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A PROGRAM EVALUATION OF COMPETENCY TRAINING WITHIN A COLLEGE

STUDENT HEALTH CENTER

by

Kala E. Randazzo

A thesis submitted in partial fulfillment of the requirements for the degree

of

MASTER OF SCIENCE

in

Psychology

Approved:

Susan Crowley, Ph.D. Major Professor Scott DeBerard, Ph.D. Committee Member

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UTAH STATE UNIVERSITY Logan, Utah

2021

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ABSTRACT

A Program Evaluation of Competency Training Within a College Student Health Center

By

Kala Randazzo

Utah State University, 2021

Major Professor: Susan Crowley, Ph.D. Department: Psychology

Integrated primary care (IPC) is a healthcare service delivery system in which behavioral and medical health providers coordinate patient care in primary care settings (O'Donahue et al. 2006). Doctoral clinical, counseling, school, and combined psychology students may pursue training in this growing specialty during their doctoral training. However, our understanding of the success of IPC training at the doctoral level is limited with few studies that have evaluated students' competency outcomes. The current study utilized the Competencies for Psychology Practice in Primary Care (CPPPC) (American Psychological Association, 2015) to evaluate IPC practicum training provided at the Utah State University Student Health Center. Existing student evaluation data, the practicum syllabus, and surveys of multiple stakeholder groups were utilized to evaluate the degree to which training is provided in CPPPC competencies and whether students develop CPPPC competencies following training. Survey participants included 14 practicum students, 4 primary care providers, and the practicum supervisor. Moderate levels of training and competence attainment were found in the Science and Systems clusters, consistently high ratings of training and competence were found in the Professionalism, Relationships, and Application clusters, and minimal evidence of training was found in the Education cluster. Areas where increased training is suggested include

interprofessional/team approach to care, improved communication of expectations for roles of students and primary care providers, increased frequency of communication between students and primary care providers, and teaching various groups about IPC. This study contributes to the understanding of the current state of predoctoral IPC training and the degree to which doctoral psychology students are prepared for careers in IPC.

(134 pages)

PUBLIC ABSTRACT

A Program Evaluation of Competency Training Within a College Student Health Center Kala Randazzo

Integrated primary care (IPC) is a method for providing medical and psychotherapy services within a single primary care setting. Doctoral psychology students pursuing a career in psychotherapy may receive training in IPC as doctoral students. However, the field of IPC has a limited understanding of the current quality of IPC training for doctoral psychology students. The current study utilized professional competency guidelines for practicing psychology in IPC settings to evaluate doctoral training provided at the Utah State University Student Health Center. Doctoral psychology training at the Student Health Center was evaluated for how well it provides training in IPC competencies and how well it develops competencies among students who have competed the training. Competency training provided and developed in doctoral students was measured using existing student evaluations, the training course syllabus, and surveys of 14 doctoral students, 4 medical providers, and the training supervisor. Moderate examples of training and competence skills were found in the Science and Systems competency clusters, consistently high ratings of training and competence were found in the Professionalism, Relationships, and Application clusters, and minimal evidence of training was found in the Education cluster. Future development of training is suggested in the team approach to patient care, communication of expectations for students and medical providers, and teaching about IPC. This study contributes to the understanding of the current state of IPC training and the degree to which doctoral psychology students are prepared for careers in IPC.

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CHAPTER I

INTRODUCTION

Supervised experience is a vital part of a psychologist's training to build competency for entry into the profession (Rodriguez-Menendez et al., 2017). In addition to the generalist training offered at APA-accredited programs, health service psychology programs provide training in specialized areas. One specialty training area that is growing in popularity is integrated primary care (IPC) (Miller, et al., 2019).

IPC is a healthcare service delivery system in which behavioral and medical health providers coordinate patient care in primary care settings (O'Donahue et al. 2006). IPC can vary in degrees of integration, but medical health providers and health service psychologists often share office space, patient medical files, support staff, and responsibility for patient care (Fickel et al., 2007; Heath, et al., 2013). The integrated approach improves the ability of providers to more fully address health problems that patients present (Blount, 2018). The joint provision of mental health treatment by primary care providers and psychologists improves patients' quality of care and follow through with care plans (Brawer et al., 2010; McGough et al., 2016).

In 2015, the American Psychological Association Competencies for Psychology Practice in Primary Care (CPPPC), outlined in the organization's *Report of the Interorganizational Work Group on Competencies for Primary Care Psychology Practice* (American Psychological Association, 2015), were published. These are the current competencies intended to guide training in IPC. The CPPPC were developed to supply behavioral health care providers in IPC with an identified set of knowledge and skills for professional practice. The competencies are intended to be used by students and supervisors in graduate training programs and licensed psychologists seeking guidance in developing or responding to opportunities in IPC (American Psychological Association, 2015). The CPPPC are organized into six clusters: Science, Systems, Professionalism, Relationships, Application, and Education.

While the CPPPC have provided guidance for training, little attention has been given to the evaluation of existing training provided in health service psychology programs. If the goal of IPC psychology is to prepare psychologists to work effectively in integrated settings, it is essential that training sites are evaluated for their ability to help students in building the necessary competencies for practice in IPC settings. Limited research has assessed the competencies students build by completing applied training in primary care settings and no studies were identified that utilized the competency-based training guidelines to assess provided training and student learning outcomes. With the limited data available on IPC training outcomes, it is unknown if IPC training sites are providing the needed training experiences to facilitate competency development in students (Larkin et al., 2016).

The current study evaluated a predoctoral-level IPC training site using a competency-based framework (American Psychological Association, 2015) by gathering data from multiple sources. The objectives of the current evaluation were to assess the perceptions of multiple stakeholder groups (i.e., students, supervisors, primary care providers, competency evaluations) regarding the degree to which 1) competency-based training is offered in the primary care training setting, and 2) students develop competence in areas reflected in the CPPPC.

CHAPTER II

LITERATURE REVIEW

The present literature review will address the following topics: 1) outline the current goals of supervised training in doctoral psychology programs and the need of IPC psychologists, 2) review the development and current state of APA competency-based guidelines for IPC psychology, and 3) describe existing studies evaluating supervised training sites in IPC psychology.

Supervised Training

Practicum Training in Psychology

In training to become licensed health service psychologists, students in clinical, counseling, school, and combined psychology programs participate in supervised practicum training (Rodriguez-Menendez et al., 2017). In line with the American Psychological Association (APA) *Standards of Accreditation for Health Service Psychologists* (American Psychological Association, 2018), APA-accredited health service psychology programs must guide students in acquiring "a general knowledge base in the field of psychology, broadly construed, to serve as a foundation for further training in the practice of health service psychology" (p. 8). Beyond the practice of general psychotherapy, many health service psychology students choose to pursue careers in specialized areas working with specific populations, settings, or clinical approaches (Perry & Boccaccini, 2009). Although generalist training is a requirement of APA-accredited health service psychology programs, most contemporary programs concurrently provide exposure and experience in specialty areas (Larkin et al., 2016). Specialty practicum sites offer training with particular populations (e.g., families,

ADHD), specific therapeutic frameworks (e.g., ACT), and specialty settings (e.g., VA, inpatient). One of the most popular areas of specialized training is integrated primary care (IPC) (Miller et al., 2019).

Specialized Training in Primary Care

In an IPC setting, health service psychologists and trainees work alongside medical health providers in order to jointly treat patients (O'Donahue et al., 2006), and more completely address health problems that patients present (Blount, 2018). Compared to patients receiving care in a general medicine only model, the facilitated consultation process in IPC can help to alleviate a greater number of mental health issues through promoting increased access to care and providing significantly greater improvement in health status (Druss et al., 2001). The physical proximity of primary care providers and health service psychologists is thought to reduce barriers to accessing mental health treatment (Austin, 2012), improving patients' quality of care and follow through with care plans (Brawer et al., 2001; McGough et al., 2016).

The use of primary care for the treatment of mental health concerns has become increasingly common (Kessler et al., 2005). On college campuses, students use primary care as their first point of contact more often than they use campus mental health centers, increasing the need for health service psychologists in IPC settings (Funderburk et al., 2012). In response to the increasing number of patients seeking mental health treatment in primary care, employers are looking for psychologists with training in IPC (Bluestein & Cubic, 2009; Cubic et al., 2012; Hall et al., 2015). Opportunities for psychologists working in primary care settings are predicted to continue expanding (McDaniel et al., 2014), and predoctoral training sites are following the trend. From 2018 to 2019, the proportion of internship sites offering primary care training listed on the Association of Psychology Postdoctoral and Internship Center's directory increased from 30% to 46% (Miller et al., 2019). IPC training opportunities in doctoral psychology programs are also increasing in popularity (Larkin et al., 2016). A 2011 APA task force on primary care training found that 48% of responding programs reported providing education or training in integrated primary care (American Psychological Association, 2011a). However, because of the growing need for health service psychologists in IPC settings, health service psychology training programs are continually encouraged to develop more training opportunities that effectively prepare students to work in IPC settings (Bluestein & Cubic, 2009; Cubic et al., 2012; Hall et al., 2015; Serrano et al., 2018).

As the field of health service psychology develops more training opportunities in IPC psychology, it is essential that the training provided is evaluated for its ability to effectively prepare students in the knowledge and skills necessary for practice in IPC settings (Bluestein & Cubic, 2009; Cubic et al., 2012; Hall et al., 2015). According to the APA, doctoral programs in health service psychology have an obligation to evaluate the ability of their training programs in progressing their students toward attaining professional competencies (Health Service Psychology Education Collaborative, 2013), and for APA-accredited programs the evaluation of students' competencies is a requirement to maintain accreditation (American Psychological Association, 2018). However, this evaluation requirement may not extend to competencies in specialty areas, and specialty training sites in IPC may have room to improve the evaluation of their sites (McDaniel et al., 2014). Without comprehensive evaluations of training, it is unclear if training sites are developing necessary competencies for their graduates' future practice (Larkin et al., 2016). Through the application of profession-guided competency-based training goals for applied practice in IPC, trainers have a strong framework by which to evaluate the training they provide.

Competency-Based Training Guidelines

Competency-Based Training

The education and professional practice of psychology has adopted a *culture of competence* that emphasizes routine assessment of competence at all levels of training and practice (Roberts et al., 2005). As a result, competency-based education and training has gained traction as a method of measuring and promoting effective training in health service psychology (Kaslow et al., 2009). The competency-based approach to training addresses the knowledge, skills, and attitudes (i.e., competencies) that psychologists need to function successfully in professional settings and uses outcome assessment data to determine the quality of training that students receive (McDaniel et al., 2014). Training programs in health service psychology have shifted their focus away from education and curriculum models and toward the identification of professional competencies for students to achieve (France et al., 2008). The APA provides recommendations (Health Service Psychology Education Collaborative, 2013) and accreditation standards (American Psychological Association, 2018) for the broad and general training of health service psychologists based on foundational competencies. However, psychology students seeking careers in IPC settings need to build competencies specific to the specialization (Nash & Larkin, 2012).

Recent efforts by the APA have resulted in identified professional competencies specific to IPC psychology (Cubic, 2012). Although general IPC training goals have

existed for nearly four decades (France et al., 2008), the field previously lacked agreement on the specific competencies IPC psychology students should develop in predoctoral-level training.

Current Guidelines

After recognizing the lack of a single, cohesive document outlining competencies for psychological practice in IPC, then APA president Susan Bennett Johnson PhD commissioned the Interorganizational Work Group on Competencies for Primary Care Psychology Practice and tasked the group with the responsibility of creating the document (Cubic, 2012). In 2012, the work group's initial comprehensive list of competencies for psychologists working in IPC was established (McDaniel et al., 2014).

The current version of Competencies for Psychology Practice in Primary Care (CPPPC) can be found in the *Report of the Interorganizational Work Group on Competencies for Primary Care Psychology Practice* (American Psychological Association, 2015; see Appendix A for the complete CPPPC). The APA list of competencies is intended to be used by psychology training programs and professionals already practicing in IPC settings to guide psychologists in the development of core competencies required for successful practice in IPC (American Psychological Association, 2015). The CPPPC guidelines organize the competencies into six clusters: Science, Systems, Professionalism, Relationships, Application, and Education. Within each competency are essential components that describe the knowledge, skills, and attitudes that make up the competency. Along with each essential component are behavioral anchors that provide examples of successful application of essential knowledge, skills, or attitudes. Table 1 lists the six clusters with their corresponding competencies and example behavioral anchors. For example, within the Application cluster is the competency of practice management. Seven essential components (e.g., 5A.3: Operates at a variety of paces consistent with the needs and realities of primary care) are included within the practice management competency, and at least one behavioral anchor is provided for each essential component to illustrate an example of its application (e.g., 5A.3: Initiates and reviews the behavioral change plan at each appointment).

