



DEVELOPING COMPETENCE FOR NURSES AND SOCIAL WORKERS

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INFORMAL CAREGIVERS

primarily family members—are the foundation of rehabilitation, chronic care, and long-term support for older persons. The growing population of older persons and the changing health care delivery system (for example, shortened hospital stays) demand more of family caregivers and increase the toll on their health (Pinquart & Sorensen, 2007). To help them cope with these demands, nurses and social workers, who treat diverse older populations, must have cultural competence to enable them to practice effectively with caregivers (Pinquart & Sorensen, 2005).

Along with increasing the emphasis on evidence-based practice, health care education is moving to a competence-based approach with clearly measured outcomes (Carraccio et al., 2002; National Center for Higher Education Management Systems, 2000). In this article, literature from the past decade, especially systematic reviews of evidence-based-practice dissemination and training, is used to inform nurse and social worker competence in supporting family caregivers. The reviews were from the medical education literature as well as from nursing and social work education, and some studies involved students and residents, not only postgraduate practitioners.

Identifying Competence

Across disciplines, *competence* refers to being able to demonstrate that the knowledge, values, and skills learned can be integrated into practice (Carraccio et al., 2002). The Council for Higher Education Accreditation, which oversees standards for 76 professions (including nursing and social

work), has adopted a competence model for accreditation (National Center of Higher Education Management Systems, 2000). Competence-based education and evaluation consist of two components: *identification* in clear, measurable terms, with indicators for levels of performance, of the specific skills required to practice a profession; and *evaluation* of skill acquisition through measurable criteria (Hackett, 2001).

Hartford Competencies

The John A. Hartford Foundation has supported competence identification in nurses and social workers who provide care to older adults. The process of identifying competence involved extensive literature review and consensus building for each profession. The result is referred to in this article as the *Hartford geriatric competencies*. Table 1 presents the competencies that specifically mention families.

The American Association of Colleges of Nursing and the John A. Hartford Foundation Institute for Geriatric Nursing (2000) identified 30 competencies and curricular guidelines for baccalaureate nursing programs (available online at www.aacn.nche.edu/Education/pdf/Gercomp.pdf). The Social Work Leadership Institute and the Council on Social Work Education Gero-Ed Center (funded by the John A. Hartford Foundation) identified 40 competencies for a master's degree in social work (Damron-Rodriguez, 2006), which is required for licensure.

Dimensions of Competence

The Geriatric Social Work Competency Scale II measures five levels of competence. "This skill is becoming more integrated in my practice" connotes a moderate level of competence. The highest level is "I complete this skill with sufficient mastery to teach others" (Damron-Rodriguez, 2006). Postgraduate training is needed to introduce these competencies and improve practitioners' levels of skill.

Competence-based education and evaluation also recognize levels of generality (Harden et al., 1999), with procedural or task skills at one end of the continuum and meta-competencies at the other. Procedural skills, such as taking vital signs and administering the Mini-Mental State Examination, are the most straightforward to measure (Long, 2000). Competencies needed for working with family caregivers are at a higher level of generality and require drawing on diverse sets of knowledge and skills (Harden et al.). In Table 1, the domain in which each competence is classified, such as communication or assessment, could be considered a metacompetence.

Competence in interdisciplinary teamwork is central to geriatrics (Ferraro, 2007). One systematic review of interdisciplinary learning for health care professionals reported that it resulted in positive outcomes in knowledge, skills, attitudes, and beliefs (Cooper et al., 2001). Another systematic review found that none of the research evaluated met the methodologic rigor for providing conclusive evidence (Zwarenstein et al., 2001). Nonetheless, shared learning among various disciplines may be helpful in competence-based education that teaches family caregiver support (Horsburgh et al., 2001).

Adult Learning

Two approaches founded in principles of andragogy, or adult learning, are important for helping nurses and social workers develop competence in caregiver support.

