

## ACCP GUIDELINE

## ACCP Clinical Pharmacist Competencies

Joseph J. Saseen, Toni L. Ripley, Deborah Bondi, John M. Burke, Lawrence J. Cohen, Sarah McBane, Karen J. McConnell, Bryan Sackey, Cynthia Sanoski, Anahit Simonyan, Jodi Taylor, and Joseph P. Vande Griend

American College of Clinical Pharmacy, Lenexa, Kansas

The purpose of the American College of Clinical Pharmacy (ACCP) is to advance human health by extending the frontiers of clinical pharmacy. Consistent with this mission and its core values, ACCP is committed to ensuring that clinical pharmacists possess the knowledge, skills, attitudes, and behaviors necessary to deliver comprehensive medication management (CMM) in team-based, direct patient care environments. These components form the basis for the core competencies of a clinical pharmacist and reflect the competencies of other direct patient care providers. This paper is an update to a previous ACCP document and includes the expectation that clinical pharmacists be competent in six essential domains: direct patient care, pharmacotherapy knowledge, systems-based care and population health, communication, professionalism, and continuing professional development. Although these domains align with the competencies of physician providers, they are specifically designed to better reflect the clinical pharmacy expertise required to provide CMM in patient-centered, team-based settings. Clinical pharmacists must be prepared to complete the education and training needed to achieve these competencies and must commit to ongoing efforts to maintain competence through ongoing professional development. Collaboration among stakeholders will be needed to ensure that these competencies guide clinical pharmacists' professional development and evaluation by educational institutions, postgraduate training programs, professional societies, and employers.

**KEY WORDS** American College of Clinical Pharmacy, clinical pharmacist, competencies.

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A long-standing priority of the American College of Clinical Pharmacy (ACCP) is the

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This document was written by the 2016 Certification Affairs Committee: Joseph J. Saseen, Pharm.D., FCCP, BCPS, BCACP (Chair); Toni L. Ripley, Pharm.D., FCCP, BCPS-AQ Cardiology (Co-chair); Deborah S. Bondi, Pharm.D., BCPS, BCPPS; John M. Burke, Pharm.D., FCCP, BCPS; Lawrence J. Cohen, Pharm.D., FCCP, BCPP; Sarah McBane, Pharm.D., FCCP, FCPHA, BCPS, CDE; Karen J. McConnell, Pharm.D., FCCP, BCPS-AQ Cardiology, ASH-CHC; Bryan Sackey, Pharm.D., BCPS, AAHIVP; Cynthia Sanoski, Pharm.D., FCCP; Anahit Simonyan; Jodi Taylor, Pharm.D., BCPS, BCCCP; and Joseph P. Vande Griend, Pharm.D., FCCP, BCPS, BCGP.

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Address reprint requests to the American College of Clinical Pharmacy, 13000 W. 87th St. Parkway, Suite 100, Lenexa, KS 66215; e-mail: [accp@accp.com](mailto:accp@accp.com); or download from [www.accp.com](http://www.accp.com).

assurance of an appropriately educated and skilled clinical pharmacy workforce. In 2008, the College published five clinical pharmacist competency statements that set forth the requisite knowledge and skills of individuals actively engaged in clinical pharmacy practice.<sup>1</sup> These were consistent with ACCP's definition of clinical pharmacy and were designed to serve as a foundation for the development and assessment of clinical pharmacists.<sup>2</sup>

The 2008 clinical pharmacist competencies were reviewed and updated by the 2016 ACCP Certification Affairs Committee. In developing these updates, committee members reviewed the literature related to competencies within the profession of pharmacy and the scope of practice of clinical pharmacists who provide comprehensive medication management (CMM) in team-based, direct patient care settings. The committee then prepared draft competencies for review by the ACCP Board of Regents. Following board

feedback, the competencies were finalized and approved.

