changes that result from the EBP.5 In 2007, Vratney and Shriver described a conceptual model that identified how to overcome obstacles to EBP implementation.6 The results from their study indicated that clinician expertise, nursing leadership, enthusiasm, mentorship, clinical inquiry, and reflective practice are essential for a successful EBP environment.

Multiple studies have illustrated how EBP can improve the quality of patient care; however, nurses' opinions about the use of EBP could be a precursor to its success in health care settings.^{7,8} The purpose of this study, therefore, was to assess VA nurses' opinions about the use of EBP in nursing services.

BACKGROUND

There are few studies that have reported the opinions of nurses (whether practicing in the VA or elsewhere) regarding EBP. One study examined nurses' perceptions of their access to the tools with which to obtain research evidence and whether they have the skills to do so.9 Findings from the study indicated that nurses frequently feel more comfortable searching the Internet for information rather than using bibliographic databases, such as the Cumulative Index to Nursing and Allied Health Literature. Furthermore, the surveyed nurses did not value research and received little or no training on the use of the tools that would assist them in finding evidence on which to base their practice. Similarly, one study by Bostrom and Suter found that only 21% of 1,200 nurses had implemented a new research

finding into their practice in the previous 6 months.¹⁰

Findings from another study exploring nurses' conceptions of EBP revealed that nurses acknowledged that they did not read research papers but were aware that they used research based on clinical evidence in their practice.3,11 A study looking at traditions, rituals, and standards in the realm of evidence-based nursing care reported that routines and rituals are driving care more often than clinical judgment. Complexities, such as nurses' fears of medical-legal repercussions and sense of security, limit possibilities for change as it relates to EBP^{12}

Another study, that explored the attitudes and knowledge of primary care providers regarding EBP, stated that the major perceived barriers to utilizing EBP were time and establishing an agreement among primary care providers of when to implement EBP. On the other hand, the most important facilitators were protected time, financial and staff resources, and training. The participants of the study suggested a multiprofessional team working together to access the evidence and then to incorporate it into their practice as a potential support mechanism for EBP.13

METHODS

For this study, we used the Clinical Effectiveness and Evidence-Based Practice Questionnaire (EBPQ), which was administered by the nurse researcher in person to nurses at 1 VA medical center (VAMC) over a 2-month period. The questionnaire took approximately 10 minutes to complete. The nurse researcher explained the purpose of the questionnaire to the nurses and obtained their verbal consent to participate in this study, which was approved by the Institutional Review Board at the VAMC.

Questionnaire

The EBPQ was developed by Upton and Upton in 2006. It was designed to gather information and the opinions of VA nurses on the use of EBP.¹⁴ During the preliminary stages of developing the EBPQ, an initial item pool of statements was piloted with a group of 33 senior health care professionals to assess internal consistency. Furthermore, the instrument has been used and validated by 500 non-VA nurses in hospitals and community-based centers.

No one refused to participate in the study, thus the nonresponse rate was zero. Convenience sampling was utilized in this study. The nurses worked on a variety of units and during a number of different shifts. The nurses also had a wide range of nursing experience and educational levels (Table 1).

Because the number of nurses with a master of science in nursing (MSN) degree was so small in this sample, they were included in the bachelor of science in nursing (BSN)

Complexities, such as nurses' fears of medical—legal repercussions and sense of security, limit possibilities for change as it relates to evidence-based practice.

Each of the 24 items on the questionnaire uses a Likert scale, ranging from 1 to 7 points, for a possible total of 168. A higher score on the Likert scale indicates a more positive attitude toward EBP, or a greater knowledge and use of EBP. Internal consistency of the entire questionnaire was reported with a Cronbach's α of 0.87. Internal reliability for the practice of EBP subscale was reported at α 0.85, for the attitude toward EBP subscale at α 0.79, and for the knowledge/skills associated with EBP subscale at α 0.91.14 Construct validity was reported with correlation coefficients ranging from 0.3 to 0.4 (P < .001), indicating a positive but moderate relationship between questionnaire scores and an independent measure of awareness of EBP.14

Sample

The study sample consisted of 110 nurses working at a single VAMC.

group for analysis purposes. This sample is representative of VA nurses in terms of educational levels: According to the VA Office of Nursing Services Report, in 2009, 10% of VA nurses had a nursing diploma, 30% had an associate degree, 49% had a BSN, 7% had an MSN, and 4% had a doctorate degree. 15

RESULTS

Means and SDs for each question on the EBPQ are illustrated in Table 2. The total mean EBPQ score was 109.4. The mean scores for each question ranged from 3.98 to 4.85. Nurses rated themselves slightly below average in the following areas: my workload is too great for me to keep up-to-date with all the new evidence (mean, 3.98); converting your information needs into a research question (mean, 4.13); research skills (mean, 4.26); information technology skills (mean, 4.33); awareness of

major information types and sources (mean, 4.41); how often you critically appraised, against set criteria, any literature you have discovered (mean, 4.44); ability to critically analyze evidence against set standards (mean, 4.47); and ability to determine how valid the material is (mean, 4.46).