The learner-centered approach shifts the responsibility of organizing, analyzing, and synthesizing information from the teacher to the learner (Brush & Saye, 2000). This approach recognizes that knowledge is built on what the learner already knows. Positive outcomes, including increased comprehension, result (Machemer & Crawford, 2007). The learner-centered approach also involves

TABLE 1. Hartford Geriatric Nursing and Social Work Competencies for Practicewith Families

Domain	Nursing Competencies*	Social Work Competencies
Diversity: clarification of attitudes and values	Recognize one's own and others' attitudes, values, and expectations about aging and their impact on care of older adults and their families. Appreciate the influence of attitudes, roles, language, culture, race, religion, gender, and lifestyle on how families and assistive personnel provide long-term care to older adults.	Respect diversity (for example, class, race, ethnicity, sex, and sexual orientation) among older adults, families, and professionals. Address the cultural, spiritual, and ethnic values and beliefs of older adults and families
Communication	Communicate effectively, respectfully, and compassionately with older adults and their families.	Establish rapport and maintain an effective working relationship with older adults and family members. Mediate situations with angry or hostile older adults or family members.
Assessment	Assess family knowledge of skills necessary to deliver care to older adults.	Assess caregivers' needs and level of stress.
Intervention planning and implementation	Analyze the effectiveness of community resources in assisting older adults and their families to retain personal goals, maximize function, maintain independence, and live in the least restrictive environment. Contrast the opportunities and constraints of supportive living arrangements on the function and independence of older adults and on their families. Assist older adults, families, and caregivers to understand and balance "everyday" autonomy and safety decisions.	Provide outreach to older adults and their families to ensure appropriate use of the service continuum. Identify the availability of resources and resource systems for older adults and their families. Provide social work case management to link older adults and their families to resources and services. Adapt organizational policy, procedures, and resources to facilitate provision of services to diverse older adults and their family caregivers.

(continued)

cooperative learning, in which a group of learners works on a project, leading to creative solutions and increasing social perspective by helping the members understand interactive factors (Johnson et al., 2000).

Problem-based learning is a related approach that structures the curricula around practice-related problems and is based on constructive, self-directed, collaborative, and contextual learning (Dolmans et al., 2001). Studies have demonstrated that problem-based learning stimulates a learner to restructure knowledge or reorganize what is already known based on new understanding of the subject and interest in the topic (Dolmans et al.; Ozuah et al., 2001). Students and faculty have been shown to be highly satisfied with problem-based learning, although studies differ on its superiority over conventional methods of learning (Mamede et al., 2006).

TABLE 1. Continued

Intervention planning and implementation (continued)		Assist caregivers to reduce their stress levels and maintain mental and physical health. Utilize group interventions with older adults and their families. Support persons and families dealing with end-of-life issues and bereavement. Apply skills in termination in work with older adults and their families.
Family education	Involve, educate, and, when appropriate, supervise family, friends, and assistive personnel in implementing best practices for older adults	Use educational strategies to provide older adults and their families with information for wellness and disease management.
Interdisciplinary teamwork	Recognize the benefits of interdisciplinary team participation in care of older adults.	Understand the perspective and values of social work in working effectively with other disciplines in geriatric interdisciplinary practice.

Note: Adapted with permission. American Association of Colleges of Nursing, The John A. Hartford Foundation Institute for Geriatric Nursing. (2000). *Older adults: Recommended baccalaureate competencies and curricular guidelines for geriatric nursing care*. Retrieved from <http://www.aacn.nche.edu/Education/pdf/Gercomp.pdf>. Damron-Rodriguez, J. A. (2006). Moving forward: Developing geriatric social work competencies. In B. Berkman (Ed.), *Handbook of social work in health and aging*. New York: Oxford University Press. pp. 1051–1068.

*Baccalaureate-level nurses.

Linking Evidence-Based Practice to Competence

Evidence from the research into interventions with caregivers can help to build professional competence. The “knowledge transfer framework” of the Agency for Healthcare Research and Quality describes three major stages that encompass all levels of evidence-based-practice adoption (Nieva et al., 2005). First, knowledge is created and distilled, then it is diffused and disseminated, and finally it is adopted, implemented, and institutionalized (Nieva et al.).