Table 1

Cluster	Specific Competency	Behavioral Anchor Example
I. Science	1A. Science related to the biopsychosocial approach	Uses scientific literature in the daily primary care practice
	1B. Research/evaluation	Consults on research conducted by interdisciplinary team members
II. Systems	2A. Leadership/ administration	Promotes effective communication and collaborative decision-making
	2B. Interdisciplinary systems	Engages schools, community agencies, and healthcare systems to support optimal patient care
	2C. Advocacy	Demonstrates understanding of where there are opportunities for better integration at community, state, and federal levels
III. Professionalism	3A. Professional values and attitudes	Willing to adapt role and activities in best interest of patient care
	3B. Individual, cultural and disciplinary diversity	Modifies interventions for behavioral health change in response to social and cultural factors
	3C. Ethics in primary care	Identifies the multiple consumers of primary care services and potential role conflicts

Competencies for Psychology Practice in Primary Care (American Psychological Association, 2015)

	3D. Reflective practice/self- assessment/self-care	Evaluates one's own competencies and appropriately seeks support from team members		
IV. Relationships	4A. Interprofessional4B. Building and	Views self as essential team member in care of patient Uses language appropriate to		
	sustaining relationships in primary care	patient's and clinician's education and culture		
V. Application	5A. Practice management	Allocates time based on patient need – not wedded to 50-minute hours		
	5B. Assessment	Quickly identifies problem, degree of functional impairment, and symptoms using focused interviewing skills		
	5C. Intervention	Effectively engages family members or primary care providers in the intervention		
	5D. Clinical consultation	Convenes case conferences as needed on complex cases		
VI. Education	6A. Teaching	Presents at a community health care forum on a common behavioral health issue		
	6B. Supervision	Ensures that training standards meet all accreditation requirements		

The CPPPC (American Psychological Association, 2015) provide a basis for the evaluation of graduate IPC training. These competencies can be used as a foundation for evaluating IPC psychology training sites in order to ensure best practices, favorable student outcomes, and medical providers' and students' satisfaction (Funderburk & Shepardson, 2017; Kaslow et al., 2009).

Evaluation of Integrated Primary Care Training Sites

The empirical investigation of IPC predoctoral training began soon after the Society of Behavioral Medicine and the APA Health Psychology Division were founded in 1978 and has continued to the present (France et al., 2008). The present review of previous work is grouped by those studies that were foundational in IPC training, followed by a more in-depth review of studies that preceded the publication of IPC competencies, and concluding with those evaluations that included the CPPPC framework. Three evaluation studies were identified that assessed predoctoral training and student outcomes in IPC. Two studies (i.e., Cox, Adams, & Loughran, 2014; Funderburk & Fielder, 2013) were completed before the publication of the CPPPC, while the third study (Larkin et al., 2016) was completed after the CPPPC and used the competencies to guide their evaluation. The review of each study provides an overview of the methods, authors' conclusions, competencies evaluated, and limitations. The review of existing studies will conclude with a table summarizing the CPPPC clusters evaluated by each study.

Foundational Studies (Pre-2010)

Early research broadly assessed training in IPC and helped establish the foundational components of predoctoral IPC training. Twenty-six studies were identified that focused on describing training methods and procedures (e.g., Masters et al., 2005; Talen et al., 2002, 2005) and reported improvements in knowledge of primary care after completing IPC practicum training (e.g., Bluestein & Cubic, 2009). However, the early evaluation studies focused on broad overviews of the programs assessed, including program implementation and basic training methods (e.g., classroom training, research projects, stages of practicum training, and evaluation methods), without mention of specific professional competencies. Although the CPPPC were not used to guide early program evaluations, the knowledge, skills, and attitudes identified are often consistent with the CPPPC. For example, Masters and colleagues (2005) identified a training goal of encouraging students to form collaborative relationships with medical providers which is consistent with CPPPC Cluster 4: Relationships. Talen et al. (2002) recognized training outcomes in the areas of organizational and consultation skills (Cluster 2: Systems), case management (Cluster 5: Application), and research/program evaluation (Cluster 1: Science). In a later study, Talen et al. (2005) reported that, in addition to the previously reported training outcomes, students have rated the IPC practicum in the top ten percent regarding site preference over the previous 12 years. Bluestein and Cubic (2009) conducted a brief assessment of student outcomes and satisfaction with their practicum training in the areas of primary care, geriatrics, and at-risk children. The authors reported that knowledge of primary care increased from 50% on the pre-test to 80% on the posttest. However, the knowledge base assessed was unclear and there was no assessment of skills or attitudes.

Pre-CPPPC

Cox et al. (2014) interviewed four predoctoral level counseling psychology practicum students in a community-based IPC practicum using semi-structured interviews to assess the students' learning outcomes. These interviews were successful in documenting what the students learned about the IPC environment, including its high demand on time, fast-paced work style, and assertive communication between providers. In their interviews, students reported that by the end of the practicum training they learned to adjust to the accelerated pace of IPC and had improved their ability to communicate and collaborate with medical providers. A frequent theme in interview responses was the contrast between the IPC and traditional psychotherapy cultures. Students reported that IPC practicum training provided them the opportunity to adjust their work pace to that of IPC by developing brief self-care methods and a focus on collaborative patient care. To improve the training site, the authors suggested that students would have benefitted from more pre-practicum training in IPC basics, exposure to medical staff before entering the practicum, clearer expectations of their roles, better orientation to clinic policies and procedures, and better understanding of how time is used in IPC.

Although the interview questions were developed and utilized before the publication of the CPPPC, learning outcomes found in Cox et al. (2014) had themes consistent with the CPPPC. The majority of the learning outcomes that students reported linked to competencies listed in the Application cluster of the CPPPC. A minority of learning outcomes reported were related to competencies in the Relationship, Systems, and Professionalism clusters, with no mention of outcomes related to the Science or Education clusters. It is unknown if the students interviewed did not build competence in areas related to the Science and Education clusters or if existing learning outcomes failed to be mentioned in interview responses. A second limitation of Cox et al. (2014) is that interviews depended entirely on students' self-reports of their experiences and learning outcomes. Self-report data of competency is limited and often not reflective of evaluations from other sources (Hitzeman et al., 2019; Mathieson et al., 2008). Data from multiple stakeholders (e.g., supervisors, medical providers) would provide a more comprehensive and potentially accurate assessment of student competency.

Funderburk and Fielder (2013) developed a 14-item questionnaire designed to assess practicum students' opinions about IPC practicum training they received at Syracuse University. Students reported that they would recommend the practicum to others and that it helped them gain confidence in their clinical skills. Students also reported that the practicum offered opportunities to adapt to the pace of IPC through conducting problem-focused assessments, implementing brief interventions, applying skills in triage, and quickly developing rapport with patients. Students also endorsed that they developed skills in effective communication with medical professionals, including collaborating with primary care providers in assessment and treatment, learning how to handle frequent interruptions from medical staff, and presenting cases to medical audiences. Students less strongly endorsed that the practicum experience enhanced their knowledge of psychopharmacology. Finally, practicum students reported that they liked group supervision and benefitted from medical supervision.

Students surveyed in Funderburk and Fielder (2013) reported that the practicum helped them to build skills that align with the CPPPC Relationships and Application clusters (e.g., brief assessment and intervention, collaboration with primary care providers), while development of competence in the Science cluster was moderately endorsed (e.g., knowledge of psychopharmacology). Funderburk and Fielder's 14-item survey did not assess competencies in the Systems or Education clusters, and only included one item for the Science and Professionalism clusters, respectively. Similar to the methods of Cox et al. (2014), Funderburk and Fielder's (2013) survey was developed and utilized before the development of the CPPPC, and reports of practicum training opportunities and skill development were entirely based on student self-report data. Responses from multiple stakeholders would improve the ability of this survey to make conclusions about the quality of training provided and the development of students' competencies.

Because the evaluation materials in Cox et al. (2014) and Funderburk and Fielder (2013) were developed before the CPPPC were published, the guidelines were not able to be utilized. While the building of some competencies in the CPPPC can be inferred from the results of Cox et al. (2014) and Funderburk and Fielder (2013), the Science and Education competency clusters were not well assessed.

Post-CPPPC

One study was identified in which training sites were evaluated for their abilities to help students acquire competencies outlined in the CPPPC (Larkin et al., 2016). In their program evaluation of the University of Arkansas' Clinical Psychology doctoral program, Larkin et al. (2016) described how primary care competencies are built through program offerings of focused IPC training in research, elective clinical seminars, and practicum opportunities. Similar to Cox et al. (2014) and Funderburk and Fielder (2013), Larkin et al. (2016) found that competencies in the Relationships and Application clusters were built through participation in IPC practicum opportunities. Through their practicum training, predoctoral students in the University of Arkansas' Clinical Psychology program learned to apply assessment and intervention techniques within the IPC context and value interprofessional, team-based care. Additionally, Larkin et al. (2016) reported that the practicum opportunity at the University of Arkansas helped students build skills in the Professionalism cluster by building a professional identity as part of a primary care team. The development of knowledge in the Science (i.e., knowledge of biological, psychological, and social bases of health and illness) and Systems (i.e., knowledge of

roles and positions of other health care professionals) clusters was addressed via required and elective courses, while no evidence of training in the Education cluster was found in predoctoral training.

Larkin et al. (2016) provided a broad outline of a single doctoral program in clinical psychology that can be used to guide other programs in the review and revision of their curriculum to improve IPC training. However, the authors focused only on training opportunities offered and did not assess the success in building students' competence, particularly in their practicum training. To add to the literature on understanding how well predoctoral IPC training prepares students, student competency should be assessed through the evaluation by multiple stakeholder groups.

Conclusions from Literature Review

Few studies have been conducted evaluating predoctoral training in IPC, with only three identified as evaluating the skills and knowledge IPC practicum training builds in predoctoral students. Among those three, two assessed learning outcomes by interviewing (Cox et al., 2014) and surveying (Funderburk & Fielder, 2013) students without the guidance of the CPPPC, while the remaining study (Larkin et al., 2016) followed the CPPPC guidelines in evaluating the presence of competency-based training goals but did not assess learning outcomes. None of the three studies utilized multiple stakeholder groups in the evaluation of student competency following IPC practicum training.

Competency building in the Professionalism, Relationships, and Application clusters was found in all three program evaluation studies (Cox et al., 2014; Funderburk & Fielder, 2013; Larkin et al., 2016) while the Science and Systems clusters were moderately endorsed. None of the program evaluation studies found evidence of

competency building in the Education cluster. Table 2 illustrates the clusters evaluated or endorsed by participant responses in each of the three studies.

Table 2

CPPPC Clusters	Evaluated	or End	'orsed by	[,] Participant	Responses
----------------	-----------	--------	-----------	--------------------------	-----------

	CPPPC Cluster					
			Profess-	Relation-	App-	
Study	Science	Systems	ionalism	ships	lication	Education
Cox et al. (2014)	-	Е	Е	E	Е	-
Funderburk and Fielder (2013)	Е	-	Е	E	Е	-
Larkin et al. (2016)	E	Е	Е	E	Е	NE

E = Evidence of competency training

NE = No evidence of competency training

- = No survey/interview items utilized to evaluate this cluster

The fact that none of the three studies found evidence of competency building in the Education cluster is not surprising. Because the primary focus of predoctoral practicum training is not on building skills in teaching or supervision, the two core competencies within the Education cluster, it is unlikely that predoctoral practicum students would report development of this competency. However, it is possible that students begin developing some specific competencies in teaching at the predoctoral level. Specific competencies within the Education cluster that could apply to predoctoral training include understanding teaching approaches used by other health professions about behavioral health issues (i.e., 6A.2), knowledge of strategies to evaluate effectiveness of teaching methods in IPC (i.e., 6A.3), and participating in the education and training of multiple stakeholders in the larger health care system about IPC (i.e., 6A.6). Displays of competence in teaching could include adapting to training models of other disciplines in primary care, educating other health care professionals on the role of psychologists in IPC, obtaining summative and formative feedback, presenting information about behavioral health issues to the public, and providing education to other health care professionals about mental health treatment. These behavioral anchors are all possible roles of trainees at the predoctoral level, and it would be ideal to assess competencies in the Education cluster at the predoctoral level.

The current literature provides a basic understanding of predoctoral training in IPC. However, no studies were found that assessed the degree to which competencybased training is offered to and successfully developed in predoctoral practicum students. Among the studies that do address competency-based training outcomes, students' development of skills and knowledge are based entirely on self-report. With so few published evaluations of training programs based on profession-guided competencies, the state of practicum training and student learning outcomes in IPC competencies is in its infancy.

Purpose of the Present Study

The current study evaluated a predoctoral-level IPC training site using a competency-based framework (American Psychological Association, 2015) and data from multiple sources. The objectives of the current evaluation were to assess the perceptions of multiple stakeholder groups (i.e., students, supervisors, primary care providers) regarding the degree to which 1) competency-based training is offered in a primary care training setting, and 2) students develop competence in areas reflected in the CPPPC.

Research Questions

The study addressed the following questions:

- To what degree is training provided in the CPPPC competencies based on student, primary care provider, supervisor, and syllabus ratings?
- 2. To what degree are competencies achieved at the end of the practicum training based on student, supervisor, and primary care provider reports?