Correlation analysis revealed that nurses with a BSN had significantly higher EBPQ scores (P = .001) than those with other degrees/diploma (Table 3). Other correlation analyses found no significant differences for years of nursing experience (P = .119) or caring for patients 65 years or older (P = .419) in relation to the total EBPQ score. ANOVA analysis revealed no significant differences detected for the type of shift (P = .502) or the type of unit (P = .452) in relation to the total EBPQ score.

Limitations

A larger sample size of VA nurses from other hospitals would have provided a broader understanding of nurses' opinions concerning the use of EBP. Nonetheless, the data from the study provides for a continuing discussion on how to better educate VA nurses about EBP to improve the quality of patient care.

DISCUSSION

The total mean score on the EBPQ (109.4 of a possible 168) indicates there is a need for improvement regarding the attitude toward and use of EBP among the VA nurses in this study. Assessing nurses' opinions of EBP is crucial because it predicts their readiness to obtain research evidence to substantiate their clinical practice. It is important for quality improvement departments and nursing management professionals in health care organizations to incorporate EBP initiatives to improve patient outcomes and quality of care.

Table 1. Demographic characteristics of study participants (n = 110)					
Characteristic	No. of participants (%)				
Years of nursing experience, mean	11.2				
Type of degree Diploma Associate BSN MSN	10 (9.1) 41 (37.3) 54 (49.1) 5 (4.5)				
Type of unit SICU/MICU Medical/surgical Long-term care	13 (11.8) 52 (47.3) 45 (40.9)				
Care for patients 65 years or older Yes No Type of shift	97 (88.2) 13 (11.8)				

BSN = bachelor of science in nursing; MICU = medical intensive care unit; MSN = master of science in nursing; SICU = surgical intensive care unit.

Studies in the literature have stressed the significance of how adhering to EBP guidelines can lead to positive patient outcomes. One such study reported the value of EBP guidelines on improving the detection of depression in older adults with dementia.16 The Detection of Depression in Older Adults with Dementia Guideline was written to provide information and guidance to health care professionals in assessing depression. Outcome indicators, such as increased percentage of patients receiving mental health referrals for depression, increased recognition of depression symptoms in patients with dementia, and improved treatment of depression, are expected to improve with consistent use of this evidencebased guideline.

Day Evening

Night

Another study addressed how to decrease maternal depression in pe-

diatric settings by developing an evidence-based management approach. By adhering to this approach, clinicians can successfully identify postpartum women with depression, monitor symptoms and treatment adherence, and clearly communicate results to each patient's health care provider.¹⁷

82 (74.5)

12 (10.9)

16 (14.5)

Results from our study illustrated that nurses rated their skills in the following areas as slightly below average on a scale of 1 to 7: research skills, information technology skills, and workload issues. Similarly, another study identified nurses as having a low comfort level with library and search techniques, lack of time to search for the best evidence, challenges with understanding and interpreting research reports, limited exposure to research strategies, and competing priorities.¹⁸