Strictly defined, evidence-based practice is a multistep process that begins with formulating an answerable question and progresses through practitioner evaluation of patient outcomes (Walker et al., 2007). To make research more applicable, practice guidelines and best practices are developed. Colyer suggested that a varied, less restrictive approach be used for translating research into nursing practice (Colyer & Kamath, 1999). Similarly, Webb (2001) suggested that the nuances and context of a situation be considered when applying research to social work practice. Relating evidence-based practice to competence for family caregiving relies on the translation of research into practice.

Levels of Evidence-Based-Practice Translation

Organizations and health care systems change at multiple levels: state and federal agencies (macro), program and practitioner groups (mezzo), and individual patients and professionals (micro).

On the macro level, the Joint Commission has set competence standards for working with older adults (Joint Commission, 2007). Two policies that have stimulated macro-level changes in caregiver practices are the Older Americans Act Amendments of 2000, which established the National Family Caregiver Support Program (2004), and the 1999 *Olmstead* decision of the Supreme Court (*Olmstead v. L. C.*), a landmark legal decision based on the Americans with Disabilities Act of 1990. These policies require professionals to work closely with family caregivers, but do not provide the evidence or indicate the competence needed for intervening effectively.

Mezzo-level attempts at educational and program change are often framed as continuous quality improvement efforts.

Micro-level approaches to increasing competence in caregiver support for an individual or group of professionals work best in supportive organizational environments.

Educational Strategies

Two systematic reviews (Belfield et al., 2001; Bero et al., 1998) identified effective and ineffective educational strategies used to translate evidence into practice and thereby develop competence.

- *Ineffective strategies* included the passive dissemination of information and didactic educational meetings or lectures. Used alone, these two interventions were found to prompt little or no change in professional practice (Bero et al., 1998; Franklin & Hopson, 2007).
- *Potentially effective strategies* resulted in variable, small to modest improvements. Educational strategies in this category included summaries of clinical performances such as audit and feedback (Jamtvedt et al., 2006), local consensus processes (such as discussions among practitioners about a problem and possible solutions), and interventions based on information from patients (Bero et al., 1998). Some of the potentially effective strategies identified were mezzo-level interventions based on continuous quality improvement methodologies (Doran & Sidani, 2007).
- *Consistently effective strategies* included educational outreach visits or “academic detailing,” manual or computerized reminders, and interactive educational forums that included practice and discussion (Bero et al., 1998; Franklin & Hopson, 2007; O’Brien et al., 2001, 2007). A Cochrane review of research on interventions for changing health professionals’ practice found that interactive workshops could result in moderately large effects (O’Brien et al., 2001).
- *Most effective* was a focused combination of strategies. The strength of a multifaceted approach was strongly supported (Bero et al., 1998; O’Brien et al., 2001; Rends et al., 2001). Efforts that included follow-up were more successful in altering practice (Jamtvedt et al., 2006; Rends et al.).

Systematic reviews point to the importance of recognizing the existence of environmental barriers to change (such as inadequate staffing) and the preparedness of clinicians to change. One study found that practitioner training needs to be flexible and that course goals must be explicitly related to applying the content rather than to the research itself (Greenhalgh & Douglas, 1999). A systematic review of 23 studies found that stand-alone teaching improved knowledge but not skills; however, knowledge, skills, attitudes, and behavior were positively affected by clinical practice interventions (Coomarasamy & Kahn, 2004).

Example With Nurses and Social Workers

The Improving Mood: Promoting Access to Collaborative Treatment (IMPACT) trial illustrates a successful multifaceted approach to evidence-based-practice postgraduate training. This randomized, multisite, controlled trial in older patients with depression demonstrated the advantages when interventions were provided by nurses and social workers who were trained as depression care specialists and worked collaboratively with primary care physicians (Unutzer et al., 2001, 2002).

