INSTRUCTIONAL DESIGN AND ASSESSMENT

A Model for Partnering First-Year Student Pharmacists With Community-Based Older Adults

Beth A. Martin, PhD,^a Andrea L. Porter, PharmD,^a Lauren Shawl, BS,^a and
Susannah E. Motl Moroney, PharmD, MS^b

^aUniversity of Wisconsin-Madison School of Pharmacy, Madison, WI

^bMedical Affairs, Pfizer, Inc., Fitchburg, WI

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Objectives. To design, integrate, and assess the effectiveness of an introductory pharmacy practice experience intended to redefine first-year student pharmacists' views on aging and medication use through their work with a healthy, community-based older-adult population.

Design. All students (N = 273) completed live skills training in an 8-hour boot camp provided during orientation week. Teams were assigned an independently living senior partner, completed 10 visits and reflections, and documented health-related information using an electronic portfolio (e-portfolio).

Assessment. As determined by pre- and post-experience survey instruments, students gained significant confidence in 7 skill areas related to communication, medication interviews, involving the partner in health care, and applying patient-care skills. Student reflections, in-class presentations, and e-portfolios documented that personal attitudes toward seniors changed over time. Senior partners enjoyed mentoring and interacting with students and many experienced health improvements as a result of the interaction.

Conclusions. The model for partnering first-year student pharmacists with community-based older adults improved students' skills and fostered their connections to pharmacist roles and growth as person-centered providers.

Keywords: geriatrics, senior partner, senior mentor, introductory pharmacy practice experience

INTRODUCTION

Regardless of the career paths graduating student pharmacists choose, the majority will have patient-care responsibilities for older adults. In 2010, an estimated 12.8% of the US population was over 65 years of age, and this number continues to increase.¹ The Institute of Medicine (IOM) predicts that by 2030, 71 million adults, or 1 in every 5 Americans, will be 65 years of age or older.² Because of the specific healthcare challenges an aging population presents, the IOM and American Geriatric Society (AGS) recognize the need for more healthcare practitioners serving as geriatric specialists, including pharmacists.^{2,3} The AGS has called for a major revision in the way health-sciences curricula approach teaching geriatrics.⁴

Although geriatric elective courses are available in many pharmacy school curricula, students' attitudes toward the elderly are more positively impacted by direct contact with older adults than by classroom instructional modules.⁵⁻⁸ Prior to the introductory pharmacy practice

experience (IPPE) described here, the University of Wisconsin-Madison School of Pharmacy only offered 2 third-year geriatric elective courses which integrated required classroom coursework with seminar experiences. Thus, there was a need to incorporate more direct patient-care experiences with the older adult population into the student-pharmacist curriculum. By including these older-adult experiences in IPPEs, students would have the opportunity to identify and clarify their professional- and clinical-role development, especially as it related to caring for older adults earlier in their education.

Changes in the experiential-learning requirements of the Accreditation Council for Pharmacy Education (ACPE) 2007 guidelines provide another impetus for incorporating direct patient-care experiences with older adults into the curriculum.⁹ Prior to the changes in accreditation standards, the first-year IPPE course incorporated 30 hours of service learning over 1 academic year in a variety of settings, but not all were related to patient care. One of the service-learning experiences was at a large retirement community in the area. Because of the school's longstanding relationship with this facility, the previous service-learning experience was modified to provide more direct patient care opportunities in a longitudinal nature as a

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Corresponding Author: Beth A Martin, PhD, Assistant Professor (CHS), University of Wisconsin-Madison School of Pharmacy, Madison, WI 53705-2222. Tel: 608-265-4667. Fax: 608-265-5421. E-mail: bamartin@pharmacy.wisc.edu

component of the first-year IPPE courses. The goal of this curriculum-design study was to evaluate student-reported perspectives, skills, and self-efficacy following a longitudinal senior-partner experience through an academic year.

DESIGN

The IPPE 1 and 2 courses at the University of Wisconsin-Madison School of Pharmacy were re-designed and implemented in the fall of 2008. These courses were designed to meet the introductory pharmacy practice standards outlined by the ACPE, as well as pharmaceutical-care outcomes of the American Association of Colleges of Pharmacy Center for the Advancement of Pharmaceutical Education.^{9,10} They are 16-week, 1-credit, sequenced courses designed to introduce first-year student pharmacists to a variety of introductory pharmacy experiences. A hybrid course design was used to support the IPPE objectives, recognizing that most student learning would occur outside of the school of pharmacy building. The hybrid course included limited class discussions, various applied experiences, and an online course-management system and reflection area.