Table 2. Evidence-Based Practice Questionnaire and study results

 Considering your practice in relation to an individual patient's care over the past year, how often have you done the following in response to a gap in your knowledge? (Please ✔ or mark X.) 						
	Mean	SD				
Formulated a clearly answerable question as the beginning of the process toward filling this gap.						
Never □1 □2 □3 □4 □5 □6 □7 Frequently	4.65	1.57				
Tracked down the relevant evidence once you have formulated the question.						
Never □1 □2 □3 □4 □5 □6 □7 Frequently	4.69	1.69				
Critically appraised, against set criteria, any literature you have discovered.						
Never □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 Frequently	4.76	1.60				
Integrated the evidence you have found with your expertise.						
Never □1 □2 □3 □4 □5 □6 □7 Frequently	4.76	1.59				
Evaluated the outcomes of your practice.						
Never □1 □2 □3 □4 □5 □6 □7 Frequently	4.69	1.76				
Shared this information with colleagues.						
Never □1 □2 □3 □4 □5 □6 □7 Frequently	4.77	1.75				
2. Please indicate (by ✓ or X) where on the scale you would place yourself for each of the following pairs of statements:						
or statements.		virig pairs				
My workload is too great for me to keep 1 2 3 4 5 6 7 New evidence is so	Mean	SD				
My workload is too	Mean 3.98					
My workload is too great for me to keep 1 2 3 4 5 6 7 up-to-date with all the new evidence. I resent having my 1 2 3 4 5 6 7 Invelcome questions on my		SD				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice 1 2 3 4 5 6 7 important that I make the time in my work schedule. New evidence is so important that I make the time in my work schedule.	3.98 Mean	SD 1.96 ————————————————————————————————————				
My workload is too great for me to keep 1 2 3 4 5 6 7 up-to-date with all the new evidence. I resent having my 1 2 3 4 5 6 7 I welcome questions on my	3.98	SD 1.96				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. 1 2 3 4 5 6 7 In the properties of the proper	3.98 Mean	SD 1.96 ————————————————————————————————————				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. 1 2 3 4 5 6 7 important that I make the time in my work schedule. I welcome questions on my practice.	3.98 Mean 4.63	SD 1.96 SD 1.86				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. 1 2 3 4 5 6 7 I welcome questions on my practice. Evidence-based practice is a waste of time. 1 2 3 4 5 6 7 Evidence-based practice is fundamental to professional practice.	3.98 Mean 4.63 Mean 4.71	SD 1.96 SD 1.86 SD 1.95				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. 1 2 3 4 5 6 7 I welcome questions on my practice. I stick to tried and trusted methods rather	3.98 Mean 4.63 Mean	SD 1.96 SD 1.86 SD				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. 1 2 3 4 5 6 7 I welcome questions on my practice. Evidence-based practice is a waste of time. 1 2 3 4 5 6 7 Evidence-based practice is fundamental to professional practice. I stick to tried and trusted methods rather	3.98 Mean 4.63 Mean 4.71	SD 1.96 SD 1.86 SD 1.95				
My workload is too great for me to keep up-to-date with all the new evidence. I resent having my clinical practice questioned. I 2 3 4 5 6 7 important that I make the time in my work schedule. I welcome questions on my practice. I welcome questions on my practice. Evidence-based practice is a waste of time. I 2 3 4 5 6 7 important that I make the time in my work schedule. I welcome questions on my practice. I stick to tried and trusted methods rather than changing anything	3.98 Mean 4.63 Mean 4.71	SD 1.96 SD 1.86 SD 1.95				

Continued on page 36

VA NURSES' OPINIONS

Continued from page 34

				continu					
On a scale of 1 to 7 (with 7 b	eing be Poor	st) how	would yo	ou rate y	our:		Best	Mean	SD
	P001						Desi	ivieari	30
Research skills	1	2	3	4	5	6	7	4.26	1.45
Information technology skills	1	2	3	4	5	6	7	4.33	1.42
Monitoring and reviewing of practice skills	1	2	3	4	5	6	7	4.57	1.3
Converting your information needs into a research question	1	2	3	4	5	6	7	4.57	1.37
Awareness of major information types and sources	1	2	3	4	5	6	7	4.41	1.36
Ability to identify gaps in your professional practice	1	2	3	4	5	6	7	4.62	1.45
Knowledge of how to	ı	۷	3	4	3	U	,	4.02	1.40
retrieve evidence	1	2	3	4	5	6	7	4.60	1.40
Ability to critically analyze evidence against set standards	1	2	3	4	5	6	7	4.47	1.43
Ability to determine how valid the material is	1	2	3	4	5	6	7	4.46	1.39
Ability to determine how useful (clinically applicable) the material is	1	2	3	4	5	6	7	4.58	1.41
Ability to apply information to individual cases	1	2	3	4	5	6	7	4.65	1.42
Sharing of ideas and information with colleagues	1	2	3	4	5	6	7	4.85	1.47
Dissemination of new ideas about care to colleagues	1	2	3	4	5	6	7	4.67	1.47
Ability to review your own practice	1	2	3	4	5	6	7	4.75	1.49

In this study, correlation analysis revealed that nurses with a BSN had significantly higher EBPQ scores, compared with those with other levels of education. This finding may be due to the fact that research is incorporated more throughout the educational courses in the BSN program vs those in associate or diploma programs. In fact, a research course is a requirement in BSN programs. Konno and colleagues reported that higher educational levels seem to be associated with better critical-thinking abilities, which are key when a clinician is engaging in EBP.¹⁹ Furthermore, utilization of an EBP framework has been shown to improve diagnostic accuracy when interpreting client data. Nursing education at all levels, therefore, should incorporate an EBP framework throughout the curriculum in order to better prepare nursing students in the area of EBP.