## Background

Clinical pharmacists are licensed professionals who have completed accredited postgraduate clinical training (or obtained equivalent postgraduate clinical experience), have achieved board certification in a Board of Pharmacy Specialties (BPS) clinical specialty, and are practicing in team-based, direct patient care environments.<sup>3-8</sup> Clinical pharmacists achieve competence by acquiring additional knowledge, skills, and experience during postgraduate clinical training and/or after entering clinical practice.<sup>9</sup>

Discussion within the pharmacy academy and the profession is ongoing regarding whether Pharm.D. graduates are prepared to engage in direct patient care in team-based environments if they have not completed accredited postgraduate clinical training or obtained equivalent postgraduate clinical experience.<sup>10, 11</sup> Nonetheless, clinical pharmacists generally agree that the competence necessary to practice in these settings and provide CMM requires postgraduate clinical training or equivalent experience.<sup>8, 9, 12, 13</sup> The ACCP definition of clinical pharmacy presumes that clinical pharmacists provide care to patients as members of interprofessional patient care teams, assuming responsibility and accountability for optimizing medication-related outcomes.<sup>2</sup> Many pharmacists provide fundamental services that are core components of pharmacy practice (e.g., drug order fulfillment, patient education, drug information, public health-related services), although such activities may not require postgraduate clinical training.<sup>12</sup> Therefore, it is important to distinguish the competencies necessary to provide fundamental pharmacy services from the competencies necessary to deliver CMM in direct patient care settings.

## Clinical Pharmacist Competencies

The six ACCP core clinical pharmacist competencies described below and summarized in Table 1 apply to practitioners engaged in CMM in team-based, direct patient care environments. They are analogous to the competency expectations for practicing physicians.<sup>12</sup> Therefore, they align with the competencies embraced by the Accreditation Council for Graduate Medical Education (see Table 2).<sup>14</sup> Although the

competencies of clinical pharmacists are similar to those of physician providers, clinical pharmacist competencies more aptly reflect a focus on pharmacotherapy and ensuring optimal medication-related outcomes. These competencies are intended to ensure that a practitioner can provide CMM as outlined in the ACCP Standards of Practice.<sup>8, 15</sup> Clinical pharmacists may need to master additional areas of competence as they progress through their careers (e.g., leadership, research, or professional education). Therefore, this document is not intended to set forth every competency that clinical pharmacists may acquire over time or that is needed to succeed in specific professional pursuits.

## Direct Patient Care

Direct patient care is not just any type of direct interaction with a patient. Rather, ACCP has defined direct patient care as “the direct observation and evaluation of the patient and his/her medication-related needs; the initiation, modification, or discontinuation of patient-specific pharmacotherapy; and the ongoing pharmacotherapeutic monitoring and follow-up of patients in collaboration with other health professionals.”<sup>9</sup> Furthermore, ACCP states that clinical pharmacists

should possess the education, training, and experience necessary to function effectively, efficiently, and responsibly in [the direct patient care] role. Therefore, ACCP believes that clinical pharmacists engaged in direct patient care should be board certified (or board eligible if a [BPS] certification does not exist in their area of practice) and have established a valid collaborative drug therapy management (CDTM) agreement or have been formally granted clinical privileges by the medical staff or credentialing system within the health care environment in which they practice.<sup>9</sup>

Competence in direct patient care is initially developed during the clinical pharmacist’s residency training (or through equivalent experience). Practitioners should be proficient in carrying out the clinical pharmacist’s process of patient care.<sup>8, 16, 17</sup> They should be able to accurately assess patients, evaluate drug therapy, develop and initiate a therapeutic plan, and follow up on and monitor the outcomes of the plan. Clinical pharmacists should have the experience and skills necessary to educate patients, families, and caregivers from diverse socioeconomic and cultural backgrounds. Clinical pharmacists should also be able to collaborate confidently as members of interprofessional