The educational interventions for IMPACT consisted of multiple stages. After receiving a two-hour interactive overview, nurses and social workers participated in 10 hours of multidisciplinary, case-based training in small groups. This was followed by eight hours of training in problem solving with clinical cases and four hours of phone supervision by an expert.

After the trial was completed, the IMPACT model was translated into practice in the “real world” setting of a health maintenance organization. Although patients had fewer treatment contacts than in the controlled trial, they achieved similar improvements in depression (Grypma et al., 2006).

Assessment of Competence-Based Education

A lack of assessment strategies has been the major challenge in moving to competence-based education (Bogo et al., 2002; Carraccio et al., 2002; Watson et al., 2002). However, the desire for competence-based education of health care professionals has spurred the development of new ways to evaluate learning outcomes based on observable measures.

Self-efficacy—the belief that one is capable of performing specific skills in such a way that certain outcomes will be achieved (Bandura, 1997) is one way to measure competence. Self-efficacy has proven to be reliable and valid for predicting behavior and performance variation in multiple health disciplines (Holden et al., 2002). It also may serve as a way to assess needs when developing learning goals for postgraduate training. The Geriatric Social Work Competency Scale II is used in this way for graduate education (Damron-Rodriguez, 2006). Simulation assessment provides a clinical approximate to patient care. The methods of simulation include role-playing, use of standardized patients, computer and videotaped vignettes, and use of mannequins (Lane et al., 2001).

Objective Structured Clinical Examination (OSCE), which originated in medical education, has been introduced successfully in both nursing (Ryan et al., 2007) and social work (Baez, 2004). Developed originally for in-person assessments of actor “patients,” the OSCE has evolved in video format for geriatric-focused primary care medicine. The piloting of the Objective Structured Video Examination resulted in 90% commitment to statewide adoption by residency programs in Wisconsin (Simpson et al., 2006). The Geriatric Interdisciplinary Team Training Program funded by the John A. Hartford Foundation developed a similar scripted video assessment tool (Hyer et al., 2003).

Framework for Evidence-Based Competence Training

The strategies that promote postgraduate competence in evidence-based practice can be used to construct a framework for educating and training nurses and social workers who provide caregiver support (see Figure 1). The framework addresses four essential elements:

- the content, or the “what,” of training
- the approaches, or the “how,” for teaching
- the strategies, or the “where” and “when,” for educational interventions
- the assessment, or the “how well,” of learning outcomes

The first step is to determine the content of the education. The Hartford geriatric competencies for nurses and social workers that are related to families can be used to identify evidence-based caregiver interventions. In addition, this supplement discusses competencies to support caregivers that were identified by nurses and social workers attending a state-of-the-science symposium (see “Executive Summary: Nurses and Social Workers Supporting Family Caregivers”). It is imperative that all of the skills identified are synthesized into an enhanced yet brief, coherent, and clearly measurable set of professional caregiver competencies.

The next step is to concentrate on employing effective strategies. Multidisciplinary postgraduate training should use learner-centered and problem-based learning approaches such as interactive training forums, consultation and follow-up, and case-based assignments. To be effective for professionals with multiple roles working with diverse populations, the educational interventions must be directly relevant to nurses’ and social workers’ current knowledge and experience. Whenever possible, teaching, mentoring, and consultation should be provided within the care environment.

The final step in developing competence is the objective assessment of skills. The OSCE, which has been proven effective in medical education and is increasingly being used in educating nurses and social workers, could be the gold standard for measuring postgraduate education in caregiver support.

