
Competencies for Psychology Practice in Primary Care

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This article reports on the outcome of a presidential initiative of 2012 American Psychological Association President Suzanne Bennett Johnson to delineate competencies for primary care (PC) psychology in six broad domains: science, systems, professionalism, relationships, application, and education. Essential knowledge, skills, and attitudes are described for each PC psychology competency. Two behavioral examples are provided to illustrate each competency. Clinical vignettes demonstrate the competencies in action. Delineation of these competencies is intended to inform education, practice, and research in PC psychology and efforts to further develop team-based competencies in PC.

Keywords: primary care, competence, education and training

The majority of people in the United States seek and receive care for mental health problems, substance use disorders, and health behavior problems in primary care (PC). They present with these problems as unique diagnoses and as part of other comorbid illnesses. As such, PC practices are addressing the biopsychosocial needs of their patients by including psychologists as interdisciplinary team members in their provision of integrated PC. Research shows this type of integrated primary care

(see Table 1 for a definition) is associated with improved outcomes for both health and mental health problems (Butler et al., 2008; Unützer, Schoenbaum, Druss, & Katon, 2006). Although PC psychology has been an area of focus over the past few decades, there is no generally accepted articulation of the competencies psychologists need to work effectively in PC medical settings.

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Authors' note. The authors of this article are the members of the Interorganizational Work Group on Competencies for Primary Care Psychology Practice. Except for the first six authors and the last author, the order of authorship is alphabetical.

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As a psychologist working in integrated primary care, Dr. Adams enjoys her position at a PC clinic that provides care across the life cycle from pediatrics to geriatrics using an integrated model. Today her day began with a consult for a patient who overuses medical services for vague complaints of pain, followed by one for a patient with asthma who seeks help only during crises. Next, Dr. Adams counseled several patients who screened as "at risk" for depression. Then she presented a "Lunch & Learn" session for clinic staff on multimodal interventions for childhood obesity, which was followed by supervision sessions with psychology trainees in integrated PC along with family medicine and pediatric residents. Mid-afternoon, she attended a meeting of the Continuous Quality Improvement team and then a meeting to discuss quality benchmarks for patients with diabetes. Dr. Adams ended her day by treating an anxious undocumented immigrant mother with many fears about taking her child for evaluation for possible autism.

This article reports on the outcome of an American Psychological Association (APA) presidential initiative to articulate the competencies needed for the practice of PC psychology as illustrated in the preceding vignette describing a day in the life of "Dr. Adams."

Integrated PC is now emerging as the foundation for the evolving health care system in the United States. PC embraces a biopsychosocial approach to health and illness (Engel, 1977) and recognizes the complexity of addressing all dimensions of health and illness (Dickinson & Miller, 2010). This can result in psychologists and other health professionals working with PC physicians and nurse practitioners in a collaborative, coordinated effort to deliver services as diverse as health promotion, nutrition, acute care, chronic disease management, and mental health (Croghan & Brown, 2010; Collins, Hewson, Munger, & Wade, 2010). Changes in current health policy and financing models will require all disciplines, including psychology, to reconfigure their core competencies to include distinct attitudes, knowledge, and skills needed in new service systems (Brown Levey, Miller, & DeGruy, 2012).

The central focus of this article is to synthesize extant literature on PC psychology competencies and describe the skills needed to practice in the rapidly changing PC setting, a new practice environment for many psychologists. These competencies are critical for trainees beginning in PC and for those who transition from traditional mental health treatment settings, which differ vastly in goals for care, intervention structure and method, referral structure, and documentation style and requirements (Runyan, Fonseca, Meyer, Oordt, & Talcott, 2003). We start with background information on the competency movement in professional psychology and describe the history of PC psychology competencies. Then we turn to our process in developing these competencies, a definition of terms, the competencies themselves in six clusters, and a discussion of the use of these clusters. Throughout, we use examples to illustrate the use of the PC psychology competencies in clinical practice.

Competency-Based Education and Training in Professional Psychology

Competency-based education and training is not a new idea, but like PC psychology, it has generated increased interest in recent years. The use of competency models by psychologists to promote business effectiveness in organizational settings dates back several decades (Derven, 2008). McClelland (1973), who is often credited as the originator of this approach, described competence as *the knowledge, skills, and attitudes for high performance*. A competency-based approach focuses on the measurement of outcomes that relate to actual performance and uses outcome assessment data to provide feedback to guide additional training needs and professional development. Such an approach is ideally suited to education and training programs and represents a shift in emphasis from a focus on a core curriculum designed to meet predetermined learning objectives during specified durations of training to a focus on the assessment of competency-defined student learning outcomes (Nelson, 2007; Roberts, Borden, Christiansen, & Lopez, 2005), that is, the competencies needed for the practice of one's profession. Empirical studies of competency models are rare but are beginning to emerge (J. M. Taylor, Neimeyer, Zemansky, & Rothke, 2011).

Several seminal initiatives specific to competency-based education and training in professional psychology have occurred in the past decades and have been detailed in a number of publications (Fouad & Grus, in press). Most recently, the competency benchmarks model articulates developmental descriptors of the competencies for three levels in the education and training sequence and provides

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Table 1
Definitions of Key Terms

Term	Definition
Accountable care organization (ACO)	"A group of health care providers who give coordinated care, chronic disease management, and thereby improve the quality of care patients get. The organization's payment is tied to achieving health care quality goals and outcomes that result in cost savings" (U.S. Department of Health and Human Services, n.d.).
Care management	Specific type of service, often disease specific (e.g., depression, congestive heart failure) whereby a behavioral health clinician, usually a nurse or social worker, provides early assessment and intervention, care facilitation, and ongoing follow-up (see, e.g., Belnap et al., 2006).
Co-located care	Behavioral health (BH) and primary care (PC) providers (i.e., physicians, nurse practitioners) delivering care in the same practice but without a common framework or practice to integrate that care (Peek & the National Integration Academy Council, 2013).
Collaborative care	An overarching term that describes partnering among clinicians (e.g., behavioral health and primary care) and patients and families over time that results in a shared treatment plan for patients.
Comprehensive care	An important principle of primary care, in which clinicians "are accountable for meeting the large majority of each patient's physical and mental health needs" (Agency for Healthcare Research and Quality, n.d.).
Coordinated care	Behavioral health providers and primary care physicians practice separately within their respective systems. Information regarding mutual patients is exchanged as needed, and collaboration is limited outside of the initial referral (Blount, 2003).
Health and behavior codes	"Billing codes designed to capture behavioral services provided to patients to address physical health problems . . . There are six health and behavior codes, two for assessment procedures and four that reflect intervention services" (American Psychological Association Practice Organization, 2005, para. 1).
Health care (or medical) neighborhood	The health care neighborhood is defined as a patient-centered health (or medical) home and the constellation of other clinicians and teams providing health care services to patients and families within it, along with community and social service organizations and state and local public health agencies (adapted from E. F. Taylor, Lake, Nysenbaum, Peterson, & Meyers, 2011).
Integrated care	Tightly integrated on-site teamwork with unified care plan. Often connotes organizational integration as well, perhaps involving social and other services (Blount, 2003; Blount et al., 2007).
Integration	Care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health, substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and crises, stress-related physical symptoms, and ineffective patterns of health care utilization (Peek & the National Integration Academy Council, 2013).
Integrated primary care	Combines medical and behavioral health services for the spectrum of problems that patients bring to primary medical care. Because most patients in primary care have a physical ailment affected by stress, problems maintaining healthy lifestyles, or a psychological disorder, it is clinically effective and cost-effective to make behavioral health providers part of primary care. Patients can feel that for any problem they bring, they have come to the right place. Teamwork of mental health and medical providers is an embodiment of the biopsychosocial model (Peek & the National Integration Academy Council, 2013).
Primary behavioral health care	"Recent term for the new relationships emerging between specialty mental health services and primary care . . . Primary behavioral health care refers to at least three related but distinct activities: (1) behavioral health care delivered by primary care clinicians, (2) specialty behavioral health care delivered in the primary care setting, and (3) innovative programs that integrate elements of primary care and specialty behavioral health care into new formats" (Sabin & Borus, 2001, p. 159).