Classroom discussions included an 8-hour boot camp during orientation week. In the boot camp, all students received older-adult sensitivity training (ie, discussion of age-related stereotypes and effective communication techniques with seniors, practical strategies for taking medication histories, training and testing on measuring blood pressure and blood glucose, and training on exercises to reduce the risk of falls in elderly patients). Other 50-minute discussion topics over the course of the academic year included team dynamics, a group-share activity in which students read one of several articles related to older adults and shared highlights with their classmates; motivational interviewing techniques; saying goodbye to your partner and dealing with loss and grief; and a final discussion session in which student teams presented clinical pearls (key points they learned from their senior-partner experience) and shared how the experience would shape their future role as pharmacists.

The knowledge and skills taught in the first-year IPPE courses were also integrated into first-year social and administrative sciences courses, and later reinforced in second- and third-year pharmacy-practice courses. The senior-partner program is 1 of the longitudinal experiences the IPPE courses offer. A longitudinal experience was preferred so that student pharmacists would gain insights about various health-related changes and monitor changes in their senior partner over time. The senior-partner program assigned student pharmacists in teams of 3 to a senior residing in a local retirement community. To be

a senior partner, the older adult had to have been a past participant in the retirement community's Active Care program, an 8-week health and wellness program that promotes physical activity and successful aging strategies through fitness training, health-risk assessments, and presentations by guest speakers. The partnership was designed to be an Active Care continuum, with student pharmacists providing the discussion, monitoring, and motivation that would benefit their partner over the long term.

The IPPE 1 and 2 course objectives related to the longitudinal interactions between student pharmacists and senior partners include developing and enhancing communication skills; discovering and reflecting on the patient's perspectives on health, social, economic, and psychological needs; fostering a sense of empathy; using effective interpersonal and intergroup behaviors by collaborating with fellow student pharmacists; and displaying professional attitudes, values, and habits. Student pharmacists were expected to gain a better understanding of their respective senior partners' perspectives on health, clinicians' roles, and issues related to successful aging.

To prepare first-year pharmacy students to work with older adults requires a course philosophy that emphasizes caring rather than curing, as these student pharmacists do not have the clinical training or expertise to provide specific medication recommendations or disease-management advice. Wisconsin licensure laws allow only those students who have successfully completed their second year of pharmacy school to assume intern responsibilities and scope of practice. First-year students did, however, have the wherewithal to help their senior partners clarify their health-related questions and goals, support them in their motivation to stay active and healthy, and provide a sense of urgency when a medical condition requires attention. Consultation was always available from the retirement site's pharmacists and the course faculty members.

Students gained experience working as part of a healthcare team. Student teams made 10 one-hour visits to their senior partner over the course of the academic year. During early visits, students had structured activities to complete, including blood pressure and blood glucose measurements, comprehensive medication histories, and exercise and nutrition assessments. Student teams learned how their senior partners functioned on a daily basis and how to assess their health, medication use, lifestyle, and social and physical environment. Students learned how to discuss and address the 4 pillars of successful aging adopted by the retirement community, which included fall prevention, adequate nutrition, socialization, and medication management. Learning opportunities for student pharmacists with their partners included enhancing communication

skills through interviews and discussions, conducting and maintaining medication and health histories, and monitoring blood pressure and blood glucose measurements. The senior-partner program culminated with a reception at the end of the academic year at which certificates were presented to each partner. This special event allowed faculty members, students, and partners an opportunity to say thank you and goodbye.

Student teams created an e-portfolio documenting their experiences with their partner. All senior-partner portfolios were HIPAA-compliant and included sections on demographics, lifestyle, family/social history, medical/medication history, senior-partner views on the healthcare system, and a planning area. Teams updated their portfolios after every visit, which provided opportunities for them to observe objective changes in their respective senior partners over time and ensured continuity of care using the medication, nutrition, and wellness profiles they had created.