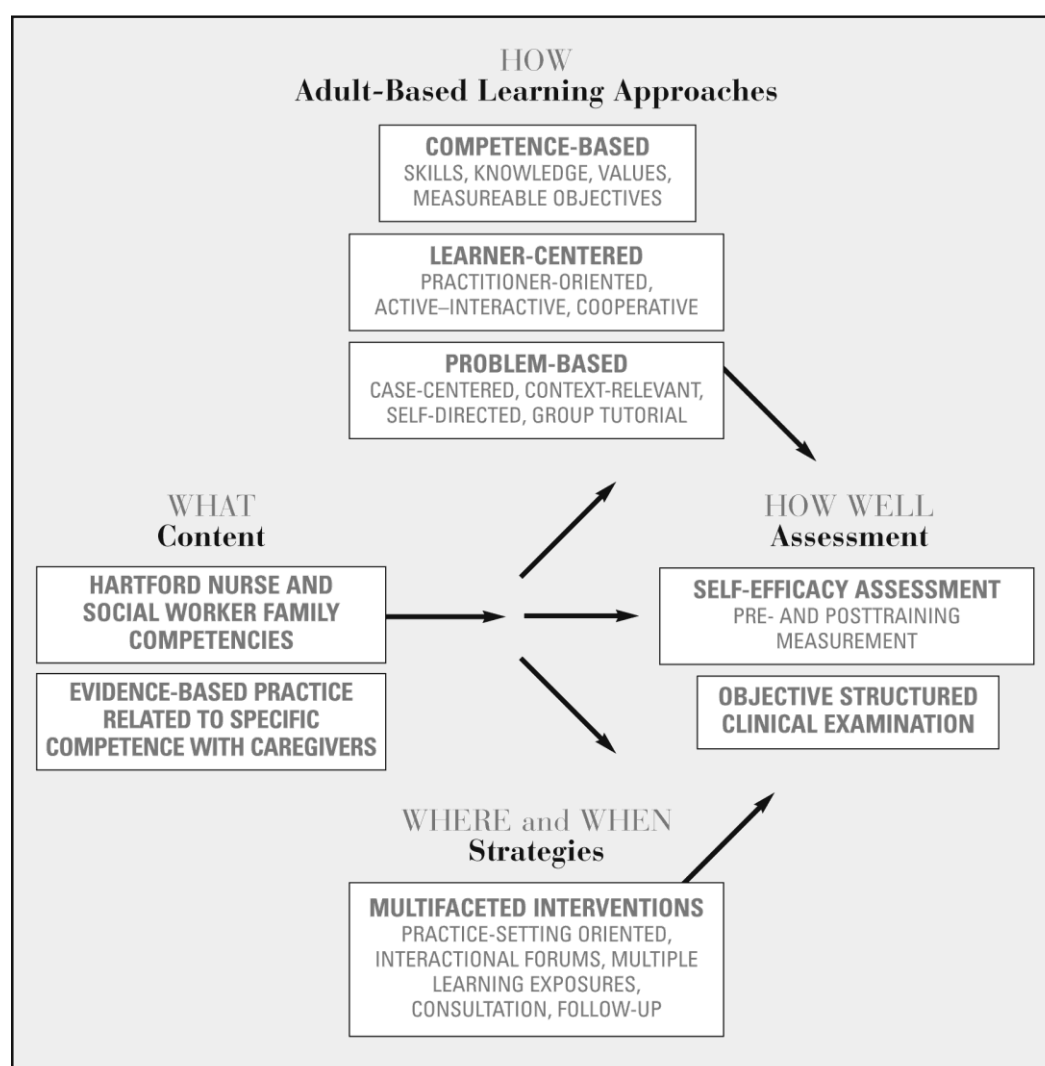


FIGURE 1. Framework for Evidence-Based Competence Training in Caregiver Support

References

1. American Association of Colleges of Nursing & John A. Hartford Foundation Institute for Geriatric Nursing. (2000). *Older adults: recommended baccalaureate competencies and curricular guidelines for geriatric nursing care*. Retrieved from <http://www.aacn.nche.edu/Education/pdf/Gercomp.pdf>
2. Baez, A. (2004). Development of an Objective Structured Clinical Examination (OSCE) for practicing substance abuse intervention competencies: An application in social work education. *Journal of Social Work Practice in the Addictions*, 5(3), 3–20.
3. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman. Belfield, C., et al. (2001). Measuring effectiveness for best evidence medical education: A discussion. *Medical Teacher*, 23(2), 164–170.
4. Bero, L. A., et al. (1998). Closing the gap between research and practice: An overview of systematic reviews of interventions to promote the implementation of research findings. The Cochrane Effective Practice and Organization of Care Review Group. *British Medical Journal*, 317(7156), 465–468.
5. Bogo, M., et al. (2002). Evaluating a measure of student field performance in direct service: Testing reliability and validity of explicit criteria. *Journal of Social Work Education*, 38(3), 385–401.
6. Brush, T., & Saye, J. (2000). Implementation and evaluation of a student-centered learning unit: A case study. *Educational Technology Research and Development*, 48(3), 79–100.