CHAPTER III

METHODS

The present study gathered data from multiple sources to identify strengths and weaknesses of training provided at the Utah State University Student Health Center (USU SHC) practicum using a competency-based framework.

Participants

Eligible participants included all USU SHC practicum students from 2015-2020 (N = 26), and USU SHC primary care providers (i.e., physicians, psychiatrists, physician assistants, and nurse practitioners) (N = 5). To train at the SHC practicum, students must have successfully completed a minimum of two semesters of supervised training in the Combined Clinical/Counseling PhD program. SHC primary care providers eligible for the study must have been employed at 75% time or more at USU SHC since 2015, be primarily responsible for patient care, and have the ability to comment on past student performance. Fifty-four percent of SHC practicum students completed the survey (n = 14) and 80% of SHC primary care providers completed the survey (n = 4). Two SHC practicum student participants were excluded from analysis for not reporting any competency ratings, resulting in a final completion rate of 46% (n = 12). See Table 3 for demographic information for students and provider participants.

Table 3

	SHC Practi	cum	SHC Primary Care		
	Student	S	Providers $(n = 4)$		
	(n = 12))			
	M(SD)	п	M(SD)	п	
Age	29.2 (2.9)		54.5 (14.8)	2	
	Percent	п	Percent	п	
Sex			10100111		
Female	66.7%	8	50%	2	
Male	16.7%	2	0%	0	
Not reported	16.7%	2	50%	2	
Ethnicity					
White	91.7%	11	25%	1	
Other	0%	0	0%	0	
Not reported	8.3%	1	75%	3	
Current Student Status					
Pre-internship student	58.3%	7			
Currently on internship	16.7%	2			
Post-internship, student	0%	0			
Post-internship, graduated	16.7%	2			
Not reported	8.3%	1			
Number of Years in SHC Practicum					
One	75%	9			
Тжо	25%	3			
Graduation Year					
2018	8.3%	1			
2019	0%	0			
2020	0%	0			
2021	16.7%	2			
2022	33.3%	4			
2023	25%	3			
Not reported	16.7%	2			
Years of Employment at SHC					
Less than 5 years			0%	0	
5-7 years			50%	2	
8-10 years			0%	0	
10+ years			50%	2	

Participant Demographics SHC Practicum Students and SHC Primary Care Providers

Setting

The integrated primary care practicum at USU resides in the Student Health Center on campus and is intended to prepare doctoral psychology students to work in integrated settings. The program was implemented in 2002 in order to increase student follow-through with mental health services, reduce waitlists at the university counseling center, improve accessibility, and increase satisfaction among providers and patients (Pratt et al., 2012). Between 2015-2020, the USU SHC served an average of 500 patients weekly, with roughly 20 receiving mental health services on site weekly. Mental health services are provided by 2-4 advanced doctoral students each semester. All doctoral students are enrolled in the Combined Clinical/Counseling Psychology PhD program at USU and receive practicum credit for providing mental health services and completing a two-semester long class. Students are supervised by a licensed psychologist on a weekly basis in individual and group supervision. Doctoral students work in the clinic 10-20 hours per week. Each student maintains an average client load of 8, with direct client contact consisting of 5 consultations and 3 short-term therapy clients each week.

Medical services are provided by the five primary care providers on site, including physicians, physician's assistants, nurse practitioners, and nurses. Primary care providers refer clients presenting with behavioral health concerns to psychology doctoral students and respond to consultation requests as needed. Clients referred for mental health services are often in need of immediate intervention (e.g., suicidal ideation and acute psychological distress). Most clients referred for mental health services are walked to the psychology doctoral student's office to be seen immediately. After receiving a referral from a primary care provider, the psychology doctoral students provide shortterm intervention, refer the client to other campus or community-based resources, or provide time-limited therapy as needed. Therapy sessions are approximately 30 minutes long and clients are, on average, seen for 6-10 sessions. Doctoral students prioritize addressing the concerns of the client and referring provider, and follow-up with the provider to coordinate care. The training provided is based on a short-term therapy model and clients in need of on-going services are referred to other campus and community resources when available. However, when other resources have reached capacity, SHC doctoral students continue to provide services when possible.

Data Sources

Student Survey

The student survey was developed to assess doctoral students' perceptions of the degree to which competency-based training is offered and their competency developed at the SHC. The CPPPC (American Psychological Association, 2015) were used to develop 37 survey items that targeted the six competency clusters. Survey items utilized the language found in the CPPPC, and at least one item was included for each specific competency found within the six clusters. Included with each specific competency item is a behavioral anchor example taken from the CPPPC. For each competency item, students were asked to indicate how much training was provided at the SHC during their applied training, with five Likert-style answer options ranging from *no training provided* to *extensive training provided*. If students indicate that training was provided, they are then asked to rate their level of competency in that skill at the end of their applied training at the SHC. Ratings for competency included *competency not developed, novice, novice/intermediate, intermediate, intermediate, advanced, advanced, and beyond*

advanced. Behavioral anchors were provided for each competency rating based on the definitions used in the program's practicum evaluation (Hatcher & Dudley Lassiter, 2005). Appendix B lists all 37 competencies included in the student survey.

The student survey also included items assessing students' interest in integrated primary care before and after applied training at the SHC, their current role and responsibilities, and a rating of how well they believe their training at the SHC prepared them for professional work in integrated primary care. Demographic information was collected including students' histories of applied training in the USU Combined Clinical/Counseling Psychology Program. See Appendix C for the complete student survey. Upon completion of the survey students were eligible for a ten-dollar Amazon gift card if they chose to share their email address.

Primary Care Provider Survey

The primary care provider survey was developed to assess primary care providers' perceptions of training provided and the degree to which students develop competence following applied training at the SHC. Providers were asked to rate the competency level across domains of students who completed the SHC applied training. One competency ratings item was included for each cluster, with the exception of the Application cluster. Because the Application cluster includes a high number of competencies, and because Application competency is a primary focus of predoctoral training, three survey items were included in the Application competency areas of practice management, assessment and intervention, and clinical consultation. Participants were given the selection of five Likert-style answer options ranging from *competency not developed* to *extremely competent* and an *NA* option, in the event that providers do not have the needed information to provide an informed rating. See Appendix D for the primary care provider survey. Upon completion of the survey primary care providers were eligible for a ten-dollar Amazon gift card if they chose to share their email address.

Supervisor Evaluations

De-identified clinical skills evaluations completed by the primary supervisor for all students who trained at the SHC between 2015 and 2020 were utilized as an evaluation of student competency attainment. The SHC clinical skills evaluation utilizes a rating scale with *Novice*, *Intermediate*, *Advanced*, *Proficient*, and *Expert*, and all transitional ratings (e.g., *Intermediate/Advanced*) as options. Ratings are left blank if the supervisor determines that insufficient data or training are provided to provide a competency rating. The most recent practicum evaluation completed at the SHC was utilized and only a single evaluation was used for each student.

Items from the program's clinical skills evaluation form were mapped onto the 37 competencies identified in the CPPPC, resulting in 17 matching pairs of CPPPC and evaluation items. The 17 pairs of CPPPC competencies and clinical skills evaluation items were sent to three licensed psychologists for independent review to assess the appropriateness of the item match. No concerns were raised. Appendix B lists all competencies that students were asked to rate and the 17 corresponding evaluation items that were obtained from supervisor evaluations. The Director of Clinical Training of the Combined Clinical/Counseling PhD program identified SHC student evaluations, and a graduate researcher input the de-identified data into the Qualtrics survey. See Appendix E for the clinical skills evaluation rating form used in Qualtrics.

Syllabus Analysis

The SHC practicum course syllabus from academic year 2019-2020 was analyzed to identify the training provided in CPPPC competencies and represented in the written document. The syllabus rating form was completed by two researchers to rate the presence or absence of each competency in the training and expectations outlined in the syllabus. See Appendix F for the syllabus rating form.

Supervisor Interview

An interview was conducted with the supervisor at the SHC. A structured interview protocol was used to augment the syllabus review. The interview briefly reviewed each competency and asked the supervisor where, how much, and to what degree students are offered training in the identified competency. In addition, the interview with the supervisor was used to clarify points of confusion regarding the syllabus review and to gather current SHC client and student statistics. See Appendix G for all supervisor interview questions.

Procedure

A list of USU Combined Clinical/Counseling Psychology PhD students enrolled between 2007 and 2020 was obtained from the USU psychology department. The SHC practicum supervisor identified students who completed practicum training at the SHC and were eligible to participate in the study. Identified students were contacted via email with a link to complete the 30-minute student survey via Qualtrics. Four follow up emails were sent to unfinished respondents over a four-month period. Students were asked to provide informed consent before completing the student survey and no identifying information was collected. Following completion of the survey, participants were redirected to a separate Qualtrics survey not linked to previous survey responses where they were given the option to provide an email address where a \$10 Amazon gift card could be delivered. If participants chose to provide an email address to receive compensation, email addresses were stored separately from survey data and destroyed after the study closed.

Eligible SHC primary care providers were identified by the SHC practicum supervisor. Eligible primary care providers were contacted via email and invited to participate in the 10-minute primary care provider survey either online via Qualtrics or over the phone. All respondents opted to complete the survey via Qualtrics. Four follow up emails were sent to unfinished respondents over a three-month period. Participants provided informed consent before completing the survey and were redirected to a separate Qualtrics survey not linked to previous survey responses where they could provide an email address for \$10 Amazon gift card compensation.

Supervisor evaluations were accessed by the Combined Clinical/Counseling Psychology PhD program's Director of Clinical Training. A separate Qualtrics survey was then utilized to gather ratings on CPPPC-linked competencies from the supervisor evaluations.

The SHC practicum course syllabus from academic year 2019-2020 was obtained from the SHC supervisor. The syllabus rating form was completed by two raters. The raters briefly discussed points of disagreement, but without the goal of seeking consensus. Instead, points of disagreement on ratings were identified as points of discussion for the SHC supervisor interview. Following the syllabus review, the primary
researcher completed a 45-minute interview with the SHC supervisor via a video conference provider.

Analysis Plan

The first objective was to assess the degree to which competency-based training is offered in the USU SHC. To address this objective, descriptive statistics were used to summarize student ratings, primary care provider ratings, syllabus ratings, and supervisor reports of training offered in CPPPC competencies. Following data collection, student ratings were converted from descriptive labels to numerical ratings for analysis (i.e., 1 =*NA/No training provided*, 2 = *Minimal training*, 3 = *Moderate training*, 4 = *Substantial training*, 5 = Extensive training). Frequencies, standard deviations, and measures of central tendency are reported. The second objective was to assess students' development of competence in areas reflected in the CPPPC. Development of competence was assessed through student ratings, primary care provider ratings, and supervisor evaluations of student competence. First, all competency ratings were converted to numerical scores in the student survey (i.e., 1 = Competency not developed, 2 = Novice, 3 = Intermediate, 4 = Advanced, 5 = Beyond advanced) and supervisor clinical skills evaluations (i.e., 1 = Competency not developed, 2 = Novice, 3 = Intermediate, 4 = Advanced, 5 = Proficient, 6 = Expert). Because existing supervisor clinical skills evaluations utilized a broader rating scale than the scales provided in the student and primary care provider surveys, all ratings above Advanced (i.e., Proficient and Expert) are described as *Beyond Advanced*. Frequencies, standard deviations, and measures of central tendency were used to describe ratings among the three groups. Student reports of competency training provided and competence attained were not evaluated based on

number of years of training competed at the USU Student Health Center practicum. Student participants reported the number of training years completed at the SHC, with 75% having completed one year and 25% having completed two years. Differences in reports of training provided and competency attained through SHC training may exists between these groups, however analyses of these differences were not conducted to protect participant privacy.

CHAPTER IV

RESULTS

The current study gathered data from multiple sources to assess 1) to what degree training is provided consistent with CPPPC competencies and, 2) to what degree competencies are built in the SHC practicum training.

Training Provided

The first research question asked to what degree the training provided at the SHC is consistent with CPPPC competencies. Results regarding CPPPC competency training offered at the SHC practicum were gathered from PhD student ratings, primary care provider ratings, a syllabus review, and supervisor interview responses.

Student Survey

Students were asked to rate how much training is provided at the SHC practicum in select CPPPC competencies. Students were given a scale ranging from *NA/No training provided* (1) to *Extensive training provided* (5). Means and standard deviations for all student ratings are presented in Table 4. Students rated competencies in the Education cluster (M = 1.9, SD = 1.0) and competency 4A.4 (i.e., Able to assess team dynamics and coach teams to improve functioning) (M = 1.5, SD = 0.8) as having the least amount of training. Overall, the Application cluster (M = 3.7, SD = 1.2) and Professionalism cluster (M = 3.5, SD = 1.1) were rated as having higher amounts of training compared to other clusters. Students rated the following competencies as having *Substantial* to *Extensive* training with mean ratings greater than 4.0: Effectively uses current evidence-based interventions appropriate for PC to treat health and mental health related issues (5C.3); Identifies patient's needs and rationale for appointment rapidly (5B.4); Scientific mindedness (1A.1); Values interprofessional team approach to care (4A.1); Develops collaborative relationships to promote healthy interprofessional team functioning characterized by mutual respect and shared values (4A.3); Uses biopsychosocial model to provide effective patient education and communication (5C.5); and Bridges appropriately between behavioral services offered in PC and specialty mental health and community resources (5C.9).