(table continues)

Table 1 (continued)

Term	Definition
Patient-centered	"Care that is respectful of and responsive to individual patient preferences, needs, and values and ensur[es] that patient values guide all clinical decisions" (Institute of Medicine, 2001, p. 40)
Patient-centered medical (health) home (PCMH)	The patient-centered medical home is not simply a place but refers to an organizational model to deliver the core functions of primary care, including: patient-centered, comprehensive, coordinated care, access, quality and safety (adapted from American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, & American Osteopathic Association, 2007).
Population based care	"A population health perspective encompasses the ability to assess the health needs of a specific population; implement and evaluate interventions to improve the health of that population; and provide care for individual patients in the context of the culture, health status, and health needs of the populations of which that patient is a member" (Association of American Medical Colleges, 1999, p. 138).

examples of attainment of the competencies in behavioral terms, called behavioral anchors (Fouad et al., 2009). This model was initially derived from the consensus efforts of a 32-member working conference convened by APA and was then revised based on substantive input from individuals and groups within professional psychology. The benchmark competencies were updated in 2011 to reflect 16 core competencies within six overarching clusters (Hatcher et al., 2013): science, systems, professionalism, relationships, application, and education. This latter structure was adopted for the PC psychology competencies outlined in this article. The PC psychology competencies presented in this article are consistent with general competency models in professional psychology and health service psychology (Fouad et al., 2009; Hatcher et al., 2013; Health Service Psychology Education Collaborative, 2013). However, the specific essential components and behavioral examples vary to reflect the focus on the distinctive aspects of PC psychology.

Competency models have also been developed by various specialties in professional psychology to reflect distinctive competencies required for working with specific (a) populations (e.g., clinical child psychology, Jackson, Wu, Aylward, & Roberts, 2012; professional geropsychology, Knight, Karel, Hinrichsen, Qualls, & Duffy, 2009; Molinari, 2012); (b) applications of psychology (e.g., clinical health psychology, France et al., 2008; clinical neuropsychology, Hannay et al., 1998, and Rey-Casserly, Roper, & Bauer, 2012; counseling psychology, Murdock, Alcorn, Heesacker, & Stoltenberg, 1998; forensic psychology, Varela & Conroy, 2012; rehabilitation psychology, Stiers et al., in press); (c) settings (e.g., school psychology, Daly, Doll, Schulte, & Fenning, 2011); and (d) approaches (e.g., group psychology, Barlow, 2012).

Competency-based education and training is consistent with the competency-based approach used in medicine. The Accreditation Council for Graduate Medical Education in the United States has articulated core competencies that are adapted for various medical specialties including psy-

chiatry (Andrews & Burruss, 2004), family medicine, internal medicine (Green et al., 2009), and pediatrics (Hicks et al., 2010) and now requires competency-based models for undergraduate and graduate medical education. The National Association of Social Workers (2005) has also developed competency standards for social work practice in health care settings.

The application of a competency-based approach to education and training across many health care disciplines, as well as concerns about patient safety (e.g., Institute of Medicine, 2000, 2001, 2003), led to the recent development of a competency model for interprofessional practice (Interprofessional Education Collaborative Expert Panel, 2011). These interprofessional competencies are meant to be applied to all health care professions and reflect the unique characteristics of team-based care. Endorsing the work of the Interprofessional Collaborative Expert Panel, we (the Interorganizational Work Group on Competencies for Primary Care Psychology Practice) included interprofessionalism as an additional competency for PC psychology practice.

History of Primary Care Psychology Competencies

While the topic of PC psychology is the focus of numerous books and manuscripts, the literature on PC psychology competencies is sparse. Ten years ago, an APA interdivisional work group issued a rationale and curriculum outline to prepare psychologists to work in PC (McDaniel, Belar, Schroeder, Hargrove, & Freeman, 2002; McDaniel, Hargrove, Belar, Schroeder, & Freeman, 2004). This work built on an earlier project funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 1998. That curriculum was based on a biopsychosocial approach and emphasized not only foundational training in professional psychology but also health policy and health care systems, common PC problems, assessment of common PC conditions, interventions, interprofessional collaboration, and ethical, legal, and professional issues in PC.

The U.S. Air Force also developed competencies for PC psychology (Hunter & Goodie, 2010) that were integrated into the Air Force's behavioral health consultant practice standards manual. These competencies have been used as reference points from which expert trainers can provide concrete feedback to behavioral health consultant trainees as they are learning to work in PC settings (Air Force Medical Operations Agency, Mental Health Division/SGHW, 2011a, pp. 76–78, 2011b, pp. 64–73).

These and other writings (e.g., McDaniel et al., 2002, 2004) identified PC psychology as requiring distinctive knowledge, skills, and attitudes, with specific training required for their attainment, and were used to inform the delineation of competencies in this document. With health care reform moving forward, and the primacy of PC being recognized, this article synthesizes the literature to date and integrates, updates, and expands current thinking on the necessary competencies for psychologists who wish to work in PC settings. It should be noted that many of these competencies would be useful for review by a number of other mental health disciplines practicing in PC settings. However, the goal of this work group was to articulate the specific competencies psychologists need to practice in PC.

The Interorganizational Work Group on Competencies for Primary Care Psychology Practice

Little formal training related to service provision in PC is typically provided in psychology doctoral training programs. In fact, a task force of the APA Board of Educational Affairs (2011) noted that there was not yet a generally accepted articulation of the competencies required for practice in PC settings. They recommended that PC-specific competencies for psychologists be developed. In 2012, the Interorganizational Work Group on Competencies for Primary Care Psychology Practice was convened as an initiative of APA President Suzanne Bennett Johnson, who recognized the need for agreed-upon competencies for PC psychology. These competencies will be used in graduate psychology education and training programs, can provide guidance for those interested in developing or responding to opportunities in this area, and will assist students and practitioners in making informed choices about available PC psychology educational programs and certificates. Furthermore, they will inform policymakers, other health professionals, and the public about the competencies of PC psychologists. Not all primary care psychologists will be expert in all of these competencies, but all primary care psychologists should be familiar with them.

Organizations with a central focus on education or practice in PC psychology were invited to identify one to two thought leaders in PC psychology to serve as members of the work group. The following organizations participated: APA Divisions 20 (Adult Development and Aging), 38 (Health Psychology), and 54 (Society of Pediatric Psychology); the Association of Psychologists in Academic Health Centers (APAHC); the Collaborative Family Healthcare Association (CFHA); the Council of Clinical

Health Psychology Training Programs (CCHPTP); the Society of Behavioral Medicine (SBM); the Society of Teachers of Family Medicine (STFM); and the VA Psychology Training Council (VAPTC).