7. Carraccio, C., et al. (2002). Shifting paradigms: From Flexner to competencies. *Academic Medicine*, 77(5), 361–367.
8. Colyer, H., & Kamath, P. (1999). Evidence- based practice. A philosophical and political analysis: Some matters for consideration by professional practitioners. *Journal of Advanced Nursing*, 29(1), 188–193.
9. Coomarasamy, A., & Khan, K. S. (2004). What is the evidence that postgraduate teaching in evidence based medicine changes anything? A systematic review. *British Medical Journal*, 329(7473), 1017.
10. Cooper, H., et al. (2001). Developing an evidence base for interdisciplinary learning: A systematic review. *Journal of Advanced Nursing*, 35(2), 228–237.
11. Damron-Rodriguez, J. A. (2006). Moving forward: Developing geriatric social work competencies. In B. Berkman (Ed.), *Handbook of social work in health and aging* (pp. 1051–1068). New York: Oxford University Press.
12. Dolmans, D. H., et al. (2001). Solving problems with group work in problem-based learning: Hold on to the philosophy. *Medical Education*, 35(9), 884–889.
13. Doran, D. M., & Sidani, S. (2007). Outcomes- focused knowledge translation: A framework for knowledge translation and patient outcomes improvement. *Worldviews on Evidence-Based Nursing*, 4(1), 3–13.
14. Ferraro, K. F. (2007). Is gerontology interdisciplinary? *Journals of Gerontology, Series B, Psychological Sciences and Social Sciences*, 62(1), S2.
- Franklin, C., & Hopson, L. M. (2007). Facilitating the use of evidence-based practice in community organizations. *Journal of Social Work Education*, 43(3), 377–397.
15. Greenhalgh, T., & Douglas, H. R. (1999). Experiences of general practitioners and practice nurses of training courses in evidence-based health care: A qualitative study. *British Journal of General Practice*, 49(444), 536–540.
16. Grypma, L., et al. (2006). Taking an evidence-based model of depression care from research to practice: Making lemonade out of depression. *General Hospital Psychiatry*, 28(2), 101–107.
17. Hackett, S. (2001). Educating for competency and reflective practice: Fostering a conjoint approach in education and training. *Journal of Workplace Learning*, 13(3), 103–112.
18. Harden, R. M., et al. (1999). AMEE Guide No. 14: Outcome-based education: Part 5— from competency to meta-competency: A model for the specification of learning outcomes. *Medical Teacher*, 21(6), 546–552.
- Holden, G., et al. (2002). Outcomes of social work education: The case for social work self-efficacy. *Journal of Social Work Education*, 38(1), 115–133.
19. Horsburgh, M., et al. (2001). Multiprofessional learning: The attitudes of medical, nursing and pharmacy students to shared learning. *Medical Education*, 35(9), 876–883.
20. Hyer, K., et al. (2003). Using scripted video to assess interdisciplinary team effectiveness training outcomes. *Gerontology & Geriatrics Education*, 24(2), 75–91.
21. Jamtvedt, G., et al. (2006). Audit and feedback: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*, 2006(2), CD000259.
22. Johnson, D. W., et al. (2000). *Cooperative learning methods: A meta-analysis*. Minneapolis: University of Minnesota, Cooperative Learning Center. Retrieved from <http://www.cooperation.org/pages/cl-methods.html>
- Joint Commission. (2007). *Comprehensive accreditation manual for hospitals: The official handbook*. Oakbrook Terrace, IL: Author.
23. Lane, J. L., et al. (2001). Simulation in medical education: A review. *Simulation & Gaming*, 32(3), 297–314.
24. Long, D. M. (2000). Competency-based residency training: The next advance in graduate medical education. *Academic Medicine*, 75(12), 1178–1183.
25. Machemer, P. L., & Crawford, P. (2007). Student perceptions of active learning in a large cross-disciplinary classroom. *Active Learning in Higher Education*, 8(1), 9–30.
26. Mamede, S., et al. (2006). Innovations in problem-based learning: What can we learn from recent studies? *Advances in Health Sciences Education. Theory and Practice*, 11(4), 403–422.
27. National Center for Higher Education Management Systems. (2000). *The competency standards*