Table 4

Sile statents faings of erric fraining frontact (n 12)	Degree of Training
CPPPC Competency	Provided
	M (SD)
I. SCIENCE	3.1 (1.2)*
1A.1 Scientific Mindedness: values a scientific foundation the practice of PC psychology	4.2 (0.6)
1A.2 – 1A.5 Considering the biological, cognitive, affective behavioral, and developmental aspects of health and illness	3.7 (0.9)
1A.6 – 1A.7 Considering sociocultural, socioeconomic, and family factors of health and illness	2.8 (1.1)
1B.1 Ability to conduct research in PC setting	3.0 (1.2)
1B.4 Ability to conduct research within the context of an interdisciplinary team	2.4 (1.6)
II. SYSTEMS	3.1 (1.2)*
2A.4 Demonstrates and promotes effective communication in a range of leadership roles	3.8 (0.8)
2B.1 Appreciates that PC takes place in the larger "healthcare neighborhood," within the community and social context	3.2 (1.1)
2C.1 Demonstrates knowledge of health care policy and its influence on health and illness and PC services	2.3 (1.1)
III. PROFESSIONALISM	3.5 (1.1)*

SHC Students' Ratings of CPPPC Training Provided (n = 12)

3A.2 Values the culture of the PC setting and conveys an attitude of flexibility	3.9 (1.0)
3B.2 Identifies the relationship of social and cultural factors in the development of health problems	3.2 (1.3)
3C.1 Identifies and addresses the distinctive ethical issues encountered in PC practice	3.5 (1.0)
3D.2 Understands importance of self-assessment in PC setting	3.8 (1.1)
3D.3 Understands importance of health professional self-care in PC	3.3 (1.3)
IV. RELATIONSHIPS	3.4 (1.4)*
4A.1 Values interprofessional team approach to care	4.2 (0.8)
4A.3 Develops collaborative relationships to promote healthy interprofessional team functioning characterized by mutual respect and shared values	4.2 (0.7)
4A.4 Able to assess team dynamics and coach teams to improve functioning	1.5 (0.8)
4B.1 Understands the importance of communicating clearly, concisely, respectfully in a manner that is understandable and meaningful to various audiences (e.g., clinicians, patients, staff)	3.9 (0.7)
V. APPLICATION	3.7 (1.2)*
5A.2 Applies principles of population-based care along a continuum from prevention and wellness to subclinical problems, to acute and chronic clinical needs	3.8 (0.6)
5A.3 Operates at a variety of paces consistent with the needs and realities of PC	4.0 (1.0)
5A.4 Can co-interview, co-assess, and co-intervene with other PC providers	3.4 (1.1)
5B.1 Selects and implements screening methods using evidence-based assessment measures to identify patients at risk or in need of specialized services	3.5 (1.4)
5B.3 Using assessment measures while simultaneously incorporating psychological, behavioral, and physical components of health and well-being	4.0 (1.0)
5B.4 Identifies patient's needs and rationale for appointment rapidly	4.4 (0.7)
5C.2 Offers interventions that encourage proper use of health care resources	3.3 (1.3)

5C.3 Effectively uses current evidence-based interventions appropriate for PC to treat health and mental health related issues	4.5 (0.8)
5C.4 Offers and solicits evidence-based interventions that can be reinforced and monitored by all PC team members	3.1 (1.1)
5C.5 Uses biopsychosocial model to provide effective patient education and communication	4.1 (1.1)
5C.6 Targets evidence-based interventions to improve chronic care management	2.6 (1.2)
5C.9 Bridges appropriately between behavioral services offered in PC and specialty mental health and community resources	4.1 (1.0)
5D.3 Helps PC team conceptualize challenging patients in a manner that enhances patient care	3.3 (1.3)
5D.4 Tailors recommendations to work pace and environment of PC	3.0 (1.2)
5D.5 Follows up with other PC clinicians as indicated	3.9 (1.2)
VI. EDUCATION	1.9 (1.0)*
6A.1 Understands and is able to apply teaching strategies about PC psychology	2.5 (1.3)
6A.2 Completes needs assessment and understands teaching approaches used by other health professions about behavioral health issues	1.9 (0.8)
6A.4 Understands importance of and facilitates teaching of psychology trainees by other health care professionals	2.0 (1.0)
6A.6 Participates in the education and training of multiple stakeholders in the larger health care system about PC psychology	1.4 (0.7)
6B.1 Understands the ethical, legal, and contextual issues of the supervisor role in PC	1.7 (1.1)
Note. $1 = NA/No$ training, $2 = Minimal$ training, $3 = Moderate$ training, $4 = training$, $5 = Extensive$ training	- Substantial

training, 5 = *Extensive training* *Mean values calculated from competency ratings within respective cluster

In their ratings of overall quality of training, the majority of students rated the

SHC practicum as very good or excellent. No students endorsed the two lowest rating

options (i.e., poor or fair). See Table 5.

Training Quality	n (%)
Excellent	2 (16.7%)
Very good	6 (50%)
Good	3 (25%)
Fair	0 (0%)
Poor	0 (0%)
No response	1 (8.3%)

SHC Students' Ratings of Overall Quality of Training Provided (n = 12)

Students were given the opportunity to select from a list of 17 CPPPC competencies and indicate in which competencies they believe more training should be provided. No students offered suggestions in the free reponse section. One participant reported that there are no competencies where they believe more training should be offered, and one participant did not provide a response. However, every other participant endorsed at least two competencies where training could increase. The most frequently selected competencies included interprofessional/team approach to care (n = 6); advocacy (n = 5); individual, cultural, and disciplinary diversity (n = 5); and teaching (n = 4). See Table 6.

Table 6

CPPPC Competencies Where Students Believe More Training Should be Provided (n = 12)

CPPPC Competency	n (%)
1A. Science related to the biopsychosocial model	0 (0%)
1B. Research in primary care	3 (25%)
2A. Leadership/administration	1 (8.3%)
2B. Interdisciplinary systems	3 (25%)
2C. Advocacy	5 (41.6%)
3A. Professional values and attitudes of primary care	1 (8.3%)
3B. Individual, cultural, and disciplinary diversity	5 (41.6)
<i>3C. Ethics in primary care</i>	2 (16.7)
3D. Reflective practice/self-assessment/self-care	2 (16.7%)

4A. Interprofessional/team approach to care	6 (50%)
4B. Building and maintaining relationships in primary care	0 (0%)
5A. Practice management	1 (8.3%)
5B. Assessment	0 (0%)
5C. Intervention	0 (0%)
5D. Clinical consultation	1 (8.3%)
6A. Teaching	4 (33.3%)
6B. Supervision	3 (25%)
Other (please specify)	0 (0%)
There are no areas where this practicum should provide more extensive training*	1 (8.3)
No reponse	1 (8.3%)

Note. Participants were able to choose multiple options; percentages will not add to 100

*Exclusive response option, cannot be selected with any other response option

Finally, students were asked to rate their interest in pursuing a career in integrated primary care psychology before and immediately following SHC practicum training using a scale from 1 to 5, with 1 being *no interest* in pursuing a career in primary care psychology and 5 being *very interested* in a career in primary care. A paired samples t-test was conducted to assess change in student interest. Students' interest significantly increased following their training at the SHC (M = 4.0, SD = 1.4) compared to interest before completing training (M = 3.2, SD = 1.3), t(9) = 2.45, p = 0.04.

Primary Care Provider Survey

Primary care providers were asked to report on various facets of their contact with psychology PhD students at the SHC. The data are summarized in Table 7. Providers reported consultations with psychology PhD students *less than once a month* (n = 2) to *once a month* (n = 2). All primary care providers reported moderate frequency of providing and receiving information from psychology PhD students, ranging from *seldom* to *often*. Three of the four providers reported consulting with psychology PhD students most frequently during the management of short-term clients, and one participant

reported most often consulting with psychology PhD students when a patient presents

with a crisis.

Table 7

Prima	ry Care	Provider	Contact	with F	Psycho	ology	PhD	Students	(n = 4)	1)
-------	---------	----------	---------	--------	--------	-------	-----	----------	---------	----

	Percent	n
Frequency of consultations with psychology PhD student		
providers		
Less than once a month	50%	2
Once a month	50%	2
More than once per month	0%	0
Frequency of <i>providing</i> information on referred patients to the		
psychology PhD student providers		
Never	0%	0
Seldom	25%	1
Sometimes	50%	2
Often	25%	1
Always	0%	0
Frequency of <i>receiving</i> information on referred patients to the		
psychology PhD student providers		
Never	0%	0
Seldom	50%	2
Sometimes	25%	1
Often	25%	1
Always	0%	0
Phase of care when primary care providers most often consult		
with psychology PhD student providers		
When patient terminates care	0%	0
When patient presents with a crisis	25%	1
During long term management	0%	0
During short term management	75%	3
Assessment	0%	0

Providers were asked to report the percentage of information they receive from psychology PhD students in four categories of communication modalities. Providers 1 and 2 reported spending the majority of their time communicating through reports on patience status and direct face-to-face conversation, respectively. Provider 3 reported receiving 60% of patient information through phone calls and 40% through reports on patient status. Provider 4 did not complete the ratings. Based on what they did report, the majority of information is received through direct face to face communication. All four providers reported that no information is received through regular meetings with the psychology PhD students. This finding is not surprising since the IPC model utilized at the SHC does not require that students meet regularly with primary care providers or attend staff meetings and instead utilizes brief communication based on client need. Training at the SHC also encourages students to utilize the communication methods preferred by each primary care provider, respectively. Provider survey results reflect these training emphases as shown in Table 8.

Table 8

Percentage of Information Regarding Referred Patients Received From Psychology PhD Student Provider Regarding Shared Patients (n = 4)

Mode of contact	Provider 1	Provider 2	Provider 3	Provider 4
Reports on patient status	90%	0%	40%	5%
Direct face to face	10%	95%	0%	20%
Phone calls regarding patients	0%	5%	60%	0%
Regular meetings with PhD student provider	0%	0%	0%	0%

When asked to rate the overall quality of training provided at the SHC, all four providers reported different ratings. Response options included *poor*, *fair*, *good*, *very good*, and *excellent*. Each rating except *poor* was endorsed by one provider. Providers were asked to select CPPPC competency areas in which they believe students should receive increased training. Two providers did not select CPPPC competencies and instead provided open ended responses. Of these two providers, one recommended changes to program training to improve coordination of care between providers and PhD psychology

students and the other suggested that students overall struggle to manage client volume. Two providers selected CPPPC competencies from the provided list, including professional values and attitudes of primary care, assessment, and intervention.

Syllabus Ratings

The two primary researchers individually completed syllabus ratings forms, then met for 30 minutes to discuss ratings. Ratings indicating the presence of competency training were provided only when explicit evidence of training was listed on the practicum syllabus. Researchers avoided using prior knowledge of the practicum course when providing ratings Two areas of disagreement were found during discussion in competencies 2A (Leadership/Administration) and 2B (Interdisciplinary Systems). After discussion, both areas were marked as not having evidence of training present in the syllabus. It is important to note that syllabus ratings of competency training do not indicate the frequency, degree, or quality of training, and the absence of competency language in the practicum syllabus does not indicate the absence of training. Evidence of all competency areas was found with the exception of leadership/administration, interdisciplinary systems, advocacy, individual, cultural and disciplinary diversity, and supervision. Syllabus ratings are presented on Table 9 below.

Table 9

	Present in syllabus?
Competency	(Y/N)
1A. Science related to the biopsychosocial approach	Y
1B. Research/evaluation	Y
2A. Leadership/administration	Ν
2B. Interdisciplinary systems	Ν
2C. Advocacy	Ν
3A. Professional values and attitudes	Y

Presence of CPPPC Competencies in SHC Practicum Syllabus

3B. Individual, cultural and disciplinary diversity	Ν
3C. Ethics in primary care	Y
3D. Reflective practice/self-assessment/self-care	Y
4A. Interprofessional	Y
4B. Building and sustaining relationships in primary care	Y
5A. Practice management	Y
5B. Assessment	Y
5C. Intervention	Y
5D. Clinical consultation	Y
6A. Teaching	Y
6B. Supervision	Ν

Y = Evidence of competency training in syllabus

N = No evidence of competency training

Supervisor Interview

The supervisor interview was utilized to augment the syllabus review and provide additional detail concerning competency-based training in the USU SHC practicum. The primary researcher met with the SHC supervisor via video conference. The SHC supervisor was asked where, how much, and to what degree training is provided in each CPPPC competency area. The SHC supervisor was familiar with the CPPPC competency clusters prior to the interview, and the interviewer included summary information regarding the essential components for each competency before the supervisor was asked to respond. The interview was recorded for future review and the interviewer transcribed responses as the supervisor answered questions. Following the interview, the SHC supervisor provided additional information in a follow-up email regarding Practice Management competency training. Additionally, he reviewed a summary of his responses for accuracy. No suggestions for edits were made upon review. A summary of the information provided by the SHC supervisor regarding each competency areas is presented below by competency.