The 16 members of the work group participated initially in a series of “lightning presentations” via conference call in which the group reviewed the existing literature on psychology competencies and PC practice. Group members were then assigned to one of four subgroups representing one or more of the six competency clusters. Each subgroup was charged with compiling/integrating competencies in that cluster from the literature review and drafting the related essential components and behavioral anchors for each competency that represented the distinctive aspects of PC psychology practice. Once drafts were completed, all but the subgroup leader were assigned to new groups to review and edit the work in order to allow for fresh perspectives on the material. The full work group then convened for a two-day in-person meeting, during which the entire group reviewed the full draft document and the original subgroups then split out to edit competencies, essential components, and behavioral anchors based on the large-group review. Work continued after the in-person meeting to finalize a draft that was then submitted for comments by the organizations who had representatives on the work group. Those comments were then integrated into the document by the work group chair with input from the members, resulting in the final listing of competencies presented in this article.

Definitions

To guide the development of the competencies, the work group agreed to a set of definitions drawn from the current literature. Core definitions follow; Table 1 provides additional definitions.

Primary care (PC) is “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community” (Institute of Medicine, 1994, p. 1).

PC psychology is the application of psychological knowledge and principles to common physical and mental health problems experienced by patients and families throughout the life span and presented in PC (McDaniel, Hargrove, Belar, Schroeder, & Freeman, 2004).

Competence in PC psychology refers to the knowledge, skills, and attitudes—and their integration—that allow an individual to perform tasks and roles as a PC psychologist regardless of service delivery model (Kaslow, Dunn, & Smith, 2008).

Competencies are distinctive elements necessary for competence; they correlate with performance and can be evaluated against agreed-upon standards (Kaslow, 2004).

Essential components are critical components that delineate the knowledge, skills, or attitudes that make up each of the competencies, consistent with the structure

of the competency benchmarks model (Hatcher et al., 2013).

Behavioral anchors are observable, measurable examples of how the essential components *might* be demonstrated. Behavioral anchors are examples, so they vary by the model of service delivery being used, the population being seen, and the system of care.

The competencies for PC psychology practice are grouped into six clusters: science, systems, professionalism, relationships, application, and education. Table 2 presents the six clusters and the competencies associated with each.

While this document focuses on competencies specific to PC, in order to be comprehensive it includes competencies that are important for functioning in other health care settings as well. An overview of the clusters and competencies follows. Table 3 presents the clusters and competencies in greater detail. The clusters and competencies are not expected to be completely independent of one another but are designed to provide a conceptual framework to guide clinical practice and education and training for psychologists working in PC.

The Primary Care Psychology Competency Clusters

Science

Dr. Jones was hired as a psychologist for a new integrated PC clinic. First, he completed a needs assessment of patients and providers. The top need identified was uncontrolled A1C levels in

patients with diabetes and comorbid depression. Interviews with patients confirmed their concern about uncontrolled diabetes and lack of awareness of the relation between psychological factors and disease management. Subsequently, Dr. Jones developed a system for incorporating brief depression screening measures and A1C lab levels (to monitor diabetes) into the clinic routine.

Dr. Jones helped the clinic establish a care protocol based on screening results, using pharmacological, nutritional, medical group visits, and brief psychological interventions with patients who met specified criteria. Criteria for referral were also established for complex cases unlikely to respond to brief PC interventions. Program evaluation was conducted at 3, 6, and 12 months, evaluating A1C lab levels, self-report measures of depression, and patient/provider satisfaction.

Initial program outcomes were reviewed with the health care team at 3 months and at 6 months to identify areas in need of improvement. Clinic administrators were pleased with the improvements noted on internal system performance metrics for diabetes and depression management.

The sustained integration of science and practice is central to psychology's identity. Two general areas comprise the distinctive competencies required for practice in PC settings defined under the domain of Science: the scientific foundation of PC psychology related to a biopsychosocial approach, and research/evaluation. The first competency focuses on values and knowledge that underlie the science upon which PC psychology is based, while the latter competency focuses on the skills involved in conducting research in PC settings.

It is important to note that many knowledge-based competencies articulated in this article stretch psychologists' exposure to scientific foundations beyond what has traditionally been used for training health service psychologists. In order to function as psychologists in PC settings, a broader exposure to scientific knowledge is needed, including knowledge of human physiology, clinical pathology, basic pharmacology and psychopharmacology, epidemiology, and public health policy. Acquiring an understanding of population-based approaches that focus on the health outcomes of a group of individuals is an example of a specific area of knowledge required of all PC psychologists (Kindig & Stoddard, 2003; see Table 2 for additional examples).

The second competency area in the Science cluster requires competence in research and program evaluation applied specifically to the PC setting. Distinct competencies include functioning as leaders on interdisciplinary research projects, evaluating clinical programs, fully participating in quality improvement assessments, and developing practice standards. Evaluating the effectiveness of screening or prevention programs used in the PC setting is a behavioral example of the essential component of applying research skills to evaluate practice, interventions, and programs.

Systems

Dr. Weir is a psychologist working in an integrated primary care clinic (see Table 1 for definition) serving primarily indigent patients covered by Medicaid. Unfortunately, the state's Medicaid system does not cover psychological service delivery. Dr. Weir initiates a meeting with Dr. Perez, executive director of the state

Table 2
Primary Care Psychology Clusters and Associated Competencies

Cluster	Competency groups
Science	Science related to the biopsychosocial approach Research/evaluation
Systems	Leadership/administration Interdisciplinary systems Advocacy
Professionalism	Professional values and attitudes Individual, cultural, and disciplinary diversity Ethics in primary care Reflective practice/self-assessment/self-care
Relationships	Interprofessionalism Building and sustaining relationships in primary care
Application	Practice management Assessment Intervention Clinical consultation
Education	Teaching Supervision

Table 3*Competencies, Essential Components, and Behavioral Anchors for Primary Care Psychology Practice*

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
Cluster 1: Science		
1A. Science related to the biopsychosocial approach	1A.1 Scientific mindedness: Values a scientific foundation in the practice of PC psychology	Uses scientific literature in daily PC practice Encourages evidence-based practice by all team members
	1A.2 Knowledge of the biological components of health and illness	Describes accurately the relationship between commonly treated PC medical conditions and psychological or behavioral concerns (e.g., recognizes depression is commonly comorbid with diabetes and the implications of various blood sugar levels on cognition and mood) Recognizes names and appropriate dosages of medications for commonly occurring medical and psychological/behavioral conditions (e.g., diabetes, hypertension, depression) seen in PC and their common side effects on cognition and mood
	1A.3 Knowledge of the cognitive components of health and illness	Articulates an understanding of health belief models and attitudes regarding help seeking that influence health and illness Demonstrates knowledge of cognitive factors that influence reactions to medical diagnoses and processing of health information
	1A.4 Knowledge of the affective components of health and illness	Demonstrates knowledge of affective factors that influence reactions to diagnoses, injury, disability, and processing of health information Recognizes that medical problems can present as affective disorders
	1A.5 Knowledge of behavioral and developmental aspects of health and illness	Describes effect of age and developmental context on health across the life span Recognizes impact of learning and conditioning on health behavior
	1A.6 Knowledge of the role and effect of families on health	Recognizes the effect of acute and chronic illness on physical and mental health of caregivers, siblings, and other family members Utilizes knowledge about the effect of the family and other members of the support system on medical regimen adherence
	1A.7 Knowledge of the effect of sociocultural and socioeconomic factors on health and illness	Describes association between socio-economic status and health outcomes and access to care Recognizes the relationships between ethnicity, race, gender, age/cohort, religion, sexual orientation, culture, and disability and health behavior as well as disease management in PC
	1A.8 Knowledge of epidemiology, public services, and health policy research	Articulates epidemiological research methods relevant to PC Employs knowledge of population-based approaches to health promotion
	1A.9 Knowledge and understanding of evidence-based practice and its application to the practice of PC psychology	Demonstrates knowledge of research methods for quality improvement initiatives to enhance patient safety, patient satisfaction, and health outcomes Understands, reads, and implements clinical algorithms in PC