Table 1. Description of Clinical Pharmacist Competencies<sup>a</sup>

Competency Domain	Elements of the Competency <sup>b</sup>
Direct patient care	<ul style="list-style-type: none"> <li>Assess patients, including identifying and prioritizing patient problems and medication-related needs.</li> <li>Evaluate drug therapy for appropriateness, effectiveness, safety, adherence, and affordability.</li> <li>Develop/initiate therapeutic plans and address medication-related problems.</li> <li>Follow up on and monitor the outcomes of therapeutic plans.</li> <li>Collaborate with other members of the health care team to achieve optimal patient outcomes across the continuum of care.</li> <li>Apply knowledge of the roles and responsibilities of other health care team members to patient care.</li> </ul>
Pharmacotherapy knowledge	<ul style="list-style-type: none"> <li>Demonstrate and apply in-depth knowledge of pharmacology, pharmacotherapy, pathophysiology, and the clinical signs, symptoms, and natural history of diseases and/or disorders.</li> <li>Locate, evaluate, interpret, and assimilate scientific/clinical evidence and other relevant information from the biomedical, clinical, epidemiological, and social-behavioral literature.</li> <li>Use scientific/clinical evidence as the basis for therapeutic decision-making.</li> <li>Possess the knowledge and experience commensurate with certification in one or more BPS specialties.</li> <li>Maintain and enhance pharmacotherapy knowledge, including recertification or other appropriate methods of self-assessment and learning.</li> </ul>
Systems-based care and population health	<ul style="list-style-type: none"> <li>Use health care delivery systems and health informatics to optimize the care of individual patients and patient populations.</li> <li>Participate in identifying systems-based errors and implementing solutions.</li> <li>Resolve medication-related problems to improve patient/population health and quality metrics.</li> <li>Apply knowledge of pharmacoeconomics and risk-benefit analysis to patient-specific and/or population-based care.</li> <li>Participate in developing processes to improve transitions of care.</li> <li>Design quality improvement processes to improve medication use.</li> </ul>
Communication	<ul style="list-style-type: none"> <li>Communicate effectively with: <ul style="list-style-type: none"> <li>Patients, caregivers, families, and laypersons of diverse backgrounds.</li> <li>Other health professionals and stakeholders.</li> </ul> </li> <li>Provide clear and concise consultations to other health professionals.</li> <li>Develop professional written communications that are appropriate to the audience.</li> <li>Use verbal communications tailored to varied clinical and patient-specific environments.</li> <li>Communicate with appropriate levels of assertiveness, confidence, empathy, and respect.</li> </ul>
Professionalism	<ul style="list-style-type: none"> <li>Uphold the highest standards of integrity and honesty.</li> <li>Commit to a fiduciary relationship with patients, always working in their best interests.</li> <li>Serve as a credible role model/leader for students, trainees, and colleagues by exhibiting the values and behaviors of a professional.</li> <li>Advance clinical pharmacy through professional stewardship, training of future clinical pharmacists, and active engagement in professional societies.</li> </ul>
Continuing professional development	<ul style="list-style-type: none"> <li>Commit to excellence and lifelong learning.</li> <li>Demonstrate skills of self-awareness, self-assessment, and self-development.</li> <li>Identify and implement strategies for personal improvement through continuing professional development.</li> <li>Provide professional education to students, trainees, or other health professionals.</li> <li>Maintain BPS certification to ensure that therapeutic knowledge is up-to-date.</li> </ul>

<sup>a</sup>These competencies are necessary to provide CMM in team-based, direct patient care environments. Other competencies should be acquired as the clinical pharmacist progresses through his/her career and engages in additional professional activities.

<sup>b</sup>These elements of competency help describe each competency but are not intended to be all-inclusive. Other, related elements may apply, depending on the clinical pharmacist's practice setting and activities.

**Table 2. Comparison of ACGME Physician Competencies and ACCP Clinical Pharmacist Competencies**

ACGME Physician Competencies <sup>14</sup>	ACCP Clinical Pharmacist Competencies
1. Patient care and procedural skills	1. Direct patient care
2. Medical knowledge	2. Pharmacotherapy knowledge
3. Systems-based practice	3. Systems-based care and population health
4. Interpersonal and communication skills	4. Communication
5. Professionalism	5. Professionalism
6. Practice-based learning and improvement	6. Continuing professional development

health care teams and apply knowledge of the roles and responsibilities of other team members to accomplish individualized, patient-centered care.<sup>18</sup> This should occur in all patient care settings and during transitions of care.<sup>19</sup>