1A. Science Related to the Biopsychosocial Approach

A strong emphasis is placed on training in this area. Training includes weekly discussions on the biopsychosocial model and the relationship between medications and mental health.

1B. Research/Evaluation

No training is provided on conducting research in IPC. A strong emphasis is placed on selecting evidence-based evaluation measures for every client in every session. Training is provided in tracking client outcomes, using empirically based measures in client assessment, and utilizing current research in case presentations.

2A. Leadership/Administration

Training in leadership and administration was described as "modest". Students returning to this practicum for a second year of training have some leadership opportunities through training new practicum students in basic practicum routines, expectations, and other basic day-to-day advice. This informal "junior mentorship" role provides training in leadership communication for a select group of advanced practicum students. However, there is no formal leadership or administrative role available to practicum students. Students are introduced to leadership and administration topics in the classroom. Specifically, lectures cover the topics of the organizational structure of IPC and the position of psychology within IPC settings.

2B. Interdisciplinary Systems

Training at the SHC maintains a large focus on the functioning of interdisciplinary teams in IPC. Training in this area is regularly provided in weekly one-

on-one supervision and team meetings. Training on resources available within the local community is provided during supervision based on client need.

2C. Advocacy

Moderate training in advocacy is provided to students as a natural outcome of participating in the IPC. Students are not directly trained to advocate for IPC, however most students leave this practicum as advocates of the IPC model of healthcare delivery. After completing SHC practicum training, students demonstrate knowledge of the benefits and importance of IPC.

3A. Professional Values and Attitudes

Professional values and attitudes are themes that exists in a large portion of training. Training provides students with an in-depth exposure to IPC which leads most students to value the culture of IPC. Essential component 3A.2 (i.e., values the culture of the IPC setting and conveys an attitude of flexibility) was endorsed by the SHC supervisor, but essential component 3A.1 (i.e., consolidates professional identity as an IPC psychologist) was not. SHC practicum students do not always pursue a career as an IPC psychologist. Students in this practicum are early in their applied clinical training, therefore consolidating their professional identity as an IPC psychologist is not a goal of training.

3B. Individual, Cultural, and Disciplinary Diversity

A strong focus of training is placed on individual, cultural, and disciplinary diversity. Training is routinely provided in weekly individual and group supervision, and a classroom lecture is devoted to the topic of individual and cultural diversity. Students help their clients with a variety of mental health problems which necessitate the understanding of cultural aspects of health. Disciplinary diversity is discussed throughout training in the IPC model.

3C. Ethics in Primary Care

Ethics in primary care is a frequent topic in individual and group supervision. Formal training is provided in a classroom lecture and multiple required training resources are devoted to this topic.

3D. Reflective Practice/Self-Assessment/Self-Care

"Adequate" training provided in this area. When describing his rating of training provided in reflective practice/self-assessment/self-care, the SHC supervisor stated, "I would give us a B". One lecture is devoted to self-care and students occasionally copresent with the SHC supervisor to first-year students on the topic of self-care.

4A. Interprofessional

Understanding the interprofessional approach to health care is a strong focus of training. Individual and group supervision is utilized to provide training in interprofessional collaboration and team dynamics in IPC. Students are frequently reminded to communicate with primary care providers about shared clients, especially concerning the impact of medications on mental health outcomes. Recently, interprofessional collaboration has become more challenging with the dependence on telehealth during COVID-19 protocols.

4B. Building and Sustaining Relationship in Primary Care

Minimal training is provided in this competency. Students are not expected to negotiate the resolution of conflicts, as this responsibility falls on the SHC supervisor as the SHC leader and clinical license holder. Training is provided in essential components

4B.1 (understands the importance of communicating clearly, concisely, respectfully in a manner that is understandable and meaningful to various audiences) and 4B.3 (able to set appropriate boundaries for patients, families, clinicians, and teams) as a necessary component of providing psychotherapy.

5A. Practice Management

Minimal training opportunities are available to apply population-based care along a continuum from prevention to chronic care. Because of the client population (i.e., majority traditional college students), practicum students have very limited opportunities to manage chronic medical illnesses. However, chronic mental health issues are frequently encountered. No training is offered in client billing and its influence on services and treatments provided.

5B. Assessment

Extensive training is provided in assessment. A strong focus is placed on selecting and implementing validated screening measures and tracking client outcomes over time. The standard protocol for client assessment at the SHC includes a structed intake assessment for every client. Students do not typically include spouses or family members in client assessments, as suggested in essential component 5B.6.

5C. Intervention

Extensive training is provided in intervention since it constitutes a strong focus of practicum training. Training maintains a strong focus in utilizing evidence-based interventions and directing intervention on functional outcomes and symptom reduction. All students are required to purchase *Integrated behavioral health in primary care: Step-by-step guidance for assessment and interventions* (Hunter et al., 2017) to use as an

evidence-based treatment manual in the majority of client cases. Because of the client population (i.e., traditional college students), practicum students receive limited training in interventions for the improvement of chronic care management, however every student generally has at least one chronic care client in their caseload at any given time. Practicum students and primary care providers monitor shared electronic treatment notes available for every client.

Moderate training is provided in client education on the biopsychosocial model. While training is provided in clinical judgement for referring to specialty mental health and community resources, many traditional mental health clients are retained by SHC practicum students and outside referrals are generally given to other USU resources (e.g., student psychological services, USU anxiety clinic) rather than providers in the surrounding community.

5D. Clinical Consultation

Moderate, informal training is provided in clinical consultation as needed. All students have routine interactions with primary care providers, however no formal team meetings are utilized between the psychology students and primary care providers. Individual consultations are utilized as needed and training in communication, IPC work pace, and other consultation etiquette is provided "on the job" based on student and client need.

6A. Teaching

Minimal training is provided in teaching about the IPC model. Students do not learn to train IPC providers or other psychology students. Returning practicum students have minimal opportunity to train new practicum students in basic protocols, and all practicum students provide one lecture to first year psychology students on basic interventions not specifically applied to IPC (e.g., behavioral activation, sleep hygiene).

6B. Supervision

No training is provided in supervision.

Competencies Built

The second research question addresses the level of CPPPC competencies achieved at the SHC practicum assessed from PhD student self-ratings, primary care provider ratings, and supervisor clinical skills evaluations of student competency immediately following SHC practicum training. Students rated their own competence in select CPPPC competencies while primary care providers were asked to rate student competence in the six CPPPC clusters, plus two additional ratings within the Application cluster. Supervisor clinical skills evaluation ratings were gathered for evaluation items that matched CPPPC competencies. Cluster means and standard deviations for student self-ratings and clinical skills evaluations were calculated using all individual ratings within the respective cluster. Ratings from all three data sources are compiled in Tables 10-15 organized by CPPPC cluster.

Science

Within the Science cluster, students rated themselves slightly above the *Intermediate* level of competence. On average, primary care providers rated students higher than students' self-ratings. No clinical skills evaluation items were identified that matched competencies within the Science cluster. See Table 10 for ratings of student competence in the Science cluster.

		Primary Care	Clinical Skills
	SHC Students ^a	Providers ^b	Evaluations ^c
CPPPC Competency	(<i>n</i> = 12)	(n = 4)	(<i>n</i> = 21)
	M (SD)	M (SD)	M (SD)
I. SCIENCE	3.1 (0.5)*	3.7 (0.9)	
1A.1 Scientific Mindedness: values a scientific foundation the practice of PC psychology	3.3 (0.4)		
1A.2 – 1A.5 Considering the biological, cognitive, affective behavioral, and developmental aspects of health and illness	3.2 (0.5)		
1A.6 – 1A.7 Considering sociocultural, socioeconomic, and family factors of health and illness	3.0 (0.6)		
1B.1 Ability to conduct research in PC setting	3.0 (0.5)		
1B.4 Ability to conduct research within the context of an interdisciplinary team	3.1 (0.8)		
^a 1 = <i>Competency not developed</i> , 2 = <i>Nov</i> <i>Advanced</i>	ice, 3 = Intermed	diate, 4 = Advar	nced, 5 = Beyond
^b 1 = <i>Competency not developed</i> , 5 = <i>Extr</i>	emely competen	t	
^c 1 = <i>Competency not developed</i> , 2 = <i>Novi</i>	ice, 3 = Intermed	liate, 4 = Advar	nced, 5 =
Proficient, 6 = Expert			
*Mean values calculated from competence	y ratings within	respective clus	ter

Ratings of Student Science Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

Systems

Students rated themselves between Novice and Intermediate in knowledge of

health care policy and its influence on health and illness and PC services (M = 2.6, SD =

0.7). Students' and primary care providers' ratings averaged to an *Intermediate* rating

while the supervisor's ratings averaged above Advanced. See Table 11.

CPPPC Competency	SHC Students ^a (n = 12)	Primary Care Providers ^b (n = 4)	Clinical Skills Evaluations ^c (n = 21)
	M (SD)	M (SD)	M (SD)
II. SYSTEMS	3.0 (0.6)*	3.0 (0.8)	4.3 (0.5)*
2A.4 Demonstrates and promotes effective communication in a range of leadership roles	3.2 (0.5)		4.3 (0.5)
2B.1 Appreciates that PC takes place in the larger "healthcare neighborhood," within the community and social context	3.1 (0.4)		
2C.1 Demonstrates knowledge of health care policy and its influence on health and illness and PC services	2.6 (0.7)		
1 0 1 1 1 0 11			

Ratings of Student Systems Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

^a 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Beyond Advanced*

^b 1 = *Competency not developed*, 5 = *Extremely competent*

^c 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Proficient*, 6 = *Expert*

*Mean values calculated from competency ratings within respective cluster

Professionalism

In the Professionalism cluster, primary care providers rated students lower than

student self-ratings and supervisor clinical skills ratings. Students' ratings averaged

slightly higher than Intermediate while the supervisor's ratings averaged above

Advanced. See Table 12.

		Primary Care	Clinical Skills
	SHC Students ^a	Providers ^b	Evaluations ^c
CPPPC Competency	(<i>n</i> = 12)	(<i>n</i> = 4)	(<i>n</i> = 21)
	M(SD)	M (SD)	M (SD)
III. PROFESSIONALISM	3.2 (0.5)*	3.0 (0.8)	4.3 (0.5)*
3A.2 Values the culture of the PC setting and conveys an attitude of flexibility	3.3 (0.5)		
3B.2 Identifies the relationship of social and cultural factors in the development of health problems	3.3 (0.5)		4.3 (0.5)
3C.1 Identifies and addresses the distinctive ethical issues encountered in PC practice	3.1 (0.5)		4.3 (0.4)
3D.2 Understands importance of self- assessment in PC setting	3.3 (0.5)		4.4 (0.5)
3D.3 Understands importance of health professional self-care in PC	3.0 (0.7)		4.4 (0.4)

Ratings of Student Professionalism Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

^a 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Beyond Advanced*

^b 1 = *Competency not developed*, 5 = *Extremely competent*

^c 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Proficient*, 6 = *Expert*

*Mean values calculated from competency ratings within respective cluster

Relationships

Students rated themselves lowest in their ability to assess team dynamics and

coach teams to improve functioning (M = 2.6, SD = 0.6). With the exception of "Able to

assess team dynamics and coach teams to improve functioning" (4A.4), students' and

primary care providers' ratings averaged Intermediate/Advanced while the supervisor's

ratings averaged above Advanced/Proficient. See Table 13.

		Primary Care	Clinical Skills
	SHC Students ^a	Providers ^b	Evaluations ^c
CPPPC Competency	(n = 12)	(n = 4)	(n = 21)
	M (SD)	M (SD)	M (SD)
IV. RELATIONSHIPS	3.3 (0.6)*	3.7 (0.5)	4.5 (0.5)*
4A.1 Values interprofessional team approach to care	3.4 (0.5)		4.4 (0.6)
4A.3 Develops collaborative relationships to promote healthy interprofessional team functioning characterized by mutual respect and shared values	3.4 (0.5)		4.5 (0.4)
4A.4 Able to assess team dynamics and coach teams to improve functioning	2.6 (0.6)		
4B.1 Understands the importance of communicating clearly, concisely, respectfully in a manner that is understandable and meaningful to various audiences (e.g., clinicians, patients, staff)	3.3 (0.5)		4.6 (0.4)

Ratings of Student Relationships Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

^a 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Beyond Advanced*

^b 1 = *Competency not developed*, 5 = *Extremely competent*

 $^{\circ} 1 = Competency not developed, 2 = Novice, 3 = Intermediate, 4 = Advanced, 5 = Disc Grinnet Competency for the second seco$

Proficient, 6 = *Expert*

*Mean values calculated from competency ratings within respective cluster

Application

Primary care providers were asked to rate competency in the Application cluster

in three competency groups: Practice Management, Assessment and Intervention, and

Clinical Consultation. Individual primary care provider ratings from the three

competency groups were combined to calculate a mean and standard deviation for the

Application cluster. Students rated themselves on average between Intermediate and

Advanced in every Application competency except "Targets evidence-based interventions

to improve chronic care management" (5C.6) which was rated between *Novice* and *Intermediate* on average. Primary care providers rated student competence highest in the Clinical Consultation competency group (M = 4.0, SD = 0.8), and lowest in the Practice Management group (M = 3.0, SD = 1.6). Primary care provider ratings of competency in the Practice Management competency group varied widely, with ratings ranging from 1 (i.e., *competency not developed*) to 5 (i.e., *extremely competent*). The SHC supervisor rated students between *Advanced* and *Proficient* in each competency. See Table 14.