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
1B. Research/evaluation	1B.1 Ability to conduct research in PC settings	Engages in practice-based research with practice-based networks where collective results can be used to assess the effectiveness of PC efforts on health outcomes Conducts effectiveness, comparative effectiveness, and/or dissemination and implementation research within the PC setting
	1B.2 Ability to select valid, brief and actionable measures for conducting research in PC	Demonstrates knowledge of brief patient outcome measures appropriate for research in PC settings Employs outcome measures used across disciplines (e.g., lab levels, financial outcomes, cost-effectiveness) in addition to psychological outcomes
	1B.3 Ability to conduct research in an ethically responsible manner in the PC setting	Demonstrates an understanding of the IRB/human research requirements as they apply to research conducted in PC Demonstrates an awareness of technical/ethical/legal issues that arise when conducting research using EHRs
	1B.4 Ability to conduct research within the context of an interdisciplinary team	Collaborates on interdisciplinary research teams Consults on research conducted by investigators from other disciplines
	1B.5 Application of research skills for evaluating PC practice, interventions, and programs	Evaluates the effectiveness of screening or prevention programs used in PC Creates or implements baseline needs assessment within PC settings for both patients and health providers
	1B.6 Ability to select valid, brief, and actionable measures for evaluating applied clinical activity in PC	Creates reliable and valid screening, diagnostic, and monitoring instruments using health information systems Considers clinical, operational, and financial outcomes when evaluating programs occurring in PC settings
	1B.7 Effectively uses information technology to track patient outcomes and provide a means for program evaluation	Uses health information technology to improve patient safety, satisfaction, and quality of care, particularly as it relates to behavioral health Evaluates use of technology to deliver care (e.g., telemedicine programs; EHR reminders and tracking of outcomes)
	1B.8 Awareness of and participation in developing and measuring quality improvement standards in PC	Demonstrates the ability to participate in the formal evaluation and assessment of standards for being a National Committee for Quality Assurance (NCQA)-certified patient-centered medical home (PCMH) Works with clinical leadership and the team to design, implement, and evaluate quality improvement initiatives that impact how care is routinely delivered
Cluster 2: Systems		
2A. Leadership/administration	2A.1 Understands the mission and organizational structure, relevant historical factors, and position of psychology in the organization	Recognizes appropriate chains of communication to initiate a change in local systems of care Understands current reporting lines for psychologists within the organization
	2A.2 Along with other practice leaders, facilitates integration across multiple domains (clinical, operational, and financial)	Works effectively with organizational leaders to ensure necessary resources are available for effective behavioral health practice Creates business plans that track costs and quality associated with integrated care

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
	2A.3 Contributes to planning and implementing organizational change to optimize service delivery	Understands systems redesign and approaches to productivity enhancement (e.g., Plan-Do-Study-Act [PDSA], Institute for Healthcare Improvement, 2011; Lean Management System, Levinson & Rerick, 2002) Examines space utilization and makes recommendations accordingly, with particular attention to impact upon interprofessional team functioning
	2A.4 Demonstrates and promotes effective communication in a range of leadership roles	Promotes effective communication and collaborative decision-making in healthcare teams, including facilitating each team member communicating his/her perspective Leads or participates in staff meetings, clinical meetings, and organizational meetings
	2A.5 Understands and applies organizational policies regarding health care professional employment, particularly for psychologists and other behavioral health clinicians	Participates in developing and implementing standards for psychologists and other behavioral health professionals as part of employment in PC Collaborates with practice leadership to implement a comprehensive evaluation process for annual 360 degree performance evaluations (Panagar, 2009)
	2A.6 Supports training programs in PC psychology and interprofessional education at local, regional, and national levels	Advocates for institutional investment in an accredited psychology PC program supported by a formal business plan Oversees efforts to develop PC psychology continuing education programs for psychologists and other health care professionals
	2B. Interdisciplinary systems	Engages schools, community agencies, and health care systems to support optimal patient care and functioning Demonstrates understanding of long-term care needs and options including in-home care, assisted living, and nursing home care
	2C. Advocacy	
	2C.1 Demonstrates knowledge of health care policy and its influence on health and illness and PC services	Describes how the policies of the Centers for Medicare and Medicaid Services impact health insurance reimbursement for screening and integrated behavioral health services Identifies opportunities to advocate for better integration of mental health services in PC at the local, state, and federal levels
	2C.2 Recognizes the health care needs of the community and works to address how they are prioritized in care delivery, state funding, and resource allocation	Establishes collaborative relationships with key community resources to decrease population rates of sexually transmitted diseases Works with school and early intervention systems to address the population's rates of childhood obesity
	2C.3 Recognizes that advocacy to improve population health may involve interacting with a number of systems	Demonstrates understanding that transitions of care (e.g., inpatient to home) are influenced by funding, caregiver availability, and patient capacity Recognizes the unique and sometimes competing interests of different stakeholders in the health care system (e.g., patients, providers, payers, employers, and government)
	2C.4 Informs policy relevant to PC psychology at local, state, and federal levels	Serves on advisory boards of community agencies Engages in active outreach efforts to policymakers

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
	2C.5 Advocates within the psychology profession for increased research, training, and practice in PC	Works with the appropriate psychology training councils to increase graduate level education and practicum opportunities in PC Works with the state psychological association on a coordinated effort to train psychologists and integrate psychology into PC practices
Cluster 3: Professionalism		
3A. Professional values and attitudes	3A.1 Consolidates professional identity as a PC psychologist 3A.2 Values the culture of the PC setting and conveys an attitude of flexibility	Conveys to others the roles/skill sets that the PC psychologist brings to the setting Participates in professional groups regarding the development and advancement of PC psychology Willing to adapt role and activities in the best interest of patient care (e.g., serving as consultant, team leader, advocate, case manager, health educator, or community liaison) Adapts to PC environment, including frequent interruptions, fast pace of clinic, and unpredictable access to space
3B. Individual, cultural, and disciplinary diversity	3B.1 Monitors and applies knowledge of self and others as cultural beings in PC settings 3B.2 Identifies the relationship of social and cultural factors in the development of health problems	Asks about cultural identities, health beliefs, and illness history that impact health behaviors Demonstrates sensitivity to a variety of factors that influence health care (e.g., developmental, cultural, socioeconomic, religious, sexual orientation) Modifies interventions for behavioral health change in response to social and cultural factors Uses culturally sensitive measures and procedures when conducting research, evaluation or quality improvement projects
3C. Ethics in PC	3C.1 Identifies and addresses the distinctive ethical issues encountered in PC 3C.2 Demonstrates knowledge about the legal issues associated with health care practice 3C.3 Articulates aspects of policies that regulate the delivery of services in health care systems	Demonstrates a commitment to ethical principles with particular attention to dual relationship matters, confidentiality, informed consent, boundary issues, team functioning, and business practices Practices appropriate documentation, billing, and reimbursement procedures for services Follows state laws related to abuse reporting, adolescent reproductive health, and determination of decision-making capacity Demonstrates familiarity with hospital/medical setting bylaws, credentialing, privileges, and staffing responsibilities Demonstrates knowledge about standards set forth by national accrediting bodies
3D. Reflective practice/self-assessment/self-care	3D.1 Supports importance of reflective practice in PC 3D.2 Understands importance of self-assessment in PC settings 3D.3 Understands importance of health professional self-care in PC	Develops skills of mindfulness and self-awareness Manages stress associated with primary care practice by actively creating a consultation network with other PC psychologists Evaluates own competencies and determines need for continuing education Acts in best interest of the patient by seeking consultation and professional support when need for services exceeds level of professional competence Actively promotes self-care consultation opportunities for PC health professionals (e.g., psychotherapy, exercise, psychiatric consultation, marriage and family therapy)