After each visit, students used the online course-management system to answer group reflective questions (Appendix 1) specific to each partner visit. Each group member responded to the reflective questions but all group members were allowed access to other group members' responses. Some reflective questions required students to respond to others' comments. The questions integrated course discussion topics and application of those principles to their senior partner visits. The primary themes included professionalism (ie, what is 1 professional attribute you would like to work on), team dynamics (ie, identify each team member's strengths and areas needing improvement), motivational interviewing (ie, which techniques were or could have been applied and were they effective), and partner engagement (ie, identify what is important to your partner, a health-related question you would like to ask, and/or your partner's perspective on the experience). An additional individual reflection (Appendix 2), which was completed using an online quiz format, assessed how well the team functioned for that particular visit. Students noted how effectively they worked together and indicated how many were prepared for and actively participated in their group work. Students also reflected on what they contributed to that particular team experience. This confidential quiz, which was intended to allow students to report any dysfunctions within their group, was reviewed by the course faculty members regularly.

Student teams also met with the course coordinators during the fall semester. The agenda for this meeting included discussing team dynamics and the senior-partner experience and checking the progress of their e-partner portfolio. Students were also asked if they had other course-related questions.

EVALUATION AND ASSESSMENT

Formal student evaluation for the senior-partner course component included attendance and participation in course-discussion sections and partner visits, reflective questions that were graded for quality and completion using a no-credit/credit/exemplary system, and appropriate documentation in their e-partner portfolio. Although grading the reflections and portfolios required time-intensive review and comments by course faculty members, it provided meaningful insights into students' interactions and reflections with their senior partners, in contrast to a discussion period wherein every student may not have the opportunity to provide detailed responses.

During the first 2 years of the course, students also completed pre- and post-experience confidence inventories in which they were asked to rate their level of confidence in performing stated tasks at that exact moment using an 11-point unipolar scale of 0 (not confident at all) to 10 (highly confident). Completion of these inventories was voluntary and students were told that participation would not affect their grade. Senior partners were also asked at the midpoint of the academic year to voluntarily complete satisfaction survey instruments regarding their interaction with student pharmacist teams, including rating the students' capabilities to perform specific tasks. A rating scale of 0 (not capable at all) to 10 (highly capable) was used. Satisfaction survey instruments completed by partners did not identify specific students. The survey instruments and assessments were granted exemption from the University of Wisconsin Social and Behavioral Sciences Institutional Review Board. Statistical analyses to evaluate changes in students' confidence level from baseline in the application of various skills with senior partners were conducted using paired *t* tests; SPSS v17. A *p* value of ≤ 0.05 was considered significant.

Measures of student confidence in performing tasks specifically related to their senior-partner activities over the course of their first academic year are summarized in Table 1. The response rates for the pre- and post-experience survey instruments were 91.2% and 68.5%, respectively. Of the 17 tasks on which students were asked to rate their confidence, scores improved for 7 ($p < 0.05$). Specifically, students felt more confident communicating with patients about their health through interviews and discussions; conducting medication histories, either alone or with their peer groups; actively involving their senior partners in medication or lifestyle management; responding to patient questions in a timely manner despite a hectic schedule; and setting a specific monthly target number of patient visits. One skill that improved, although not significantly ($p = 0.07$), was overcoming self-doubts about

Table 1. Students' Mean Confidence Ratings Before and After their Senior Partner Experiences (N = 187)

Survey Statements ^a	Precourse, Mean (SD)	Postcourse, Mean (SD)	Change (95% CI)	P
Introduce yourself to a new patient	8.5 (1.6)	8.7 (1.4)	0.1 (-0.4, 1.6)	0.38
Use interpersonal skills, such as eye contact, asking open-ended questions, and using silence in a patient interview	7.9 (1.7)	8.0 (1.5)	0.2 (-0.5, 1.4)	0.30
Communicate with patients about their health through interviews and discussions	6.9 (2.0)	7.5 (1.6)	0.6 (-0.9, -0.3)	<0.001
Conduct medication history interviews along with your peer group	7.0 (2.0)	8.0 (1.6)	1.0 (-1.4, -0.7)	<0.001
Conduct medication history interviews alone	5.9 (2.5)	7.2 (1.8)	1.3 (-1.8, -1.0)	<0.001
Actively involve your senior partner with their medication management	6.0 (2.2)	7.4 (1.7)	1.4 (-1.7, -1.0)	<0.001
Actively involve your senior partner with their lifestyle management	6.3 (2.1)	7.4 (1.6)	1.1 (-1.5, -0.8)	<0.001
Respond to patient questions in a timely manner despite a hectic schedule	7.2 (1.8)	7.9 (1.5)	0.6 (-0.9, -0.3)	<0.001
Set a specific monthly target number of patient visits	6.3 (2.3)	7.7 (1.8)	1.4 (-1.8, -1.0)	<0.001
Overcome self doubts about new patient care skills after a lapse in practicing them	6.9 (1.9)	7.2 (1.7)	0.3 (-0.7, 0.3)	0.07
Get through to the most difficult patients	6.0 (2.1)	6.1 (2.0)	0.1 (-0.5, 0.3)	0.60
Express empathy and reflect a patient's emotions during an interaction	7.9 (1.6)	7.9 (1.5)	0.0 (-0.3, 0.3)	0.94
Recognize the effects that differences in gender, age, social and cultural backgrounds may have on a patient's health and ability to treat their illness	7.8 (1.7)	7.8 (1.6)	-0.0 (-0.3, 0.4)	0.76
Demonstrate to patients and other healthcare providers that pharmacists are valuable healthcare professionals	7.9 (1.6)	8.0 (1.5)	0.1 (-0.4, 0.2)	0.39
Demonstrate a professional attitude and the ability to work harmoniously with other members of your healthcare team or group	8.7 (1.3)	8.5 (1.4)	-0.2 (-0.1, 0.4)	0.14
Maintain confidentiality with all patient information	9.5 (0.9)	8.9 (1.3)	-0.5 (0.3, 0.7)	<0.001
Conduct regular self-assessments for the purposes of lifelong learning	8.4 (1.4)	8.1 (1.5)	-0.3 (0.1, 0.6)	0.018