With some creativity, evidence-based research assignments and evidence-based nursing curriculum modules can be threaded throughout nursing programs. One study explained how the use of laptop computers in an undergraduate nursing research course better equipped students by giving them hands-on experience with the process and introducing them to online evidence-based nursing resources.²⁰

Another way of introducing EBP to nursing students is to develop an undergraduate research fellows program, in which, each student works with a mentor. The mentors' responsibility is to help the students understand how to develop a research team, how to retrieve accurate data from the literature, how to write abstracts for professional poster presentations, and how to learn about ethical issues surrounding the research.²¹

Table 3: Pearson correlation and ANOVA analysis for selected variables						
Variable	Pearson correlation	Significance				
Years of nursing experience	.150	.119				
Type of degree	.301	.001ª				
Care for patients 65 years or older	078	.419				
Variable	ANOVA (F)	Significance				
Type of unit	.799	.452				
Type of shift	.694	.502				
^a Correlation is significant at < .01 (2-tailed).						

EBP in the VA: Current efforts

The VA Office of Nursing Services outlined several EBP initiatives in their 2009 annual report.15 One initiative includes implementing a toolkit to address the basic elements of EBP, to provide an organizational infrastructure and support for EBP, and to support teaching EBP to nurses. Other initiatives include creating an EBP business case template, that each facility can individualize, to justify evidence-based nursing programs by highlighting patient outcomes and cost savings, and identifying nursing measures that impact patient outcomes.

Currently, dissemination and implementation of evidence-based psychological treatment (EBPT) occurs throughout the VHA.²² EBPT training for clinicians exists in the areas of cognitive-processing therapy and prolonged exposure therapy for the treatment of posttraumatic stress disorder, depression, and anxiety. VHA centers are required to have clinicians trained in EBPT; however, the clinical use of EBPT is not mandated. The decision to select a particular treatment is the sole discretion of the clinician and patient.

The VA also has evaluated the contributions EBP has made to the development of health information technology (HIT), as part of the Health Services Research and Development Service's Quality Enhancement Research Initiative (QUERI).23 Documentation analysis of implementation project abstracts, along with interviewing of key informants from each of the 9 QUERI evidencebased clinical initiatives, was conducted. Results highlighted that research should generate clinical evidence that is relevant to the needs of patients served by the federal health care system; researchers need to systematically study the process of evidence implementation itself; and activities that include clinicians, middle management, and upper management are needed to integrate EBP across the VHA.

Translating Initiatives for Depression into Effective Solutions (TIDES) is a VA system-wide initiative to promote evidence-based collaborative care by utilizing marketing techniques to promote positive behavioral changes.²⁴ The TIDES marketing approach focuses on a sequential model of behavioral change and audience

segmentation involving VISNs, regional leadership, facility managers, frontline providers, and veterans. Data has illustrated that social marketing is a promising approach for promoting implementation of EBP in such a vast system as the VHA.

The VA also has created the Veterans Evidence-Based Research Dissemination Implementation Center—an established entity in which clinical, managerial, and policy decisions are derived from research findings. The multidisciplinary teams in the center address systematic implementation of evidence in clinical practice throughout the VHA.²⁵

Overall, the VHA needs to continue to foster the current efforts and develop efficient modes to systematically implement EBP throughout the health care system. Efforts to disseminate knowledge of current EBP initiatives and resources in the VHA are crucial for clinicians to improve the quality of care to veterans by incorporating EBP into their practice.

CONCLUSION

EBP is essential in the VHA because of the demand for high-quality health care. Acknowledging nurses' knowledge deficits and misconceptions of EBP is one of the most crucial initial steps that must occur in the process of EBP implementation. A strong emphasis on EBP also must be threaded throughout the curriculum in undergraduate and graduate nursing programs. Finding creative ways of introducing EBP to VA nurses in all settings and of all educational backgrounds is key to the success of achieving positive patient outcomes

and improving overall quality of care to our veterans

Author disclosures

The authors report no actual or potential conflicts of interest with regard to this article.

Disclaimer

The opinions expressed herein are those of the authors and do not necessarily reflect those of Federal Practitioner, Quadrant HealthCom Inc., the U.S. Government, or any of its agencies. This article may discuss unlabeled or investigational use of certain drugs. Please review complete prescribing information for specific drugs or drug combinations—including indications, contraindications, warnings, and adverse effects—before administering pharmacologic therapy to patients.