Table 14

CPPPC Competency	SHC Students ^a $(n = 12)$	Primary Care Providers ^b (n = 4)	Clinical Skills Evaluations ^c (n = 21)
	M (SD)	M (SD)	M (SD)
V. APPLICATION	3.2 (0.6)*	3.6 (1.3)*	4.4 (0.5)*
5A. Practice Management		3.0 (1.6)	
5A.2 Applies principles of population- based care along a continuum from prevention and wellness to subclinical problems, to acute and chronic clinical needs	3.0 (0.4)		4.5 (0.5)
5A.3 Operates at a variety of paces consistent with the needs and realities of PC	3.4 (0.5)		
5A.4 Can co-interview, co-assess, and co- intervene with other PC providers	3.3 (0.7)		
5B/C. Assessment and Intervention		3.7 (0.9)	
5B.1 Selects and implements screening methods using evidence-based assessment measures to identify patients at risk or in need of specialized services	3.3 (0.7)		4.2 (0.4)

Ratings of Student Application Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

5B.3 Using assessment measures while simultaneously incorporating psychological, behavioral, and physical components of health and well-being	3.5 (0.4)		4.3 (0.4)
5B.4 Identifies patient's needs and rationale for appointment rapidly	3.5 (0.6)		4.4 (0.6)
5C.2 Offers interventions that encourage proper use of health care resources	3.1 (0.6)		
5C.3 Effectively uses current evidence- based interventions appropriate for PC to treat health and mental health related issues	3.5 (0.4)		4.4 (0.4)
5C.4 Offers and solicits evidence-based interventions that can be reinforced and monitored by all PC team members	3.0 (0.7)		
5C.5 Uses biopsychosocial model to provide effective patient education and communication	3.4 (0.5)		
5C.6 Targets evidence-based interventions to improve chronic care management	2.8 (0.5)		
5C.9 Bridges appropriately between behavioral services offered in PC and specialty mental health and community resources	3.4 (0.5)		
5D. Clinical Consultation		4.0 (0.8)	
5D.3 Helps PC team conceptualize challenging patients in a manner that enhances patient care	3.1 (0.7)		4.4 (0.5)
5D.4 Tailors recommendations to work pace and environment of PC	3.0 (0.7)		4.4 (0.4)
5D.5 Follows up with other PC clinicians as indicated	3.2 (0.8)		4.4 (0.4)
 a 1 = Competency not developed, 2 = Novice, Advanced b 1 = Competency not developed, 5 = Extrem c 1 = Competency not developed, 2 = Novice, 	3 = Intermedic ely competent	A = Advance	d, 5 = Beyond

^c 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Advanced*, 5 = *Proficient*, 6 = *Expert*

*Mean values calculated from competency ratings within respective cluster

Education

Student self-ratings of competence within the Education cluster were lower than other clusters, averaging between *Novice* and *Intermediate*. Primary care providers rated student competence slightly above *Intermediate*. Teaching related competencies were not evaluated in the supervisor clinical skills evaluation, and only one supervisor rating was provided in supervision competency. See Table 15.

Table 15

CPPPC Competency	SHC Students ^a (n = 12)	Primary Care Providers ^b (n = 4)	Clinical Skills Evaluations ^c (n = 21)
	$\frac{(m-12)}{M(SD)}$	(<i>n</i> - 1) <i>M</i> (SD)	M (SD)
VI. EDUCATION	2.6 (0.5)*	3.3 (0.5)	4.5 (0.0)*
6A.1 Understands and is able to apply teaching strategies about PC psychology	2.8 (0.7)		
6A.2 Completes needs assessment and understands teaching approaches used by other health professions about behavioral health issues	2.5 (0.4)		
6A.4 Understands importance of and facilitates teaching of psychology trainees by other health care professionals	2.6 (0.6)		
6A.6 Participates in the education and training of multiple stakeholders in the larger health care system about PC psychology	2.5 (0.5)		
6B.1 Understands ethical, legal, contextual issues of the supervisor role in PC	2.6 (0.6)		4.5 (0.0)
^a $1 = Competency not developed, 2 = Novice, 3 = Intermediate, 4 = Adv, 5 = Beyond Adv$			

Ratings of Student Education Competency from SHC Students, Primary Care Providers, and Clinical Skills Evaluations

^b 1 = *Competency not developed*, 5 = *Extremely competent*

^c 1 = *Competency not developed*, 2 = *Novice*, 3 = *Intermediate*, 4 = *Adv*, 5 = *Proficient*, 6 = *Expert*

*Mean values calculated from competency ratings within respective cluster

Overall, supervisor ratings of students' competence were consistently higher than students' self-ratings and primary care provider ratings. Competency ratings in the Relationship cluster were rated highest among all CPPPC clusters in all three groups. Primary care providers and the SHC supervisor rated students lowest in the Systems and Professionalism clusters, while students rated themselves lowest in the Education cluster. Students' average self-ratings of competence were highest in the Relationships cluster (M = 3.3, SD, 0.6) and lowest in the Education cluster (M = 2.6, SD = 0.5). Primary care providers highest ratings of student competence were in the Relationships (M = 3.7, SD = 0.5) and Science clusters (M = 3.7, SD = 0.5) and lowest in the Systems (M = 3.0, SD = 0.8). Supervisor clinical skills evaluations had the highest ratings in the Relationships cluster (M = 4.5, SD = 0.5) and lowest ratings in the Systems (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5) and Professionalism clusters (M = 4.3, SD = 0.5).

CHAPTER V

DISCUSSION

Evaluating competency-based training provided to doctoral students and doctoral students' degree of competence following training allows supervisors and directors of practicum training programs to assess the quality of training they provide. In the current study, reports from doctoral students, primary care providers, syllabus ratings, and the SHC supervisor were analyzed to assess the quality of training and to develop actionable steps for improvement to existing training and student competence upon completion of practicum training.

Training Provided

In the extent IPC program evaluation literature, moderate levels of training in the Science and Systems clusters were found. Responses from SHC students, primary care providers, syllabus ratings, and the primary SHC supervisor were consistent with these findings. SHC students and the SHC supervisor reported a lack of training in conducting research in the IPC context, however both groups endorsed high levels of training in utilizing existing research for evidence-based treatment planning. Moderate training in the Systems cluster was also found. Results from the student survey, syllabus review, and supervisor interview indicated little training in advocacy of the IPC model and leadership/administration. The SHC supervisor reported that an emphasis of training is placed on interdisciplinary systems, however evidence of where this training is provided was not indicated on the practicum syllabus. It is possible that training in the Systems cluster was less strongly endorsed because of the level of training provided at the SHC. Doctoral level practicum students are not expected to have developed competency in all Systems competencies (American Psychological Association, 2011b), including interdisciplinary consultation, leadership, and management of teams. Thus, a lesser focus on training in Systems competencies is consistent with expectations of predoctoral training. However, sites engaging in IPC training would be served by being thoughtful and intentional in providing aspects of the Science and Systems competencies consistent with their unique training goals and identifying specific times and places where this training can take place. At the SHC, in may be helpful to clarify Systems training in the practicum syllabus.

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Previous research also indicated a lack of training in the Education cluster at the predoctoral level. The current study offers a more nuanced report of where training is provided in Education at the SHC training site. Minimal levels of training were provided in teaching about the IPC model. Four SHC students suggested additional training in teaching should be provided. Overall, SHC students and their supervisor reported minimal training in the Education cluster. At the predoctoral level of training, we expected little training in teaching and supervision. Doctoral students are not expected to supervise other students and teaching about the IPC model is not necessary at the predoctoral level, providing teaching opportunities within the doctoral program or the community could satisfy students' requests for more teaching and advocacy training opportunities. Given that supervision is an area of training within doctoral programs, integrating supervision within the IPC context could be an avenue to further skill development for those students who envision having a career in IPC.

Findings concerning the Professionalism cluster were mixed. Students suggested additional training is needed in individual, cultural, and interdisciplinary diversity, however their average rating of training provided in social and cultural aspects of health was *moderate* to *substantial*. The SHC supervisor reported high levels of training in this competency, including lectures devoted to the topic and utilization of individual and cultural diversity-based frameworks necessitated in every client interaction. Because individual and cultural diversity are grouped with interdisciplinary diversity in this competency, it is unclear where specifically students are suggesting additional training should be provided. Greater specificity in documenting the training provided on the practicum syllabus could improve students' and the supervisor's understanding of where training is provided in individual and cultural diversity and interdisciplinary diversity. Such added specificity will add clarity to what aspects of the Professionalism cluster are the focus of training.

Training in the Relationships and Application clusters were highly endorsed by previous studies and all stakeholder groups in the current study. Previous findings suggest that IPC practicum training provides extensive training opportunities in utilizing evidence-based treatments, conducting brief intake assessment and intervention, quickly developing rapport with clients, and adapting to the fast pace of IPC. Student and SHC supervisor reports of training provided endorsed similar statements. However, limited training opportunities were reported in building interprofessional relationships and utilizing interventions for chronic care management. Primary care providers reported infrequent clinical consultations and limited coordination of care, and six SHC students suggested additional training in the interprofessional/team approach to care. These findings suggest that improved and increased contact between SHC students and primary care providers is desired by both groups. While fulfilling the role of a consultant and participating in interdisciplinary collaboration are not expected competencies at the predoctoral level, a beginning level of knowledge is expected upon readiness for internships (American Psychological Association, 2011b). Additional training opportunities could be provided in interdisciplinary relationships by increasing contact between students and primary care providers through more frequent consultation meetings and increased collaboration in client care.

SHC students and the SHC supervisor reported limited opportunities to practice chronic care management. This is consistent with findings from previous evaluations of predoctoral level training at a university setting. Because of the practicum setting, few clients present with chronic physical illnesses, and SHC students do not have the opportunity to apply evidence-based interventions to improve chronic care management. Doctoral training programs wanting to provide training in chronic care management may need to establish practicum training sites outside of the university setting.

Competencies Built

Previous studies found minimal evidence of competency building in the Science and Systems clusters. Ratings from the student survey, primary care provider survey, and clinical skills evaluations were consistent with these findings.

Competency ratings in the Relationships and Application clusters mirrored student ratings of training provided in these clusters. Students rated their competence lowest in coaching teams to improve functioning and utilizing evidence-based treatments for chronic care management, two areas where training is not provided.

Previous studies found no evidence of competency building in the Education cluster. It is possible students did not report on competency building in Education because they were not prompted to consider their skills in teaching and supervision. Because the current study asked students and primary care providers to consider competency building in teaching and supervision, participants were able to provide more detailed feedback and evidence of competency development in Education was found. Among students who reported that Education training was provided, ratings of competency attainment were low (e.g., between *Novice* and *Intermediate*) but not nonexistent, and primary care providers rated students as *Intermediate* in Education cluster competency. These results indicate that, although training in Education is not a strong focus of predoctoral training, doctoral practicum students do develop Education competencies. Minimal opportunities to practice teaching and supervision competency through application of these skills was provided, however students at the SHC practicum are exposed to teaching and supervision through indirect training opportunities. It is possible that students develop an understanding of teaching and supervision competency through observing other providers (e.g., SHC supervisor, primary care providers) model teaching and supervision skills. While direct training in Education competencies is not required at the predoctoral level, students did indicate a desire for more competency building opportunities in teaching and supervision. Additional training opportunities warrant consideration to allow students to further develop competency in teaching multiple stakeholder groups about IPC and understanding teaching methods of other health care professionals.

Differences in student and supervisor ratings of competence were observed, with supervisor ratings being higher in every competency compared to student ratings. While only speculative, we hypothesize that students and supervisors are using the competency labels differently. For the supervisor, the metric is readiness for internship and students are not expected to perform at the level of a psychologist practicing independently. Thus, the highest competency rating means students are ready to begin their internship training consistent with the expected level of competency during graduate training. Students are providing a retrospective report of their past competency. It is possible that students are comparing their past level of competency to their current level of competency (often post-graduate) and so evaluate themselves more critically. Students may be evaluating themselves compared to the level of competency needed for independent practice.