^a Self-efficacy values derived from a 11-point scale on which 0 = not confident at all to 10 = highly confident

new patient-care skills after a lapse in practicing those skills. Self-confidence measures were lower for 3 skills on the postcourse evaluation, 2 of which were significantly lower: work harmoniously with team ($p = 0.14$), maintain confidentiality with all patient information ($p < 0.001$), and conduct regular self-assessments for the purposes of lifelong learning ($p < 0.001$).

Senior-partner perspectives regarding their experience with the student pharmacist-senior partnerships were favorable overall. After the first 5 visits, a majority (77%) stated that it was easy or very easy to coordinate schedules for the visits. When asked to rate the capabilities of student pharmacists on various communication,

health-management, and professional attitude-oriented tasks using a scale of 0 (not capable at all) to 10 (highly capable), seniors reported median scores of 9 or higher for all tasks. Seniors' written comments about what they liked best emphasized that they appreciated interacting and getting acquainted with young, caring students who had a sincere interest in their health, their experiences with pharmacies, and their medications. When asked to comment on what they liked least, the few seniors who entered responses in this category reported that it was difficult to schedule visits and to keep the conversation going during visits. When asked about areas in which the students performed well, seniors said students were

excellent listeners, asked relevant and nonthreatening questions, motivated them to exercise more, and did well discussing medications and taking a medication history. Seniors thought the students could improve in speaking loudly and clearly for patients with hearing difficulties, maintaining eye contact, measuring blood pressure, and displaying confidence in asking health-related questions.

During the spring semester, students received formal peer and faculty review of their e-partner portfolio. The faculty members graded the e-portfolios using a 25-point scale based on section completeness and professional writing style (organization, accuracy, clarity and HIPAA compliance). Primary areas identified as needing improvement included: separating documented information by visit date, spelling medication names accurately, including indications for every medication, maintaining HIPAA compliance, and documenting and following the partner's health-related goals. Students reported that documentation of care was useful because it enabled them to see important changes over time. The e-portfolio also provided students the experience of deciding what information was essential to document and how to be accurate and concise.

The reflective experiences provided students an opportunity to consider older adults' perspectives and to discover an increased awareness of their personal attitudes toward older adults. Many students commented that they overcame attitudes and beliefs they previously held about seniors; for example, they learned that seniors are busy people who are involved in many activities. Many student pharmacist-senior partner teams found time to enjoy informal time together beyond educational activities, such as going to dinner or a performance at the retirement community. Several groups made simple but remarkable interventions with their partners. For example, 1 team's partner called a course coordinator to report how her team "instilled a sense of urgency" with her regarding her high blood pressure readings. Her team also conducted a follow-up call to confirm that she had visited her physician and assessed how she was taking and tolerating her new blood pressure medicine. Another team, recognizing a significant change in their partner's eyesight, urged her to seek care within days rather than waiting 2 months for her scheduled eye appointment. The partner's doctor said that because of the aggressive nature of her condition, she would have lost her sight had she not sought immediate care.