REFERENCES

- Evidence based practice: Creating a culture of inquiry. American Nurses Credentialing Center Web site. http://www.nursecredentialing.org/Magnet /MagnetEvents/Magnet-Events-List/Recognition Workshops/EBP.aspx. Accessed March 24, 2011.
- Newhouse RP, Dearholt SL, Poe SS, Pugh LC, White KM. Johns Hopkins Nursing: Evidence-Based Practice Model and Guidelines. Indianapolis, IN: Sigma Theta Tau International; 2007.
- Pravikoff DS, Tanner AB, Pierce ST. Readiness of U.S. nurses for evidence-based practice. Am J Nurs. 2005;105(9):40-51.
- Shirey MR. Evidence-based practice: How nurse leaders can facilitate innovation. Nurs Adm Q. 2006;30(3):252-265.
- Levin RF, Lunney M, Krainovich-Miller B. Improving diagnostic accuracy using an evidence-based nursing model. *Int J Nurs Terminol Classif.* 2004;15(4):114-122.
- Vratny A, Shriver D. A conceptual model for growing evidence-based practice. Nurs Adm Q. 2007;31(2):162-170.
- O'Donnell CA. Attitudes and knowledge of primary care professionals towards evidence-based practice: A postal survey. J Eval Clin Pract. 2004;10(2):197-205.
- Melnyk B, Fineout-Overholt E, Hockenberry M, et al. Improving healthcare outcomes for high risk children and teens: Formation of the National Consortium for Pediatric and Adolescent Evidence-

- Based Practice. Pediatr Nurs. 2007;33(6):525-529.
- Pearcey PA. Achieving research-based nursing practice. J Adv Nurs. 1995;22(1):23-39.
- Bostrom J, Suter WN. Research utilization: Making the link to practice. J Nurs Staff Dev. 1993;9(1):28-34.
- Olade RA. Strategic collaborative model for evidence-based nursing practice. Worldviews Evid Based Nurs. 2004;1(1):60-68.
- 12. Zeitz K, McCutcheon H. Tradition, rituals and standards, in a realm of evidenced based nursing care. *Contemp Nurse*. 2005;18(3):300-308.
- Brown C, Wickline A, Glaser D. Nursing practice, knowledge, attitudes and perceived barriers to evidence-based practice at an academic medical center. J Adv Nurs. 2009;65(2):371-381.
- Upton D, Upton P. Development of an evidencebased practice questionnaire for nurses. J Adv Nurs. 2006;53(4):454-458.
- US Department of Veterans Affairs, Office of Nursing Services. Annual Report 2009.VA Nursing: Connecting all of the pieces of the puzzle to transform care for veterans. http://www.va.gov /NURSING/docs/OfficeofNursingServices-ONS _Annual_Report_2009-WEB.pdf.Accessed April 12, 2011.
- Brown EL, Raue P, Halpert KD, Adams S, Titler MG. Detection of depression in older adults with dementia. J Gerontol Nurs. 2009;35(2):11-15.
- 17. Feinberg E, Smith MV, Morales MJ, Claussen AH, Smith DC, Perou R. Improving women's health during internatal periods: Developing an evidenced-based approach to addressing maternal depression in pediatric settings. J Womens Health. 2006;15(6):692-703.
- Leasure AR, Stirlen J, Thompson C. Barriers and facilitators to the use of evidence-based best practices. Dimens Crit Care Nurs. 2008;27(2):74-82.
- Konno R, Otake Y, Emoto A. A study on accuracy of nursing diagnosis: Comparison of pre-educational and post-educational groups. Paper presented at: 6th Annual Conference of the Japan Society of Nursing Diagnosis; June 17-18, 2000; Shiga Prefecture, Japan.
- Rush KL. Connecting practice to evidence using laptop computers in the classroom. Comput Inform Nurs. 2008;26(4):190-196.
- Vessey JA, DeMarco RF. The undergraduate research fellows program: A unique model to promote engagement in research. J Prof Nurs. 2008;24(6):358-363.
- McHugh RK, Barlow DH. The dissemination and implementation of evidence-based psychological treatments. A review of current efforts. Am Psychol. 2010:65(2):73-84.
- Hynes DM, Weddle T, Smith N, Atkins D, Francis J. Use of health information technology to advance evidence-based care: Lessons from the VA QUERI program. J Gen Intern Med. 2010;25(suppl 1):44-49.
- Luck J, Hagigi F, Parker LE, Yano EM, Rubenstein LV, Kirchner JE. A social marketing approach to implementing evidence-based practice in VHA QUERI: The TIDES depression collaborative care model. *Implement Sci.* 2009;4:64.
- VERDICT home. Veterans Evidence Based Research Dissemination Implementation Center Web site. http://www.verdict.research.va.gov. Accessed March 24, 2011.