Primary Care Provider and Student Communication

In their evaluation of a doctoral IPC training site, Cox et al. (2014) found that students would have benefitted from more pre-practicum training in IPC basics, exposure to medical staff before entering the practicum, clearer expectations of their roles, better orientation to clinic policies and procedures, and better understanding of how time is used in IPC. No evidence was found that additional training is needed in IPC basics or clinic policies and procedures. Student ratings of competence and suggestions for areas of increased training indicated that additional training should be provided in interprofessionalism, which includes collaborative relationships with medical staff and understanding health care providers' various roles. Results from the primary care provider survey indicated multiple areas where relationships between SHC students and primary care providers could be improved including professional values and attitudes, coordination of care, and frequency of consultations.

Multiple areas for growth suggested by primary care providers were unique to their stakeholder group. Primary care providers suggested additional training in intervention and professional values and attitudes, two areas where student and SHC supervisor ratings were consistently high. Primary care providers also suggested increased training should be provided in managing client volume and coordination of patient care. Competency ratings in the practice management competency within the Application cluster were highly varied among primary care providers, compared to consistency high ratings among students and SHC supervisor. Each provider gave a

different rating for the practice management competency, ranging from *competency not* developed to extremely competent. This wide variation could reflect highly varied consultation and communication experiences between primary care providers and SHC students, or different expectations of primary care providers. Additionally, because the practice management competency includes multiple facets of clinical practice (i.e., applying population-based care along a continuum from prevention to subclinical problems to chronic clinical needs; operating at a variety of paces consistent with realities of integrated primary care; and co-interviewing, co-assessing, and co-intervening with other providers) it is unclear if primary care providers had in mind a specific area for improvement or if multiple practice management skills need improvement. However, other responses from primary care providers indicate that increased training opportunities in co-interviewing, co-assessing, and co-intervening with other providers could be provided. Primary care providers reported infrequent clinical consultations and exchange of shared patient information with SHC students. Primary care providers and students indicated a desire for more training in the interprofessional/team approach to care. This finding is consistent with a previous program evaluation of IPC training at this practicum site (i.e., Pratt et al., 2012) where providers commented that they would like to see additional communication between themselves and practicum students.

Training opportunities and student competence in CPPPC guidelines could be improved by providing increased classroom training on health care providers' roles and responsibilities and clearer expectations of the degree to which students should collaborate with primary care providers in an IPC setting. Additionally, student competence could benefit from increased collaboration with primary care providers in patient care including more frequent consultation meetings and increasing the exchange of information regarding shared patients.

Limitations

The following limitations may have impacted the current study. The SHC student sample was limited in number. Students contacted for participation were limited to those who completed training within the previous five years, and among those 54% (n = 14) responded. Those who elected to respond may be different from non-responders in a number of ways. Among those who completed the demographic questionnaire, 82% (n = 9) were current students, 82% were female (n = 9), and 100% were white (n = 11). Additionally, none were currently working in an IPC setting, limiting their ability to comment on the quality of IPC training. Students were also asked to self-report their levels of competence following training, which is often limited and not reflective of evaluations from superiors (Hitzeman et al., 2019; Mathieson et al., 2008). All survey participants (i.e., SHC students and primary care providers) were asked to retrospectively assess the quality of IPC training which could result in issues retrieving accurate information when completing ratings. Student, primary care provider, and supervisor reports of CPPPC competency training are limited to the single USU SHC practicum site and are not necessarily representative of predoctoral IPC training as a whole. The sample characteristics, dependence on self-report, and retrospective questions could limit participants' abilities to accurately assess the quality of IPC training provided at the SHC and their levels of competence following training.

Finally, the request for participation took place during the COVID-19 pandemic. Daily complications caused by the pandemic could have impacted potential participants' willingness to engage in a survey. Additionally, the majority of student participants completed training before the impact of COVID-19 beginning in the spring semester of 2020 and, therefore, experiences in SHC training were not impacted by COVID-19. However, four students completed practicum training at the SHC during the 2019-2020 academic year which included practicum training during spring and summer 2020. For participant privacy reasons demographic information could not reveal how many of those students completed our survey. While the majority of student participants reported on training that was completed before COVID-19, it is possible that as many as four participants' training experiences were impacted by COVID-19 in spring and summer 2020. COVID-19 protocols enacted during the spring and summer 2020 semesters may have impacted student and primary care provider reports of the quality and degree of training provided at the SHC during that time.

Future Research

This study adds to the extant literature by evaluating a predoctoral level IPC practicum training site for its ability to develop professional competencies among its students. With the guidance of professional standards of competencies (i.e., CPPPC), the current study gathered data from multiple stakeholder groups to assess where, how much, and to what degree training is provided and how well that training develops competence in doctoral practicum students. Ongoing evaluation of training sites are needed, both at the level of individual sites as well as at the level of the field, to continue assessing the quality of training over time. The review of the current literature concerning the evaluation of health service psychology training revealed a dearth of peer reviewed assessments. While individual APA-accredited training programs are required to evaluate

their students' competence and progress in training, program evaluations are rarely shared with the training community and the quality of training in specialty areas, such as primary care psychology, is under researched. Future research is needed to determine not only students' ability to attain competence, but also their abilities to apply competence to professional practice.

Future program evaluations should utilize standards of competency developed by professional organizations in their area of training and consult all applicable stakeholders (e.g., students, supervisors, supporting staff, internship trainers, and IPC employers of new graduates) in their evaluations. To improve future program evaluations, students' self-ratings of competency and suggestions for improvements in training should be collected immediately following practicum training. Furthermore, additional data is needed to make conclusions about predoctoral IPC training as a whole. Future research should gather competency data from multiple predoctoral training sites to understand how clinical, counseling, school, and combined psychology doctoral students are prepared for professional work in IPC. Future research should focus on providing actionable steps that training programs can take to better prepare doctoral students for professional practice.
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APPENDIXES

APPENDIX A

CPPPC Guidelines

Competencies, Essential Components*, and Behavioral Anchors**

for Psychology Practice in Primary Care (PC)

Cluster 1: Science

1A. Science related to the biopsychosocial approach	
Essential Component(s)	Behavioral Anchors
1A.1 Scientific Mindedness: values a	Uses scientific literature in the daily
scientific foundation the practice of PC	primary care practice
psychology	
1A.2 Knowledge of the biological	Demonstrates knowledge of
components of health and illness	pharmacology
1A.3 Knowledge of the cognitive	Demonstrates knowledge of the impact of
components of health and illness	biological factors on cognitive functioning
1A.4 Knowledge of the affective	Recognizes that medical problems can
components of health and illness	present as affective disorders
1A.5 Knowledge of behavioral and	Recognizes impact of learning and
developmental aspects of health and	condition on health behavior
illness	
1A.6 Knowledge of the role and effect of	Utilizes knowledge about the effect of the
families on health	family in medical regimen adherence
1A.7 Knowledge of the effect of	Describes association between
sociocultural and socioeconomic factors	socioeconomic status and health outcomes
and historical context on health and illness	and access to care
1A.8 Knowledge of epidemiology, public	Employs knolwedge of population-based
services, and health policy research	approaches to health promotion
1A.9 Knowledge and understanding of	Understands, reads, and implements
evidence-based practice and its	clinical algorithms in PC
application to the practice of PC	
psychology	
1B. Research/evaluation	
Essential Component(s)	Behavioral Anchors
1B.1 Ability to conduct research in PC	Demonstrates an understanding of
setting	methods for evaluating outcomes in
	primary care
1B.2 Ability to select valid, brief and	Demonstrates knowledge of brief patient
actionable measures for conducting	outcomes measures appropriate for
research in PC settings	research in PC settings
1.B.3 Ability to conduct research in an	Demonstrates an understanding of the
ethically responsible manner in the PC	IRB/Human Research requirements as
setting	they apply to research conducted in PC

1B.4 Ability to conduct research within	Consults on research conducted by
the context of an interdisciplinary team	interdisciplinary team members
1B.5 Application of research skills for	Evaluates the effectiveness of screening
evaluating practice, interventions, and	programs used in PC settings
programs	
1B.6 Ability to select valid, brief and	Creates reliable and valid screening,
actionable measures for evaluating	diagnostic, and monitoring instruments
applied clinical activity in PC	using health information systems
1B.7 Effectively uses information	Evaluates use of technology to deliver
technology to track patient outcomes and	care
provide a means for program evaluation	
1B.8 Awareness of and participation in	Works with clinical leadership and the
developing and measuring Quality	team to design, implement, and evaluate
Improvement standards in PC	quality improvement initiatives that
-	impact how care is routinely delivered

Cluster 2: Systems

2A. Leadership/administration	
Essential Component(s)	Behavioral Anchors
2A.1 Understands the mission and	Understands current reporting lines for
organizational structure, relevant	psychologists within the organization
historical factors, and position of	
psychology in the organization	
2A.2 Along with other practice leaders,	Develops standards of care for psychology
facilities integration across multiple	services within the PC setting
domains (clinical, operational, and	
financial)	
2A.3 Contributes to planning and	Notices an inefficient work process and
implementing organizational change to	collaborates with team to identify and try
optimize service delivery	a new strategy
2A.4 Demonstrates and promotes	Promotes effective communication and
effective communication in a range of	collaborative decision-making in
leadership roles	healthcare teams
2A. 5 Understands and applies	Demonstrates familiarity with
organizational policies regarding health	hospital/medical setting bylaws,
care professional employment,	credentialing, privileging, and staffing
particularly for psychologists and other	responsibilities
behavioral health clinicians	
2A.6 Supports training programs in PC	Oversees efforts to develop PC
psychology and interprofessional	psychology continuing education
education at local, regional, and national	programs for psychologists and other
levels	healthcare professionals
2B. Interdisciplinary systems	
Essential Component(s)	Behavioral Anchors

2B.1 Appreciates that PC takes place in	Engages schools, community agencies,
the larger "healthcare neighborhood,"	and healthcare systems to support optimal
within the community and social context	patient care
2C. Advocacy	
Essential Component(s)	Behavioral Anchors
2C.1 Demonstrates knowledge of health	Demonstrates understanding of where
care policy and its influence on health and	there are opportunities for better
illness and PC services	integration at community, state, and
	federal levels
2C.2 Recognizes and addresses the	Works with school and early intervention
healthcare needs of the community, and	systems to address the population's rates
works to address how they are prioritized	of childhood obesity
in care delivery, state funding, and	
resource allocation	
2C.3 Recognizes that advocacy to	Recognizes the unique and sometimes
improve population health may involve	competing interests of different
interacting with a number of systems	stakeholders in the healthcare system
2C.4 Informs policy relevant to PC	Serves on advisory boards of community
psychology care at local, state, and federal	agencies
levels	
2C.5 Ability to advocate within the	Works with the appropriate psychology
psychology profession for increased	training councils to increase graduation
research, training, and practice in PC	level education and practicum
	opportunities in PC

Cluster 3: Professionalism

3A. Professional values and attitudes	
Essential Component(s)	Behavioral Anchors
3A.1 Consolidates professional identity as	Conveys to others the roles/skill sets that
a PC psychologist	the PC psychologist brings to the setting
3A.2 Values the culture of the PC setting	Willing to adapt role and activities in best
and conveys an attitude of flexibility	interest of patient care
3B. Individual, cultural ad disciplinary diversity	
Essential Component(s)	Behavioral Anchors
3B.1 Monitors and applies knowledge of	Reflects on own cultural identity and its
self and others as cultural beings in PC	impact on treatment of patients
settings	
3B.2 Identifies the relationship of social	Modifies interventions for behavioral
and cultural factors in the development of	health change in response to social and
health problems	cultural factors
3C. Ethics in primary care	
Essential Component(s)	Behavioral Anchors

3C.1 Identifies and addresses the	Identifies the multiple consumers of	
distinctive ethical issues encountered in	primary care services and potential role	
PC practice	conflicts	
3C.2 Demonstrates knowledge about the	Demonstrates understanding of liability	
legal issues associated with health care	issues in PC	
practice		
3C.3 Articulates aspects of policies that	Demonstrates knowledge about standards	
regulate the delivery of services in health	set forth by national accrediting bodies	
care systems		
3D. Reflective practice/self-assessment/self-care		
3D. Keneenve practice/sen-assessment/se	li-cal c	
Essential Component(s)	Behavioral Anchors	
Essential Component(s) 3D.1 Supports importance of reflective	Behavioral Anchors Seeks and is receptive to feedback on	
Essential Component(s) 3D.1 Supports importance of reflective practice in PC settings	Behavioral Anchors Seeks and is receptive to feedback on performance	
SD: Reflective practice/self-assessment/seEssential Component(s)3D.1 Supports importance of reflective practice in PC settings3D.2 Understands importance of self-	Behavioral Anchors Seeks and is receptive to feedback on performance Evaluates one's own competencies and	
SD: Reflective practice/scit-assessment/sciteSupports importance of reflectivepractice in PC settings3D.2 Understands importance of self-assessment in PC setting	Behavioral Anchors Seeks and is receptive to feedback on performance Evaluates one's own competencies and appropriately seeking support from team	
Sp: Reflective practice/self-assessment/set Essential Component(s) 3D.1 Supports importance of reflective practice in PC settings 3D.2 Understands importance of self-assessment in PC setting	Behavioral Anchors Seeks and is receptive to feedback on performance Evaluates one's own competencies and appropriately seeking support from team members	
Sp: Reflective practice/self-assessment/set Essential Component(s) 3D.1 Supports importance of reflective practice in PC settings 3D.2 Understands importance of self-assessment in PC setting 3D.3 Understands importance of health	Behavioral AnchorsSeeks and is receptive to feedback on performanceEvaluates one's own competencies and appropriately seeking support from team membersActively promotes self-care consultation	
SD: Reflective practice/self-assessment/self-assessment/self-assessment/self-assessment in PC setting3D.2 Understands importance of self-assessment in PC setting3D.3 Understands importance of healthprofessional self-care in PC	Behavioral Anchors Seeks and is receptive to feedback on performance Evaluates one's own competencies and appropriately seeking support from team members Actively promotes self-care consultation opportunities for other PC health	