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
Cluster 4: Relationships		
4A. Interprofessionalism	4A.1 Values interprofessional team approach to care	Demonstrates understanding that patient care is the responsibility of a team of professionals, not a single clinician Recognizes, respects, and supports activities of other members of the PC team in the provision of behavioral health services
	4A.2 Appreciates the unique contributions that different health care professionals bring to the PC team	Communicates the various roles of the psychologist to team members Recognizes when and how to use other team members' specific disciplinary expertise
	4A.3 Develops collaborative relationships to promote healthy interprofessional team functioning that is characterized by mutual respect and shared values	Promotes collegial and mutually respectful relationships with colleagues from different disciplines Promotes and participates in team huddles prior to clinical work
	4A.4 Assesses team dynamics and coaches teams to improve functioning	Proactively helps team members to better understand their interpersonal and communication styles Uses psychological skills to address malfunctioning team behavior
	4A.5 Demonstrates awareness, sensitivity, and skills in working professionally with diverse individuals	Communicates effectively with team members and patients in a manner that is sensitive to power differentials present in a clinical setting Helps patients communicate with health care professionals who have cultural backgrounds different from their own
4B. Building and sustaining relationships in PC	4B.1 Understands the importance of communicating clearly, concisely, and respectfully in a manner that is understandable and meaningful to various audiences (e.g., clinicians, patients, staff)	Uses language appropriate to the patient's and clinician's education and culture Uses visual aids to enhance a patient's and family's understanding of a recent diagnosis
	4B.2 Negotiates resolution of conflict between clinicians, staff, patients, and systems	Facilitates team process when there are professional disagreements by focusing on shared goals Recognizes and manages power differentials between team members and between patients and providers
	4B.3 Able to set appropriate boundaries for patients, families, clinicians, and teams	Advises patients and their families about availability, and limits, of behavioral health services after hours and informs patients of alternative resources that are available to them (e.g., on-call service, crisis hotlines, AA sponsors, Emergency Department) Communicates with the team about how to access behavioral health services when the PC psychologist is not available
Cluster 5: Application		
5A. Practice management	5A.1 Meets the needs of the patients, their families, other team members, and the setting, taking into consideration the model of behavioral health/PC integration used, resources available, and time constraints within the setting	Relies on a needs assessment to allocate clinical services or develop new services Distributes care in a manner best suited for the patient and the population (e.g., tracks percentage of time spent in brief assessments/interventions, family systems-based interventions, and detailed assessments/interventions)

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
	5A.2 Applies principles of population-based care along a continuum from prevention and wellness, to subclinical problems, to acute and chronic clinical needs	Focuses assessment and interventions across the continuum of health and illness, providing acute services, targeting prevention of illness, health promotion, and risk reduction for physical and mental/behavioral health issues, including substance use disorders Follows evidence-based and evidence-informed models of assessment and intervention across consultations (e.g., Assess, Advise, Agree, Assist, Arrange; Glasgow, Emont, & Miller, 2006; Whitlock, Orleans, Pender, & Allan, 2002)
	5A.3 Operates at a variety of paces, consistent with the needs and realities of PC	Uses appointment time efficiently (e.g., in a 30-minute appointment identifies problem, degree of functional impairment, and symptoms early in the visit) Summarizes to patient and family, when possible, an understanding of the problem (e.g., in 2–3 minutes) at the appropriate level, depth, and specificity for each patient, in the context of their cultural beliefs
	5A.4 Can co-interview, co-assess, and co-intervene with other PC providers	Co-interviews a patient with diabetes by conducting the interview with a dietician Works with the pediatrician and respiratory therapist in a joint effort to develop a plan to improve a child's adherence to an asthma treatment regimen
	5A.5 Understands how payment for services may influence the type of services and treatment provided	Informs a parent that a recommended developmental screen is not covered by insurance Uses health and behavior codes when applicable
	5A.6 Communicates information that addresses a patient's needs, improves PC practice, and allows for research (when IRB approved) without revealing unnecessary confidential information	Writes clear, concise EHR notes focused on referral problem, frequency, duration (acute or long-term), and functional impairment and provides short, specific recommendations Ensures notes are accessible to the PC team and considers they may be accessible to the patient
	5A.7 Uses most up-to-date technology and methods to guide clinical service delivery	Establishes systems to direct patients to web-based protocols (e.g., electronic smoking cessation programs, chronic disease based interventions) Encourages patients and families to use the patient portal of the EHR
	5B. Assessment	
	5B.1 Selects and implements screening methods using evidence-based assessment measures to identify patients at risk or in need of specialized services	Reviews EHR core behavioral risk measures to determine where to focus screenings Assists PC team in selecting measures to include in routine appointments to identify common presenting problems (e.g., depression, anxiety, substance use disorders, sleep difficulties, disruptive behavior)
	5B.2 Ensures that psychological assessments for the PC setting are utilized, administered, and interpreted in a manner that maintains test integrity	Understands strengths and limitations of screening tools designed for specialty mental health services when adapted for PC Appropriately uses the most up-to-date data bases (e.g., Cochrane, DynaMed, Essential Evidence Plus, Epocrates, Lexi-Comp, TRIP, UpToDate) to ensure the best evidence-based assessments are conducted, taking into consideration normative data

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
	5B.3 Uses assessment questions and measures geared toward current functioning, while simultaneously incorporating psychological, behavioral, and physical components of health and well-being	Assesses how the patient's physical condition (e.g., body mass index, HbA1c, out-of-range lab values), thoughts, emotions, behaviors, habits, interpersonal relationships, and environment influence the identified problem and functioning Uses an assessment strategy that can be tied to a behavioral change plan
	5B.4 Identifies patient's needs and rationale for appointment rapidly	Quickly identifies problem, degree of functional impairment, and symptoms using focused interviewing skills Uses brief screening tools to determine areas in need of attention during the current visit
	5B.5 Assesses pertinent behavioral risk factors	Conducts an evidence-based suicide assessment on all patients identified with depressed mood Identifies the health risks for a child with asthma residing with a smoker
	5B.6 Involves input of significant others in the assessment process as indicated	Obtains information from caregivers in the assessment process Seeks feedback from a couple simultaneously about how they can work together to ensure compliance with a postoperative bariatric surgery lifestyle
	5B.7 Evaluates and uses intrapersonal, family and community strengths, resilience, and wellness to inform understanding of a patient's needs and to promote health	Uses interview and assessment measures that include evaluation of psychosocial (e.g., personality, health beliefs, family) strengths Effectively questions patient about support systems, spiritual resources, and links to community resources
	5B.8 Monitors patients longitudinally to identify changes in presenting problems and effectiveness of recommended interventions	Works collaboratively with PC team to perform on-going assessment of fluctuations in presenting problem and of emerging problems Conducts follow-up assessment to evaluate effectiveness of recommended interventions
	5C.1 Focuses patient recommendations and interventions on functional outcomes and symptom reduction in a targeted manner	Uses evidence-based interventions to improve functioning in areas such as meeting school and work responsibilities, improving quality of social interactions, decreasing disruptive behaviors, improving sleep, decreasing pain, reducing anxiety, improving mood, and improving exercise and nutrition
	5C.2 Offers interventions that encourage proper use of health care resources	Meets routinely with a patient with somatization disorder to decrease frequency of urgent care visits Employs methods such as "Teach Back" to assure patient understanding of health care instructions (Schillinger et al., 2003)
	5C.3 Effectively uses current evidence-based interventions appropriate for PC to treat health and mental health related issues	Implements evidence-based interventions (e.g., cognitive behavior therapy, parent-child interaction therapy, motivational interviewing, family psychoeducation, problem-solving therapy) Focuses on patient self-care, symptom reduction, and functional improvement with interventions such as deep breathing, cue-controlled relaxation, cognitive disputation, sleep hygiene, stimulus control, increased exercise, problem solving, assertive communication, and disease management