#### Pharmacotherapy Knowledge

Clinical pharmacists must possess an in-depth knowledge of pharmacology and pharmacotherapy and the scientific/clinical evidence that forms the basis for rational drug therapy. This knowledge is critical in making decisions that optimize patients' medication-related outcomes. Clinical pharmacists must also possess an extensive knowledge of medicine (e.g., pathophysiology and mechanisms of diseases/disorders, clinical presentation, diagnostic tests, and natural history of disease). This knowledge contributes to effective and efficient patient assessment and the evaluation, monitoring, and optimization of pharmacotherapy. Clinical pharmacists must be able to understand, analyze, critically evaluate, and apply knowledge from the biomedical, clinical, epidemiological, and social-behavioral sciences to patient care. Without such knowledge, they cannot fully contribute to ensuring optimal medication-related outcomes.

ACCP maintains that clinical pharmacy practitioners providing direct patient care should be board-certified specialists.<sup>13</sup> Certification as a specialist through BPS provides evidence of an individual clinical pharmacist's knowledge related to pharmacotherapy, evidence-based medicine, systems-based standards and population-based pharmacotherapy, and other domains, depending on the specialty. At a minimum, the breadth and depth of the clinical pharmacist's knowledge should be commensurate with that of a Board Certified Pharmacotherapy Specialist (BCPS).<sup>13, 20, 21</sup>

#### Systems-Based Care and Population Health

Clinical pharmacists' contributions to public health, global health, and population health directly and indirectly affect medication management, including chronic disease prevention and treatment.<sup>22-25</sup> This has been facilitated by the expansion of health informatics, which has become an important, multidimensional health care tool. Clinical pharmacists use health informatics to optimize patient care at both the health system and population levels by engaging in developing, implementing, and disseminating system-wide protocols, clinical pathways, and clinical decision support systems.<sup>26, 27</sup> Health informatics data allow opportunities to improve health care metrics/outcomes and reduce costs. Clinical pharmacists should be able to conduct pharmacotherapy-related evaluations and critically interpret data to improve health within a population.

Clinical pharmacists should also possess a multifaceted understanding of how different health care systems and settings function. This should include the flow of clinical care from the emergency department through admission, transition of care to home or a postcare facility, and care in the ambulatory environment. Not only should clinical pharmacists understand the potential complications that may arise as patients transition between health care systems or settings, but they should also be able to participate in the development of processes to promote safe and effective medication use during these transitions.<sup>28</sup>

An understanding of health care metrics and accreditation of health care systems is also important.<sup>29, 30</sup> Clinical pharmacists often serve as members of interprofessional teams charged to help review, analyze, and document the institutional achievement of performance standards set forth by accreditation, recognition, or certification bodies such as the Joint Commission and the National Committee for Quality Assurance (NCQA). Together with physicians, physician assistants, nurse practitioners, and other health professionals, clinical pharmacists participate in documenting institutional compliance with Joint Commission National Quality Core Measures and other metrics.<sup>31, 32</sup> In addition, clinical pharmacists contribute to similar activities through NCQA's Healthcare Effectiveness Data and Information Set (HEDIS) measures and Patient-Centered Medical Home (PCMH) recognition program.<sup>33</sup> The competent clinical pharmacist

should exhibit the abilities necessary to engage in these activities.

### Communication

Clinical pharmacists must communicate effectively with patients, caregivers, families, and laypersons of diverse backgrounds; other health professionals; staff of health-related agencies; and other stakeholders. All forms of communication should conform to the professionalism expectations cited in the following paragraphs.

Clinical pharmacists must be able to develop professional written communications ranging from formal, peer-reviewed documents to less-formal daily communications in professional settings. Documenting direct patient care activities appropriately in the medical record is an essential expectation.<sup>5, 8, 16</sup> Clinical pharmacists are required to use writing styles appropriate to the context of the communication. For example, accurate, clear, and concise messages are necessary for follow-up medical record notations and e-mail communications; more detailed and extensive writing may be required for consultative, admission, or discharge medical record entries. Regardless of their purpose, clinical pharmacists' written communications must be accurate, appropriate in tone, suitable for the audience, and as clear and concise as possible.