Team dynamics were also monitored carefully through group reflections, individual reflections, and team meetings with the course coordinators. Although most teams quickly learned one another's strengths and managed their teamwork effectively and efficiently, some required additional counseling on ways to improve

their dynamics, provide effective feedback for growth and development, and celebrate small successes along the way. Because of the discussion devoted to team dynamics, students became articulate in describing strengths and areas for improvement within their team. Through group reflections, students were prompted to suggest 1 specific practical change the group could make that would help improve any aspect of the experience. Many groups clarified team rules to assist them in becoming a more functional team. For example, a common team rule was to purposefully prepare and plan the visit agenda as a team, designating each person's area of responsibility. Another team rule was to debrief after every visit regarding what went well and what could be improved. Others challenged themselves to become more knowledgeable about diseases and medications and to be able to communicate more clearly with one another and their senior partner.

During the final class discussion period in the spring semester, teams presented their aging and pharmacist "pearls." Themes for the pearls included aspects of communication styles (redirecting, promoting/supporting health-behavior change, involving/supporting caregivers, phrasing questions), monitoring health conditions, exploring health beliefs, and coping with grief and loss. During the presentations, students specifically recognized the challenges of coordinating multiple healthcare providers, setting goals, and monitoring progress, identifying different methods for medication management, and finding useful health-related resources for health professionals and the lay public. An overwhelming number of students commented on the importance of listening, building rapport with patients, and gaining patients' respect as a medication expert.

DISCUSSION

Because the student pharmacist-senior partner program activities reflect the primary objectives of the IPPE 1 and 2 courses so well, it has become an important component of the University of Wisconsin- Madison School of Pharmacy curriculum. The course creates a foundation for students to practice and improve their communication skills, work together as part of a healthcare team, begin to acclimate as healthcare professionals, and appreciate the patient's story.

Through the established relationship between the university and the retirement community, students can comfortably apply their newly learned skills in a safe environment that is more applicable to pharmacy practice than a simulated classroom setting would be. The longitudinal design has allowed students to observe changes in their partner over time; for instance, most commented after the winter break about changes that had occurred in their partner's health and lifestyle.

Students participating in this program became more confident in their ability to conduct medication histories and to actively engage older adults in medication management and successful aging strategies. Students with greater confidence in their abilities are more likely to transfer those skills to other environments and patient-care opportunities.¹¹ Areas showing improvement involved skills necessary for pharmacist medication-therapy management services. Although program participants were a cohort of first-year student pharmacists who may not be practicing these skills on a regular basis, they still had enough confidence in their ability to apply the patient care skills when necessary. As the students proceed through the curriculum, they will continue to use the skills they have acquired, build on them, and apply them in different situations, such as team-based activities in other courses, skills application in pharmacotherapy laboratory, and community outreach projects in their second-year IPPEs.

Three areas of students' perceived confidence showed a decrease on the postcourse assessment, 2 of which had significantly lower values: ability to demonstrate a professional attitude and ability to work harmoniously with the healthcare team or group. The lower scores may reflect students' increased awareness of the challenges associated with teamwork and consistent professionalism. Although all had previously worked in team environments, the duration of the IPPE teamwork spanned 2 semesters, which required students to function effectively as a team in order to meet required course goals. Maintaining confidentiality with all patient information was another area that was scored lower on the postcourse survey instrument. This result may be attributable to the realization that breaches of confidentiality can occur rather easily. Finally, lower student self-ratings on ability to conduct regular self-assessments for the purposes of lifelong learning are probably a result of greater awareness of how difficult it is in a practice setting to set aside time for self-reflection and professional development.

The reflective experiences provided students an opportunity to consider older-adult perspectives and become more aware of their own personal attitudes toward older adults. Students gained generally more positive and realistic attitudes toward older adults. A national evaluation of senior mentor programs in medical education demonstrated similar results, noting that all 10 programs that were evaluated demonstrated a positive effect on student attitudes toward older adults.¹² Additionally, all of their programs found that the student-mentor relationship tended to be a vital one, as supported by teams finding time to informally get together. The student pharmacists and senior partners in our IPPE courses appreciated the time they spent with one other. Seniors enjoyed interact-

ing with younger professional students and were energized by their enthusiasm for their future profession.