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
5D. Clinical consultation	5C.4 Offers and solicits evidence-based interventions that can be reinforced and monitored by all PC team members	Shares and solicits information about behavioral interventions in a manner that encourages endorsement and support by the PC team (e.g., interventions to increase physical activity by walking 20 minutes daily on 5 out of 7 days, use of relaxation or diaphragmatic breathing 3 times per day and once at bedtime)
	5C.5 Uses biopsychosocial model to provide effective patient education and communication	Effectively engages family members in the intervention Describes to the patient the relevant factors (e.g., physical, behavioral, cognitive, environmental, social) that can affect pain, with consideration of the patient's health literacy level and cultural and religious beliefs Based on the patient's health literacy level and personal history with breast cancer, educates the patient about genetic testing for breast cancer and assists the patient in decision making about whether to undergo genetic testing
	5C.6 Targets evidence-based interventions to improve chronic care management	Uses behavioral intervention strategies to improve a patient's diabetes self-management Uses validated parent and teacher observational scales to determine the impact of an ADHD medication trial
	5C.7 Offers interventions that are inclusive of the family system	Involves spouse in nutritional planning for a patient with diabetes Provides psychoeducation and supportive counseling to family caregivers of a patient with Alzheimer's disease
	5C.8 Provides responsive care along the continuum of prevention and wellness promotion	Develops psychoeducational materials for common parental concerns Participates in health fairs
	5C.9 Bridges appropriately between behavioral services offered in PC and specialty mental health and community resources	Refers patient to specialty behavioral or mental health care when the intensity of service needed is beyond the scope of PC Develops efficient, ongoing communication strategies between the PC provider and referral source to insure ongoing collaboration
	5D.1 Assists in the development of standardized and reliable processes for consultative services for PC psychology	Assists the PC team regarding when and how to incorporate a PC psychologist into the process of care Uses empirical literature to develop parameters for when PC psychology consultations should be triggered (e.g., a diagnosis of chronic pain triggers an evaluation for pain management)
	5D.2 Clarifies, focuses on, and responds to consultation question raised, in an efficient manner	Conducts a thorough health record review of the referred patient Includes other PC team members in response to consultation question
	5D.3 Helps PC team conceptualize challenging patients in a manner that enhances patient care	Collaborates with other PC team members to ensure the entire health care team interacts more effectively and efficiently with patients and their support systems Is readily available to PC team to discuss ways to interact effectively with patients with challenging interpersonal styles (e.g., patients with personality disorders) and complicated cases (e.g., significant comorbidities, family dysfunction, limited intellect, low health literacy)
	5D.4 Tailors recommendations to PC work pace and environment	Gives PC providers actionable recommendations that are brief, concrete, and evidence-based Provides immediate (e.g., same day), brief feedback to the consulting PC provider, avoiding psychological jargon

(table continues)

Table 3 (continued)

Competency	Essential component(s) ^a	Sample behavioral anchors ^b
	5D.5 Follows up with other PC clinicians as indicated	Uses oral and/or written communication effectively Conveys and receives both urgent and routine clinical information to PC team members, using appropriate infrastructure/clinic procedures (e.g., face-to-face, e-mail communication, assigning tasks in EHR, consults, chart notes)
	5D.6 Ensures integrity of the consultation process when algorithm-based automated triggers for consultation occur	Can effectively explain to a patient the rationale for the consultation that has been automatically triggered Completes feedback loop with PC provider following consultation
Cluster 6: Education		
6A. Teaching	6A.1 Understands and is able to apply teaching strategies about PC psychology	Develops a portfolio of educational strategies to demonstrate and teach PC psychology competencies Develops curriculum and training materials addressing specific psychological and social issues encountered in PC
	6A.2 Completes needs assessment and understands teaching approaches used by other health professions about behavioral health issues	Adapts to and is familiar with training models of other PC disciplines Able to coach physicians and staff in patient- and family-centered care behaviors
	6A.3 Knowledge of strategies to evaluate effectiveness of teaching methods and procedures in PC psychology	Obtains summative and formative feedback Discusses the strengths and weaknesses of different assessment methods
	6A.4 Understands importance of and facilitates teaching of psychology trainees by other health care professionals	Implements opportunities for psychology trainees to observe and participate in clinical activities with other health care professionals Encourages teaching activities for psychology trainees by physicians and other health care professionals
	6A.5 Educates and trains psychologists regarding physical and mental health promotion, disease prevention, and management of acute and chronic disease across the life span to prepare psychologists for integrated PC in varied settings	Develops materials addressing the natural history of Type 2 diabetes from prevention, diagnosis, disease management, and complications Develops materials addressing the challenges faced by families with a child who has Type 1 diabetes from infancy to young adulthood
	6A.6 Participates in the education and training of multiple stakeholders in the larger health care system about PC psychology	Presents at a community health care forum on a common behavioral health issue Provides training to PC team members on the role of psychologists in addressing mental and behavioral health concerns
6B. Supervision	6B.1 Understands the ethical, legal, and contextual issues of the supervisor role in PC	Ensures that PC psychology training program meets all accreditation requirements Outlines competency expectations for PC psychology and regularly provides feedback to trainees on progress
	6B.2 Applies a range of methods to the supervision of psychology trainees	Supervises in a variety of ways, including case discussion, direct observation, and precepting Creates opportunities for psychology trainees to receive supervision from colleagues from other disciplines

Note. PC = primary care; IRB = institutional review board; EHR = electronic health record.

^a Essential components refer to the knowledge/skills/attitudes that make up the competency. ^b Sample behavioral anchors demonstrate the essential components. These samples are not all inclusive.

psychological association, to enlist the association's and its lobbyist's support for a meeting with State Representative Blaser, who has a record of putting forward and supporting mental health legislation. The meeting focuses on avenues for psychologists to receive state Medicaid reimbursement for consultation and care coordination services to PC patients. Dr. Weir speaks to Representative Blaser about the valuable, unreimbursed services psychologists provide for PC patients and providers when mental and behavioral health services are integrated in the PC setting, including managing mental illness and enhancing health behavior change. He offers evidence on how this integrated care can help decrease overall health care costs.

Psychologists working in PC are aware that their work takes place in constantly evolving systems that operate at the local, regional, and national levels. The Systems cluster includes three competencies: interdisciplinary systems (understanding systems of care), leadership and administration, and advocacy.

PC psychologists understand and develop skills in systemic thinking (e.g., appreciating the health care community, cultural, and family contexts). As leaders and administrators, PC psychologists demonstrate and promote effective communication at the staff, clinical, and organizational levels. PC psychologists appreciate that all patient care occurs within multiple, complex interdisciplinary systems and work to improve these systems through advocacy. PC psychologists understand how health care policy affects the clinical, operational, and financial aspects of health care (Miller, Mendenhall, & Malik, 2009; Peek, 2008). As the case of Dr. Weir depicts, PC psychologists educate policymakers as advocates for sufficient resources to ensure patient access to mental health services, including psychological services delivered in PC.