Verbal communications should be tailored to the clinical and patient-specific environment. Clinical pharmacists are often expected to provide formal presentations that are well planned, well prepared, and well practiced. The ability to think and effectively communicate "in the moment," with little planning, is also expected. This skill is essential when clinical pharmacists make patient-specific recommendations in clinical settings. Like their written communications, clinical pharmacists' verbal communications must be clear and concise. These communications must also balance appropriate levels of assertiveness, confidence, empathy, and respect. Finally, when communicating with patients, caregivers, families, and laypersons, clinical pharmacists should use reflective, patient-centered listening while establishing the individual's or audience's level of understanding.

### Professionalism

The oath of a pharmacist declares a commitment to serve patients, pursue optimal health

outcomes, and act according to the highest moral, ethical, and legal conduct.<sup>34</sup> Professionalism is expected of all health care providers and should be central to pharmacists' practices over their lifetime.<sup>35</sup> As professionals, clinical pharmacists must make it their primary obligation to establish a "fiduciary" relationship with those they serve. In exchange for this "gift of trust," they promise to work in the patient's best interests. This covenantal relationship lies at the core of the clinical pharmacist's relationship with the patient.<sup>36, 37</sup>

Teaching and demonstrating professionalism are essential components of the postgraduate training competency areas, goals, and objectives.<sup>5</sup> Postgraduate clinical trainees are expected to have been thoroughly inculcated with the values of professionalism. Clinical pharmacists must serve as credible role models for students and trainees by both exhibiting and providing guidance on the values and behaviors of a professional.<sup>38</sup>

### Continuing Professional Development

Engaging in continuing professional development (CPD) is a core competency of any professional because it reflects a commitment to excellence and an awareness of the need for lifelong learning. Clinical pharmacists are expected to possess the skills of self-awareness, self-assessment, and self-development.<sup>39</sup> These skills are often acquired through the evaluation and mentorship provided during their postgraduate training and then developed further throughout their careers. Ongoing self-assessment should inform the areas of priority for individual CPD.

An important component of the clinical pharmacist's CPD is the pursuit of board certification through BPS.<sup>8, 21</sup> BPS board certification is an effective means of accomplishing CPD. Board certification also provides evidence of competence to stakeholders and facilitates opportunities for clinical pharmacists to practice at a level reflective of their education, training, and experience. Other activities and certification processes may also effectively promote CPD. Providing professional education to students, trainees, or other health professionals can enhance the clinical pharmacist's professional development. Engaging in professional organizations to gain exposure to contemporary clinical practice innovations/advances, learn about best practices, and forge collaborative relationships is also an effective means of accomplishing CPD.

## Conclusions

The six competencies outlined above describe the requisite knowledge, skills, attitudes, and behaviors of clinical pharmacists who provide CMM. Individual practitioners can be assessed using the criteria outlined in the updated ACCP Template for Evaluating a Clinical Pharmacist.<sup>40</sup> ACCP's goal is to ensure that clinical pharmacists possess the core competencies necessary to contribute meaningfully to the optimal use of medications. Commitment by individual clinical pharmacists, postgraduate training programs, and health care institutions/organizations to achieving and maintaining these competencies will be necessary to attain this goal.