- project: Another approach to accreditation review*. Washington, DC: Council for Higher Education Accreditation. Retrieved from http://www.chea.org/pdf/Competency_Aug2000.pdf
28. National Family Caregiver Support Program. (2004). *About the NFCSP*. Administration on Aging, U.S. Department of Health and Human Services. Retrieved from http://www.aoa.gov/prof/aoaprof/caregiver/overview/overview_caregiver.asp.
 29. Nieva, V. F., et al. (2005). From science to service: A framework for the transfer of patient safety research into practice. In *Advances in patient safety: From research to implementation, volume 2* (AHRQ Publication No. 05-0021-2). Rockville, MD: Agency for Healthcare Research and Quality. Retrieved from <http://stinet.dtic.mil/cgi-bin/GetTRDoc?AD=ADA434249&Location=U2&doc=GetTRDoc.pdf>
 30. O'Brien, M. A., et al. (2001). Continuing education meetings and workshops: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*, 2001(2), CD003030.
 31. O'Brien, M. A., et al. (2007). Educational outreach visits: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*, 2007(4), CD000409. Olmstead v. L.C. (98-536) 527 U.S. 581 (1999).
 32. Ozuah, P. O., et al. (2001). Impact of problem-based learning on residents' self-directed learning. *Archives of Pediatric & Adolescent Medicine*, 155(6), 669–672.
 33. Pinquart, M., & Sorensen, S. (2005). Ethnic differences in stressors, resources, and psychological outcomes of family caregiving: A meta-analysis. *Gerontologist*, 45(1), 90–106.
 34. Pinquart, M., & Sorensen, S. (2007). Correlates of physical health of informal caregivers: A meta-analysis. *Journals of Gerontology, Series B, Psychological Sciences and Social Sciences*, 62(2), P126–P137.
 35. Renders, C. M., et al. (2001). Interventions to improve the management of diabetes mellitus in primary care, outpatient and community settings. *Cochrane Database of Systematic Reviews*, 2001(1), CD001481.
 36. Ryan, S., et al. (2007). Assessment of clinical nurse specialists in rheumatology using an OSCE. *Musculoskeletal Care*, 5(3), 119–129.
 37. Simpson, D., et al. (2006). Objective Structured Video Examinations (OSVEs) for geriatrics education. *Gerontology & Geriatrics Education*, 26(4), 7–24.
 38. Unutzer, J., et al. (2001). Improving primary care for depression in late life: The design of a multicenter randomized trial. *Medical Care*, 39(8), 785–799.
 39. Unutzer, J., et al. (2002). Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. *Journal of the American Medical Association*, 288(22), 2836–2845.
 40. Walker, J. S., et al. (2007). Implementing and sustaining evidence-based practice in social work. *Journal of Social Work Education*, 43(3), 361–373.
 41. Watson, R., et al. (2002). Clinical competence assessment in nursing: A systematic review of the literature. *Journal of Advanced Nursing*, 39(5), 421–431.
 42. Webb, S. A. (2001) Some considerations on the validity of evidence-based practice in social work. *British Journal of Social Work*, 31(1), 41–55. Zwarenstein, M., et al. (2001). Interprofessional education: Effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews*, 2001(1), CD002213.