Professionalism

Dr. Sandy is a psychologist who begins her day with a team huddle at the PC clinic. Her morning includes three initial consultations related to patients dealing with chronic pain, stress-related hypertension, and postpartum depression. In addition, she sees two follow-up patients: one for poor medical regimen adherence and the other for test anxiety. She consults with two physicians about how they might best address the psychosocial needs of their patients and supervises a psychology trainee regarding an ethical dilemma.

After lunch, a clinical pharmacist colleague asks Dr. Sandy for assistance with a patient who has poorly controlled diabetes. Dr. Sandy conducts a brief assessment using a new tool she was trained to use at a continuing education workshop she recently attended. At the end of the day, Dr. Sandy finds the pharmacist to discuss her recommended integrated treatment plan, which has been documented in the patient's electronic health record and shared with other team members. Dr. Sandy and the pharmacist agree to collaborate in the patient's future visits to assist with her diabetes management.

The Professionalism cluster includes competencies expected for psychologists practicing in PC related to professional values and attitudes; individual, cultural, and disciplinary diversity; ethics; and reflective self-practice, self-assessment, and self-care.

The PC setting demands a strong professional identity with distinct behaviors and comportment. As a member of a diverse team, PC psychologists must be knowledgeable about the unique culture of the setting and the roles and expectations of other PC team members. PC psychologists convey an attitude of flexibility in terms of putting the patient's needs at the center of care. This means managing time to accommodate interruptions and matching frequency of treatment to the fast-paced environment that is characterized by unpredictable access to space and resources.

The Professionalism cluster also includes competencies that reflect the awareness, sensitivity, and skills necessary to work with diverse populations within the PC setting. The PC psychologist is able to articulate how cultural identities, health beliefs, and illness history impact health behaviors and patients' personal constructions of illness and their attitudes toward the health care system.

Another essential component in the Professionalism cluster is the ability to identify and address the distinctive ethical issues encountered in PC, for example, issues related to informed consent and confidentiality associated with team-based care, such as documenting patient information in the electronic health record (EHR). The PC psychologist identifies relevant patient information that needs to be shared with the PC team and is adept at negotiating with the patient what information will be shared. The PC psychologist is knowledgeable about legal issues associated with health care practice in PC settings, able to address scope of practice concerns, and able to demonstrate understanding of liability issues related to shared care.

The PC setting often places distinct personal and professional demands on psychologists that require reflective practice. Reflective practice is crucial in providing effective patient consultation and treatment, team consultation, and supervision of psychologists and other trainees. Self-awareness and mindfulness (defined as "bringing one's complete attention to the present experience on a moment-to-moment basis," Marlatt & Kristeller, 1999, p. 68) are important when managing the stress associated with the fast-paced setting, unpredictable competing demands, and treating a wide range of patients across the life cycle, many with complex comorbid disorders.

Relationships

A newly formed patient-centered medical home (PCMH) team was not using daily team huddles prior to seeing their patients. Dr. Chen is the team psychologist, and his conversations with a team nurse indicate she feels overworked and undersupported. Two team physicians have also expressed frustration about a lack of consistency in prescreening. Several patients have mentioned that team members seem unorganized. Dr. Chen decides to discuss his positive experiences with consistent preclinic huddles with team members. He suggests that making a commitment to daily team huddles would improve team job satisfaction, patient satisfaction, and effective delivery of services. He suggests a trial for two weeks of consistent commitment to the huddles and then a reevaluation by team members. Each team member agrees. After

two weeks, even the team members with the greatest concerns agree that the huddles are useful.

The Relationships cluster contains two broad competency domains: interprofessionalism and building and sustaining relationships in PC. Excellent interdisciplinary team care is necessary to achieve higher quality and more cost-effective health care (Institute of Medicine, 2001). PC psychologists must excel at collaboration with other health care professionals and contribute to effective team functioning. Knowing one's own and others' professional functions and roles in PC is essential for effective clinical collaboration. Valuing an interprofessional team approach to care, respecting the contributions of all team members, and facilitating positive team functioning are foundational to PC psychology practice. Building and sustaining positive relationships depends on skills in clear and respectful communication with a wide range of audiences, in negotiating conflict, and in promoting shared decision making.

Application

Dr. Lien (family physician) pages the team psychologist, Dr. Elmer, for a warm handoff and introduces Dr. Elmer to the patient and reviews the patient's symptoms. Dr. Elmer then interviews the patient, administers the Generalized Anxiety Disorder-7 scale (Spitzer, Kroenke, Williams, & Löwe, 2006) and the Alcohol Use Disorders Identification Test (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), and determines that the patient is experiencing panic attacks and insomnia and has an extensive remote substance abuse history unrelated to the current symptoms. Dr. Elmer provides the patient psychoeducation about anxiety and teaches the patient coping skills to manage stress, including deep breathing, and provides education about how sleep and anxiety interact and can negatively impact each other.

The patient and Dr. Elmer work collaboratively to develop a treatment plan that has the patient filling out a sleep log and monitoring panic attacks until the next appointment. The patient provides consent for information sharing with the rest of the health care team. Dr. Elmer then documents findings and the treatment plan in the EHR and shares these with Dr. Lien, offering praise for the physician's role in calming this patient and providing good collaborative care (see Table 1 for a definition). Dr. Lien and Dr. Elmer also discuss the possible use of medication but ultimately decide not to use medication given the patient's history of substance abuse and the nature of the anxiety.

Delivering effective, evidence-based interventions in PC requires an expanded set of clinical skills and a paradigm shift about how effective care is delivered. The Application cluster includes four discrete competency areas: practice management, assessment, intervention, and clinical consultation.

Efficient practice management is essential in PC. Psychologists must adapt to the fast pace of the environment and demonstrate the added value of offering behavioral services in the setting. Care must be delivered in a manner that fits the individuals served, the time demands, and the service delivery and financial models of the clinic. The PC psychologist must have the necessary skills to co-interview and co-intervene with other members of the health care team and be comfortable using the EHR and other evi-

dence-based technology designed to enhance service delivery.

Population-based care (see Table 1 for a definition) is another essential component of the practice management competency. PC psychologists necessarily adopt a "public health psychologist" hat in addition to their traditional clinical roles. The PC psychologist considers the health of the larger population of which an individual is a representative. Health and illness are viewed as a continuum ranging from prevention and wellness, to subclinical problems, acute symptoms, and chronic disease. The psychologist develops evidenced-based assessment strategies and interventions appropriate for each component of this continuum. This competency highlights the unique flexibility required by PC psychologists in population-based care to shift between health promotion, early intervention with subthreshold problems, and intervention for more serious problems.

The assessment competency of the Application cluster can be characterized as a continuous, flexible, dynamic process. Psychologists offer assessment services at both the individual and population-based levels. These competencies focus on screening and assessment activities that deliver rich clinical information within a focused time frame. The PC psychologist is able to identify the patient's concerns rapidly, early in the appointment, so a plan can be developed to address the patient's needs. Because a health care team follows patients longitudinally over time, the PC psychologist is able to provide different services over time, according to the patient's/family's changing needs, including prevention and wellness services and supporting the patient's areas of strengths and resilience.

Intervention is another key competency in the Application cluster. Mental health conditions are only a part of what psychologists address in PC. In this context, psychologists treat commonly occurring mental health issues (e.g., behavioral problems in children, depression, and anxiety), address unhealthy behaviors (e.g., tobacco use, poor diet, lack of exercise, and substance abuse), and negotiate adherence issues that contribute to the chronic diseases that are leading causes of morbidity and mortality, using evidence-based interventions appropriate to the PC setting. Psychologists also target contributors to excessive health care utilization, such as somatization, and tackle a variety of psychosocial issues (e.g., marital conflict, domestic violence, and bereavement) that often underlie reasons for PC appointments. Focusing patient recommendations and interventions on functional outcomes and symptom reduction in a targeted manner is an essential component of the intervention competency.