## References

- Burke JM, Miller WA, Spencer AP, et al. Clinical pharmacist competencies. *Pharmacotherapy* 2008;28:806-15.
- American College of Clinical Pharmacy (ACCP). The definition of clinical pharmacy. *Pharmacotherapy* 2008;28:816-7.
- Accreditation Council for Pharmacy Education (ACPE). Accreditation standards and key elements for the professional program in pharmacy leading to the doctor of pharmacy degree (Standards 2016). Available from [www.acpe-credit.org/pdf/Standards2016FINAL.pdf](http://www.acpe-credit.org/pdf/Standards2016FINAL.pdf). Accessed January 8, 2017.
- Medina MS, Plaza CM, Stowe CD, et al. Center for the Advancement of Pharmacy Education 2013 educational outcomes. *Am J Pharm Educ* 2013;77:162.
- American Society of Health-System Pharmacists (ASHP). PGY1 competency areas, goals and objectives. Available from [www.ashp.org/menu/Residency/Residency-Program-Directors/PGY1-Competency-Areas-Goals-and-Objectives.aspx](http://www.ashp.org/menu/Residency/Residency-Program-Directors/PGY1-Competency-Areas-Goals-and-Objectives.aspx). Accessed January 8, 2017.
- Jordan CJ, Wall GC, Lobo B, et al. Postgraduate year one pharmacy residency program equivalency. *Pharmacotherapy* 2009;29:1495.
- Board of Pharmacy Specialties (BPS). Available from [www.bpsweb.org](http://www.bpsweb.org). Accessed January 8, 2017.
- American College of Clinical Pharmacy (ACCP). Standards of practice for clinical pharmacists. *Pharmacotherapy* 2014;34:794-7.
- Murphy JE, Nappi JM, Bosso JA, et al. American College of Clinical Pharmacy's vision of the future: postgraduate pharmacy residency training as a prerequisite for direct patient care practice. *Pharmacotherapy* 2006;26:722-33.
- Robinson D, Speedie M. Is postgraduate training essential for practice readiness? *Pharmacotherapy* 2015;35:1096-9.
- Murphy JE. Practice-readiness of U.S. pharmacy graduates to provide direct patient care. *Pharmacotherapy* 2015;35:1091-5.
- Maddux MS. American College of Clinical Pharmacy Board of Regents commentary. Qualifications of pharmacists who provide direct patient care: perspectives on the need for residency training and board certification. *Pharmacotherapy* 2013;33:888-91.
- Saseen JJ, Grady SE, Hansen LB, et al. Future clinical pharmacy practitioners should be board-certified specialists. *Pharmacotherapy* 2006;26:1816-25.
- Accreditation Council for Graduate Medical Education (ACGME). ACGME common program requirements. Available from [www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRs\\_07012016.pdf](http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRs_07012016.pdf). Accessed January 8, 2017.
- Brushwood DB, Nanni KR. Hospital liability for accuracy of pharmacist consultations. *Am J Health Syst Pharm* 2009;66:680-3.
- Harris IM, Phillips B, Boyce E, et al. Clinical pharmacy should adopt a consistent process of direct patient care. *Pharmacotherapy* 2014;34:e133-48.
- American College of Clinical Pharmacy (ACCP). Comprehensive medication management in team-based care. Available from [www.accp.com/docs/positions/misc/CMM%20Brief.pdf](http://www.accp.com/docs/positions/misc/CMM%20Brief.pdf). Accessed January 8, 2017.
- Interprofessional Education Collaborative (IPEC). Core competencies for interprofessional collaborative practice: report of an expert panel. Washington, DC: IPEC, 2011.
- Hume AL, Kirwin J, Bieber HL, et al. Improving care transitions: current practice and future opportunities for pharmacists. *Pharmacotherapy* 2012;32:e326-37.
- Board of Pharmacy Specialties (BPS). Pharmacotherapy specialist certification content outline/classification system. 2015. Available from [www.bpsweb.org/wp-content/uploads/bps-specialties/pharmacotherapy/pharma\\_fall.pdf](http://www.bpsweb.org/wp-content/uploads/bps-specialties/pharmacotherapy/pharma_fall.pdf). Accessed January 8, 2017.
- Board of Pharmacy Specialties (BPS). White paper: five-year vision for pharmacy specialties. 2013. Available from [www.bpsweb.org/wp-content/uploads/BPS-WHITE-PAPER-FINAL-January-2013.pdf](http://www.bpsweb.org/wp-content/uploads/BPS-WHITE-PAPER-FINAL-January-2013.pdf). Accessed January 8, 2017.