Appreciation of the senior partner's story was echoed in several reflections, illustrating the essence of narrative medicine.¹³⁻¹⁵ Narrative medicine encourages going beyond the patient's medical problems and diagnoses and actually listening to and appreciating the patient's story. By empathically connecting to the patient, a practitioner can holistically manage and care for the patient. Narrative medicine has gained credibility in medical school curricula.^{13,16} The act of listening to and reflecting on the patient's story supports a patient-directed practice standard that has been linked to more positive patient outcomes.¹⁶⁻¹⁹ Within a 1-hour visit, students heard much about the senior partner's views on having a health condition and feelings about different aspects of the healthcare system. This type of visit resulted in a more patient-centered and shared decision-making approach to care (an integrated topic within our pharmacy curriculum). Over the past few years, unexpected learning opportunities have occurred, including 4 deaths, intensive illness support, and caregiver support. The patient-directed nature of this course requirement has made it a favorite part of the course, and students have reflected positively on the meaningful relationships built with their senior partner.

Some aspects of the senior-partner program are time-intensive for students, including setting up, conducting, documenting, and reflecting upon the 10 visits with their partner. Because the school did not detail activities for every visit, students had to prepare and plan an agenda. Close faculty involvement was essential to managing student pharmacist-senior partner pairings and creating and developing portfolios, especially in the inaugural year of the courses. Partner recruitment, orientation, and follow-up were also time-intensive. Faculty members were initially wary of the hybrid nature of the course, fearing it would be difficult to manage. However, the multifaceted learning avenues, especially the Web interfaces, provided new opportunities for faculty members to understand just how engaged students were in these courses. Faculty review of the senior-partner portfolios and reflective questions enabled them to see how their students were applying the skills and knowledge from their discussion sections to their interactions with senior partners. These reflections also enabled faculty members to observe team dynamics. Two upperclass student pharmacists were trained by the course coordinators to ease some of the manpower constraints for reflective and portfolio grading.

The results of this paper should be considered with some limitations. Because the study survey instruments were completed anonymously, they could not be linked with individual student-performance data. Postcourse

student survey participation declined, most likely because of end-of-semester demands. However, the findings are strengthened by our evaluation of a required course for 2 consecutive classes of students so that the class size would be more generalizable and large enough that differences could be observed.

Based on the first few years of the courses, the senior-partner program positively impacts our student pharmacists as well as our community partnerships. To further validate its impact, a formal measure of students' long-term geriatric interests and a performance-based assessment could be incorporated. Informally, upperclassmen have reported enhanced learning as a result of participating in the senior-partner program, as they find themselves paying closer attention in class to therapeutic topics that pertained to their partner. During the second-year performance assessments, faculty members identified improved communication skills among students, such as agenda-setting, use of open-ended questions, and active listening. Partnering with other health-profession students has also been considered, but scheduling remains a barrier. A panel discussion featuring past senior partners might offer additional insights and a foundation during the boot-camp training provided in orientation. Enhancing visit content to include an environmental safety check, discussion about end-of-life care, and completion of a living will also may be beneficial.

CONCLUSION

The longitudinal student pharmacist-senior partner program in the required first-year IPPEs is an excellent opportunity for students to connect with and learn from healthy older adults independently living in the community. Students improved significantly in their ability to communicate and also fostered connections between their practice-based pharmacist roles and their growth as more person-centered healthcare providers.