Interventions by the PC psychologist are always considered within the contexts of the patient's family system and the care provided by the other team members (e.g., how other team members may reinforce, monitor, and build upon the patient-psychologist treatment plan). Psychologists at times serve as culture brokers, toggling back and forth between translating the biopsychosocial world to the patient and translating the patient's world to the medical team. PC psychologists also know when services appropri-

ate to PC are insufficient to address the patient's concerns and serve as a bridge, enabling the patient to access needed specialty mental health services in the community.

Clinical consultation is the fifth competency within the Application cluster. This competency focuses on effectively responding to clinical questions in a manner that is collaborative, team oriented, actionable, and promotes peak scope of practice service delivery. For example, tailoring recommendations to work pace and the PC environment is an essential component of this competency. PC psychologists provide recommendations that are specific, evidence-based, and can be completed in a brief period of time. Because the PC psychologist is part of the fluid, constantly changing PC clinical world, he or she understands that ready availability to other providers is critical to the consultation process as the health care team tries to make sense of complex symptom presentations or challenging patient interpersonal styles, all in the service of enhanced patient care.

Education

Dr. Nelson's supervision of a psychology intern rotating in a pediatric integrated care clinic involves didactic training, modeling, and direct observation of patient care. At the start of the rotation, Dr. Nelson assigns readings on evidence-based screening, assessment, and intervention for common behavioral health problems seen in pediatrics as well as PC psychology competencies.

Dr. Nelson models how to prepare for patient care by having the intern sit with her before starting clinic. They review patient charts with attention to recent primary care appointments, results of developmental screening procedures, current medications, chronic or acute problems, recent labs, and how the patient and the team want Dr. Nelson to assist with each case. The intern then shadows an experienced pediatrician conducting well-child visits to observe the pace and approach used in PC and assists Dr. Nelson with cases presenting in clinic that day: a toddler who screened positive for developmental concerns, a preschool child experiencing separation anxiety, two brothers who are both struggling with attention problems in school, and an adolescent whose diabetes is poorly controlled. At the end of the day the intern and Dr. Nelson discuss how the work aligns with the PC psychology competencies.

Teaching and supervision encompass the two core competencies in the Education cluster. Teaching is a critical role of psychologists in PC settings and encompasses the training of both psychologists and members of other disciplines in implementation of psychological services as part of PC integrated care. PC psychologists are able to complete a needs assessment of students, create from this assessment appropriate learning opportunities, and use teaching methods from other health professions as well as their own. A PC psychologist may be expected to contribute to a medical resident's developing competencies required by the Accreditation Council for Graduate Medical Education (2010; i.e., patient care, medical knowledge, practice-based learning and improvement, systems-based practice, professionalism, and interpersonal skills and communication).

PC psychologists also evaluate the effectiveness of their teaching approaches through the use of summative and formative feedback processes in order to continually

improve. They maximize the learning of their students by facilitating opportunities for training from other health care professionals. These may include opportunities for psychology trainees to observe and participate in clinical activities with other health care professionals such as physicians, clinical pharmacists, nurses, social workers, care managers, and dietitians. PC psychologists train others not only in the treatment of mental health disorders but also in behavioral health interventions focused on health promotion and disease prevention. Finally, PC psychologists serve as educators for health care providers systemwide, increasing understanding about the role of psychological service delivery within integrated care. PC psychologists understand the ethical, legal, and contextual issues of the supervisory role. These include clear expectations of competencies for PC trainees and regular feedback on progress in competency acquisition. Supervision is provided in a variety of formats, including case discussion, direct observation, and precepting, depending on the unique needs of each trainee and each learning context.

Discussion

Over the next decade, there will be expanding opportunities for psychologists to work in PC in fulfilling jobs that have substantial impact on the delivery of health services, the education and training of other health professionals, and health care reform. The distinct elements of the PC setting—the diversity of patients with a range of undiagnosed problems, and the biopsychosocial nature of these problems—offer psychologists an opportunity to provide needed and effective services for a wide range of patients and their families. Psychologists will be expected to have the skill set to address a wide variety of issues and problems in addition to patient mental health concerns: wellness, prevention, and health promotion; acute and chronic condition management; family participation; care coordination; and ways to improve access. Psychologists will be providing services for a higher volume of patients as more individuals are insured in 2014 with the implementation of the Patient Protection and Affordable Care Act (2010). They will need to be competent in team-based care and able to focus on linkages between health and behavior to meet societal needs, including providing services to an increasingly diverse and aging population.

Unfortunately, current educational models and curricula used by many graduate psychology training programs fail to prepare the next generation for providing services in medical settings, especially the rapid-paced PC world. Without a shift in training program focus and postdoctoral continuing education, most psychologists will not have the appropriate skills to effectively work in PC. Likewise, practicing psychologists must be able to evaluate the extent to which they have the knowledge and skills to work in new practice areas and must seek continuing professional development to address competency deficiencies (APA, 2010).

The PC psychology competencies presented in this article were articulated by an interorganizational work

group and incorporate the perspectives of multiple entities invested in psychological practice within PC. It is expected that the competencies articulated can provide a guide for multiple stakeholders. These include not only psychology graduate training programs, faculty, clinical supervisors, and students who wish to ensure that psychology education and training programs are appropriately preparing the next generation for service in integrated interdisciplinary PC but also psychologists who wish to develop skills for PC practice and need a guide for continuing education and professional development. Other stakeholders who may find this articulation of PC psychology competencies useful include clinical and administrative health care leaders and other health care professionals interested in the unique role a PC psychologist can play in PC comprehensive service delivery as well as scientists engaged in needed clinical and educational research and program evaluation to inform educational and clinical policy in the PC setting.

While this competency document provides a roadmap for the near future, it remains a living document to be reexamined at frequent intervals in order to be responsive to the changing health care landscape and evolving opportunities for psychology within collaborative and comprehensive patient care.

Conclusion

The current focus in the United States on health care delivery in the PC setting arises out of a desire to enhance quality care and improve patient outcomes. PC is organizing around team-based care, including psychologists and other behavioral health professionals. It is essential that practicing psychologists understand the mission and scope of newer models of integrated PC being developed in the United States, including accountable care organizations (ACOs; see Table 1) and patient-centered medical homes (PCMHs; see Table 1 as well as other publications such as Centers for Medicare and Medicaid Services, 2013; Nutting et al., 2011).

Practicing psychologists need to be competent in direct clinical service delivery in PC and able to teach other health care disciplines about the unique contributions psychologists can make to integrated PC. Psychologists must be competent in designing research protocols, developing and evaluating behavioral services within PC settings, and serving as administrators and leaders in the health care system of tomorrow. Professional psychology has the opportunity to expand and enhance the breadth and quality of services delivered to the public in the PC setting, providing easy access to expert behavioral health interventions. It is incumbent upon the profession to ensure that psychologists expand their training and skill sets so they are viable, important, and competent team players in PC. PC will certainly be the venue in which the highest percentages of mental health services are provided in the U.S. health care system. Shifting psychological services to PC is critical if patients are to have ready access to high-quality evidence-based psychological services in a destigmatized environment. Graduate and postdoctoral education in professional

psychology must change if it is to ensure that psychologists have the necessary competencies to take their rightful place in integrated interdisciplinary PC. Failure to make this change will leave psychologists out of mainstream 21st-century health care; the void will certainly be filled by other mental health providers.

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