- Smith M. Pharmacists' role in public and population health. *Ann Public Health Res* 2014;1:1006.
- American Public Health Association (APHA). The role of the pharmacist in public health. 2006. Available from [www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/07/13/05/the-role-of-the-pharmacist-in-public-health](http://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/07/13/05/the-role-of-the-pharmacist-in-public-health). Accessed January 8, 2017.
- Steeb DR, Joyner PU, Thakker DR. Exploring the role of the pharmacist in global health. *J Am Pharm Assoc* 2014;54:552-5.
- National Center for Chronic Disease Prevention and Health Promotion. A program guide for public health: partnering with pharmacists in the prevention and control of chronic diseases. 2012. Available from [www.cdc.gov/dhdsp/programs/spha/docs/pharmacist\\_guide.pdf](http://www.cdc.gov/dhdsp/programs/spha/docs/pharmacist_guide.pdf). Accessed January 8, 2017.
- Dobesh PP, Bosso J, Wortman S, et al. Critical pathways: the role of pharmacy today and tomorrow. *Pharmacotherapy* 2006;26:1358-68.
- American Society of Health-System Pharmacists. ASHP guidelines on the pharmacist's role in the development, implementation, and assessment of critical pathways. *Am J Health Syst Pharm* 2004;61:939-45.
- Kirwin J, Canales AE, Bentley ML, et al. Process indicators of quality clinical pharmacy services during transitions of care. *Pharmacotherapy* 2012;32:e338-47.
- Academy of Managed Care Pharmacy, American Pharmacists Association. Medicare star ratings: stakeholder proceedings on community pharmacy and managed care partnerships in quality. *J Am Pharm Assoc* 2014;54:228-40.
- Dobesh PP, Trujillo TC, Finks SW. Role of the pharmacist in achieving performance measures to improve the prevention and treatment of venous thromboembolism. *Pharmacotherapy* 2013;33:650-64.
- Joint Commission. Specifications manual for Joint Commission National Quality Core Measures (2010A1). Contraindication to systemic corticosteroids. Available from [www.jointcommission.org/releases/archive/TJC2010B/DataElem0040.html](http://www.jointcommission.org/releases/archive/TJC2010B/DataElem0040.html). Accessed January 8, 2017.
- Joint Commission. Specifications manual for Joint Commission National Quality Core Measures (2010A1). Contraindication to both ACEI and ARB at discharge. Available from [www.jointcommission.org/releases/archive/TJC2010B/DataElem0038.html](http://www.jointcommission.org/releases/archive/TJC2010B/DataElem0038.html). Accessed January 8, 2017.
- National Committee for Quality Assurance (NCQA). Measuring quality. Improving health care. Available from [www.ncqa.org/homepage](http://www.ncqa.org/homepage). Accessed January 8, 2017.
- American Association of Colleges of Pharmacy (AACP). Oath of a pharmacist. Available from [www.aacp.org/resources/studentaffairs/studentaffairs/policies/Documents/OATHOFA%20PHARMACIST2008-09.pdf](http://www.aacp.org/resources/studentaffairs/studentaffairs/policies/Documents/OATHOFA%20PHARMACIST2008-09.pdf). Accessed January 8, 2017.
- Lesser CS, Lucey CR, Egener B, Braddock CH III, Linas SL, Levinson W. A behavioral and systems view of professionalism. *JAMA* 2010;304:2732-7.

36. Holt SL, Lau MS, Wong FL, et al. Tenets of professionalism for pharmacy students. *Pharmacotherapy* 2009;29:757-9.
37. Roth MT, Zlatic TD. Development of student professionalism. *Pharmacotherapy* 2009;29:749-56.
38. Brown D, Ferrill MJ. The taxonomy of professionalism: reframing the academic pursuit of professional development. *Am J Pharm Educ* 2009;73:68.
39. Accreditation Council for Pharmacy Education (ACPE). Guidance on continuing professional development (CPD) for the profession of pharmacy, 2015. Available from [www.acpe-credit.org/pdf/CPDGuidance%20ProfessionPharmacyJan2015.pdf](http://www.acpe-credit.org/pdf/CPDGuidance%20ProfessionPharmacyJan2015.pdf). Accessed January 8, 2017.
40. Lee M, Badowski M, Acquisito N, et al. ACCP template for evaluating a clinical pharmacist. *Pharmacotherapy* 2017;37:e21-e9.