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REFERENCES

1. The World Factbook. Central Intelligence Agency. <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html>. Updated November 9, 2010. Accessed April 22, 2012.
2. Institute of Medicine. *Retooling for an Aging America: Building the Health Care Workforce*. Washington, DC: National Academy Press; 2008.
3. Phillips C. Letter to: Senator Ron Wyden and Representative Edward Markey (Senate and House Office Buildings, Washington, DC). American Geriatrics Society. 2009 June 25. http://www.americangeriatrics.org/files/documents/Adv_Resources/IAH2009AGSEndorsement062509L.pdf. Accessed April 22, 2012.
4. Besdine R, Boulton C, Brangman S, et al. American Geriatrics Society Core Writing Group of the Task Force on the Future of Geriatric Medicine. Caring for older Americans: the future of geriatric medicine. *J Am Geriatr Soc*. 2005;53(6 Suppl):S245-S256.
5. Adelman RD, Fields SD, Jutagir R. Geriatric education. Part II: the effect of a well elderly program on medical student attitudes toward geriatric patients. *J Am Geriatr Soc*. 1992;40(9):970-973.
6. Smith MAM, Koronowski MJ, Peterson NJ. Enhancing student learning through integrating community-based geriatric educational outreach into ambulatory care advanced practice experiential training. *Am J Pharm Educ*. 2004;68(1):Article 20.
7. Denton GD, Rodriguez R, Hemmer PA, Harder J, Short P, Hanson JL. A prospective controlled trial of the influence of a geriatrics home visit program on medical student knowledge, skills, and attitudes towards care of the elderly. *J Gen Intern Med*. 2009;24(5):599-605.
8. Estus EL, Hume AL, Owens NJ. An active-learning course model to teach pharmacotherapy in geriatrics. *Am J Pharm Educ*. 2010;74(3):Article 38.
9. Accreditation Council for Pharmacy Education. Accreditation standards and guidelines for the professional program in pharmacy leading to the doctor of pharmacy degree. http://www.acpe-accredit.org/pdf/ACPE_Revised_PharmD_Standards_Adopted_Jan152006.pdf. Accessed April 22, 2012.
10. American Association of Colleges of Pharmacy. Center for the Advancement of Pharmaceutical Education (CAPE) Advisory Panel, Educational Outcomes. 2004. <http://www.aacp.org/resources/education/Documents/CAPE2004.pdf>. Accessed April 22, 2012.
11. Martin BA, Bruskiewitz RH, Chewing BA. The Effect of a Tobacco Cessation Continuing Professional Education Program on Pharmacists' Confidence, Skills, and Practice Behaviors. *J Am Pharm Assoc*. 2010;50(1):9-16.
12. Eleazer GP, Stewart TJ, Wieland GD, Anderson MB, Simpson D. Steering committee of the national evaluation of senior mentor programs. The National Evaluation of Senior Mentor Programs: Older Adults in Medical Education. *J Am Geriatr Soc*. 2009;57(2):321-326.
13. Charon R. Narrative medicine: a model for empathy, reflection, profession, and trust. *JAMA*. 2001;286(15):1897-1902.
14. Hurwitz B. Narrative and the practice of medicine. *Lancet*. 2000;356(9247):2086-2089.
15. Heliker D. Transformation of story to practice: an innovative approach to long-term care. *Issues Ment Health Nurs*. 1999;20(6):513-515.
16. Greenhalgh T, Hurwitz B. Narrative based medicine: why study narrative? *BMJ*. 1999;318(7175):48-50.
17. Silva SA, Charon R, Wyrer PC. The marriage of evidence and narrative: scientific nurturance within clinical practice. *J Eval Clin Prac*. 2011;17(4):585-593.
18. Smyth JM, Stone AA, Hurewitz A, Kaell A. Effects of writing about stressful experiences on symptom reduction in patients with asthma or rheumatoid arthritis: a randomized trial. *JAMA*. 1999;281(14):1304-1309.
19. Pennebaker JW. Telling stories: the health benefits of narrative. *Lit Med*. 2000;19(1):3-18.

Appendix 1. Group Reflective Questions

Directions: After each partner visit, each group member should respond to the appropriate set of questions below in the discussion area.

Visit 1 Group Reflective Questions (Getting to Know Your Partner)

1. List 3 important things you discovered about your partner during this partner visit.
2. What is 1 question that you would like to ask your partner during a future visit?
3. Please share any additional comments about this group experience. (optional)

Visit 2 Group Reflective Questions (Professionalism)

1. Describe 3 professional behaviors exhibited by you and/or group members during your partner visits.
2. What is 1 professional behavior that you would personally like to develop further?
3. What is 1 way that you could help encourage your team members in their professional development this semester?
4. Please share any additional comments about this group experience. (optional)

Visit 3 Group Reflective Questions (Changes for Improvement)

1. **Part 1:** Suggest specific, practical changes the group could make that would help improve the following aspects of this group experience:
(Respond to 3 of the following points in your reflection.)
  - a. Group preparation and/or planning for partner visits
  - b. Team learning
  - c. Team interaction with partner
  - d. General team communication
  - e. Any other aspect of this group experience
2. **Part 2:** Considering all of the changes that you and your teammates have suggested, discuss and determine *as a group* which change would be the most important for the group to focus on now. Agree to make this change.
3. **Part 3:** Describe how you, as an individual, will contribute to making this change.
4. Please share any additional comments about this group experience. (optional)

Visit 4 Group Reflective Questions (Team-Member Strengths)

1. Now that you've met with your partner a number of times, what challenges do you perceive that they have or are facing relating to the health care system (i.e. practitioners' roles, medication management, lifestyle)?
2. Give two specific examples of something you have learned from the group that you probably would not have learned on your own.
3. Finish this sentence for each of your group members:
"A strength (insert team member's name) brings to this team is ..."
4. You have 1 visit remaining this semester with your partner. What is 1 thing that you have learned from over the course of your visits?
5. Please share any additional comments about this group experience. (optional)

Visit 5 Group Reflective Questions (Implementing Change & Team Dynamics)

1. How do you think your partner has felt about interacting with your group over the course of this semester?
2. How successful has your group been at implementing the change you decided on from the Visit 3 Group Reflection?
3. Have there been any problems in team dynamics this semester? If so, how have they been resolved?
4. Complete the following sentence for each of your group members: "An area that (insert team member's name) **has shown growth** in is ..."
5. Please share any additional comments about this group experience. (optional)

Visit 6 Group Reflective Questions (Continuing Your Partner Relationship)

1. List 3 important things you discovered about your partner during this visit.
2. What is a new health-related topic you would like to address with your partner during a future visit?
3. How did your group 'regroup' for this visit, considering the time since your last partner visit?
4. Please share any additional comments about this group experience. (optional)

Visit 7 Group Reflective Questions (Professionalism)

1. Read the scenario “Group 48’s Visit 7” provided. Identify and discuss at least three professional and/or unprofessional behaviors exhibited by the group members. Please identify different behaviors than what your group members have identified (there are at least 12 behaviors in the scenario).
2. Each group member should choose one different unprofessional behavior identified by you or a group member (in the Group 48 scenario) that needs improvement.
  - a. If you were in Group 48, how would you address this unprofessional behavior?
  - b. What specific feedback would you provide in order to improve this aspect of professional behavior?
3. After all of your group mates have responded to Question 2, provide specific feedback to each approach presented. Does it relate well to how you would like to receive feedback on your own professional behavior?
4. Which aspect of professionalism do you see as your greatest challenge? Why?
5. Please share any additional comments about this group experience. (optional)

Visit 8 Group Reflective Questions (Motivational Interviewing Toolbox)

1. What particular Motivational Interviewing (MI) tools have been most useful to your group during interactions with your partner? Please give at least two specific examples. If you haven’t applied the techniques, how could you use the techniques in the next visit? (Be specific with 2 examples.)
2. Describe a time when you have communicated with your partner about a behavior change and experienced difficulty. Knowing more about MI tools now, how could you have applied them to that experience?
3. Please share any additional comments about this group experience. (optional)

Visit 9 Group Reflective Questions (Planning for the Final Visit/Reception)

1. You’ve attended a colloquium on how to say goodbye to your partners. What challenges or opportunities do you anticipate with the inevitable conclusion of the Partner Program for this year? How does your group plan to thoughtfully and professionally say goodbye to your partner at this final visit/reception?
2. What has been the most meaningful thing each of you has learned from your partner? Consider sharing this with your partner as appropriate.
3. Describe an area in which your partner has grown or developed while you’ve been visiting them.
4. Please share any additional comments about this group experience. (optional)

Visit 10 Group Reflective Questions (Team Skills and Older-Adult Perspectives)

1. How do you think your partner has felt about interacting with your group over the course of this year?
2. What has been the most challenging aspect of working with an older adult? What aspect of working with an older adult has impacted you personally or professionally? Explain.
3. Finish this sentence for each of your group members and explain why:
“A **strength** (insert team member’s name) brought to this team was . . . because. . .”
4. Complete the following sentence for each of your group members and explain why:
“An area that (insert team member’s name) **showed growth in** was . . .because. . .”
5. Please share any additional comments about this group experience. (optional)

Appendix 2. Individual Reflective Questions for Each Partner Visit

1. Overall, how effectively did your group work together for this partner visit?
4 response options: poorly, adequately, well, extremely well
2. How many of the group members participated actively most of the time?
3 response options: 1, 2 or 3
3. How many of the group members were fully prepared for group work most of the time?
3 response options: 1, 2 or 3
4. How often did you participate actively in group efforts? (this includes coming prepared to work, contributing to discussions, meeting internal group deadlines, and staying on task).
5 response options: not at all, rarely, sometimes, most of the time, always
5. What did you personally contribute to this visit (preparing, planning, doing)? Begin your response with: “I contributed. . .” (short answer)
6. Suggest 1 specific, practical change the group could make that would help improve any aspect of this group experience (consider improvement of team learning, partner interaction, preparation, and planning). (optional)
7. Please share any additional comments about this group experience. (optional)