Cluster 4: Relationships

4A. Interprofessional	
Essential Component(s)	Behavioral Anchors
4A.1 Values interprofessional team	Views self as essential team member in
approach to care	care of patient
4A.2 Appreciates the unique contributions	Communicates the various roles of the
that different health care professionals	psychologist to team members
bring to the PC team	
4A.3 Develops collaborative relationships	Works with team when stressful events
to promote healthy interprofessional team	occur
functioning characterized by mutual	
respect and shared values	
4A.4 Able to assess team dynamics and	Uses psychological skills to address
coach teams to improve functioning	malfunctioning team behavior
4A.5 Demonstrates awareness, sensitivity	Helps patients communicate with health
and skills in working professionally with	care professionals who have cultural
diverse individuals	backgrounds different from their own
4B. Building and sustaining relationships in primary care	
Essential Component(s)	Behavioral Anchors
4B.1 Understands the importance of	Uses language appropriate to patient's and
communicating clearly, concisely,	clinician's education and culture
respectfully in a manner that is	
understandable and meaningful to various	
audiences (e.g., clinicians, patients, staff)	

4B.2 Negotiates resolution of conflict	Facilitates team process when there are
between clinicians, staff, patients, and	professional disagreements by focusing on
systems	shared goals
4B.3 Able to set appropriate boundaries	Communicates with team how to access
for patients, families, clinicians, and	behavioral health services when the PC
teams	psychologist is not available

Cluster 5: Application

5A. Practice management	
Essential Component(s)	Behavioral Anchors
5A.1 Meets the needs of the patients, their	Relies on a needs assessment to allocate
families, other team members, and the	clinical services or develop new services
setting, taking into consideration the	
model of behavioral health/PC integration	
used, resources available, and time	
constraints within the setting	
5A.2 Applies principles of population-	Follows an evidence-based model of
based care along a continuum from	assessment and intervention across
prevention and wellness to subclinical	consultations
problems, to acute and chronic clinical	
needs	
5A.3 Operates at a variety of paces	Allocates time based on patient need (i.e.,
consistent with the needs and realities of	not wedded to 50-minute hours)
PC	
5A.4 Can co-interview, co-assess, and co-	Collaboratively creates treatment plans
intervene with other PC providers	with other relevant PC professionals
5A.5 Understands how payment for	Uses Health and Behavior Codes when
services may influence the type of	applicable
services and treatment provided	
5A.6 Communicates information that	Types notes in HER while assessing
addresses a patient's needs, improves PC	patient or as soon thereafter as possible
practice and allows for research (when	
IRB approved) without revealing	
unnecessary confidential information	
5A.7 Uses most up to date technology and	Provides telehealth when indicated and
methods to guide clinical service delivery	appropriate
5B. Assessment	
Essential Component(s)	Behavioral Anchors
5B.1 Selects and implements screening	Assisting primary care team in selecting
methods using evidence-based assessment	measures to include in routine
measures to identify patients at risk or in	appointments
need of specialized services	
5B.2 Ensures that psychological	Understands strengths and limitations of
assessments for the PC setting are	screening tools designed for specialty

utilized, administered, and interpreted in a	mental health services when adapted for
manner that maintains test integrity	PC
5B.3 Uses assessment questions and	Uses assessment strategies that can be tied
measures geared towards current	to behavioral change plan
functioning, while simultaneously	
incorporating psychological, behavioral,	
and physical components of health and	
well being	
5B.4 Identifies patient's needs and	Quickly identifies problem, degree of
rationale for appointment rapidly	functional impairment, and symptoms
	using focused interviewing skills
5B.5 Assesses pertinent behavioral risk	Identified the health risks for a child with
factors	asthma residing with a smoker
5B.6 Involves input of significant others	Obtains information from caregivers in
in the assessment process as indicated	the assessment process
5B.7 Evaluates and uses intrapersonal,	Employs prescreening methods of family
family, and community strengths,	resources
resilience, and wellness to inform	
understanding of patient's needs and to	
promote health	
5B.8 Monitors patients longitudinally, as	Conducts follow-up assessment to
indicated, to identify changes in	evaluate effectiveness of recommended
presenting problems and effectiveness of	interventions
presenting problems and effectiveness of	
recommended interventions	
recommended interventions 5C. Intervention	
recommended interventions 5C. Intervention Essential Component(s)	Behavioral Anchors
recommended interventions 5C. Intervention Essential Component(s) 5C.1 Focuses patient recommendations	Behavioral Anchors Conducts evidence-based interventions to
recommended interventions 5C. Intervention Essential Component(s) 5 C.1 Focuses patient recommendations and interventions on functional outcomes	Behavioral Anchors Conducts evidence-based interventions to improve functioning in areas such as
recommended interventionsSC. InterventionEssential Component(s)SC.1 Focuses patient recommendationsand interventions on functional outcomesand symptom reduction in a targeted	Behavioral Anchors Conducts evidence-based interventions to improve functioning in areas such as meeting school and work responsibilities
recommended interventionsSC. InterventionEssential Component(s)5C.1 Focuses patient recommendationsand interventions on functional outcomesand symptom reduction in a targetedmanner	Behavioral Anchors Conducts evidence-based interventions to improve functioning in areas such as meeting school and work responsibilities
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presenting problems and effectiveness of recommended interventionsSC. InterventionEssential Component(s)5C.1 Focuses patient recommendations and interventions on functional outcomes and symptom reduction in a targeted manner5C.2 Offers interventions that encourage proper use of health care resources5C.3 Effectively uses current evidence- based interventions appropriate for PC to treat health and mental health related issues5C.4 Offers and solicits evidence-based interventions that can be reinforced and monitored by all PC team members5C.5 Uses biopsychosocial model to provide effective patient education and communication	Behavioral Anchors Conducts evidence-based interventions to improve functioning in areas such as meeting school and work responsibilities Uses appropriate techniques to increase or decrease use of healthcare resources Implements evidence-based interventions Effectively engages family members or primary care providers in the intervention Provides empirical evidence to the patient about how the intervention offered will lead to functional improvement
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recommended interventionsrecommended interventionsSC. InterventionEssential Component(s)SC.1 Focuses patient recommendationsand interventions on functional outcomesand symptom reduction in a targetedmannerSC.2 Offers interventions that encourageproper use of health care resourcesSC.3 Effectively uses current evidence-based interventions appropriate for PC totreat health and mental health relatedissuesSC.4 Offers and solicits evidence-basedinterventions that can be reinforced andmonitored by all PC team membersSC.5 Uses biopsychosocial model toprovide effective patient education andcommunicationSC.6 Targets evidence-based interventionsto improve chronic care management	Behavioral Anchors Conducts evidence-based interventions to improve functioning in areas such as meeting school and work responsibilities Uses appropriate techniques to increase or decrease use of healthcare resources Implements evidence-based interventions Effectively engages family members or primary care providers in the intervention Provides empirical evidence to the patient about how the intervention offered will lead to functional improvement Uses behavioral intervention strategies to improve a patient's diabetes self-

5C.7 Offers interventions that are	Involves spouse in nutritional planning for
inclusive of the family system	patient with diabetes
5C.8 Provides responsive care along the	Participates in Health Fairs
continuum of prevention and wellness	
promotion	
5C.9 Bridges appropriately between	Refers patient to specialty mental health
behavioral services offered in PC and	care when intensity of service needed in
specialty mental health and community	beyond the scope of primary care
resources	
5D. Clinical consultation	
Essential Component(s)	Behavioral Anchors
5D.1 Assists in the development of	Assists the PC team regarding when and
standardized and reliable processes for	how to incorporate a PC psychology
consultative serves for PC psychology	provider into the process of care
5D.2 Clarifies, focuses on, and responds	Conducts a thorough health record review
to consultation question raised, in an	of the referred patient
efficient manner	
5D.3 Helps PC team conceptualize	Convenes case conferences as needed on
challenging patients in a manner that	complex cases
enhances patient care	
5D.4 Tailors recommendations to work	Gives primary care providers actionable
pace and environment of PC	recommendations that are brief, concrete,
	and evidence-based
5D.5 Follows up with other PC clinicians	Conveys clinical information using
as indicated	appropriate infrastructure/clinical
	procedures such as face-to-face, email,
	EMR, consults, etc.)
5D.6 Ensures integrity of the consultation	Completes feedback look with PC
process when algorithm-based automated	provider following consultation
triggers for consultation occur	

Cluster 6: Education

6A. Teaching	
Essential Component(s)	Behavioral Anchors
6A.1 Understands and is able to apply	Develops portfolio of educational
teaching strategies about PC psychology	strategies to demonstrate and teach
	integrated primary care psychology
	competencies
6A.2 Completes needs assessment and	Adapts to and is familiar with training
understands teaching approaches used by	models of other disciplines' trainees
other health professions about behavioral	present in PC
health issues	

6A.3 Knowledge of strategies to evaluate	Obtains summative and formative
effectiveness of teaching methods and	feedback
procedures in PC psychology	
6A.4 Understands importance of and	Encourages teaching activities for
facilitates teaching of psychology trainees	psychology trainees by physicians and
by other health care professionals	other health care professionals
6A.5 Educates and trains psychologists	Creates mentoring networks across
regarding (physical and mental) health	institutions
promotion, disease prevention, and	
management of acute and chronic disease	
across the lifespan to prepare	
psychologists for integrated PC in varied	
settings	
6A.6 Participates in the education and	Presents at a community health care
training of multiple stakeholders in the	forum on a common behavioral health
larger health care system about PC	issue
psychology	
6B. Supervision	
Essential Component(s)	Behavioral Anchors
6B.1 Understands the ethical, legal, and	Ensures that PC psychology training
contextual issues of the supervisor role in	standards meet all accreditation
PC	requirements
6B.2 Applies a range of methods to the	Provides education; fosters skill
supervision of psychology trainees	development and training for trainees
	from a variety of disciplines

*Essential Components refer to the knowledge/skills/attitudes that make up the

competency.

** Sample behavioral anchors are included that demonstrate the essential components.

These samples are not all inclusive.

APPENDIX B

CPPPC Competency Items and Supervisor Evaluation Items

Student Survey Competency Items and Corresponding Supervisor Evaluation Items

Cluster 1: Science

Student Survey Competency Items	Supervisor Evaluation Items		
1A. Science related to the biopsychosocial approach			
1A.1 - Valuing a scientific foundation in the practice of integrated primary care psychology (e.g., using scientific literature in the daily primary care practice)	NA		
1A.2 – 1A.5 - Considering the biological, cognitive, affective behavioral, and developmental aspects of health and illness (e.g., knowledge of human anatomy, physiology and/or pathophysiology)	NA		
1A.6/1A.7 - Considering sociocultural, socioeconomic, and family factors of health and illness (e.g., knowledge about the effect of the family in medical regimen adherence)	NA		
1B. Research/evaluation			
1B.1 - Conducting research in integrated primary care settings (e.g., understanding of methods for evaluating outcomes in primary care)	NA		
1B.4 - Conducting research with interdisciplinary teams (e.g., consults on research conducted by interdisciplinary team members)	NA		

Cluster 2: Systems

Student Survey Competency Items	Supervisor Evaluation Items	
2A. Leadership/administration		
2A.4 - Demonstrating and promoting	B.6.b.v - Leadership skills: development	
leadership roles (e.g., promoting effective	of leadership skins appropriate to site	
communication and collaborative decision-		
making)		
2B. Interdisciplinary systems		
2B.1 - Appreciating that integrated primary	NA	
care takes place in a larger "healthcare		
neighborhood" within the community and		
social context (e.g., engaging schools,		
community agencies, and healthcare		
systems to support optimal patient care)		
2C. Advocacy		
2C.1 - Demonstrating knowledge of	NA	
healthcare policy and its influence on		
integrated primary care (e.g.,		
understanding of where there are		
opportunities for better integration at		
community, state, and federal levels)		

Cluster 3: Professionalism

Student Survey Competency Items	Supervisor Evaluation Items
3A. Professional values and attitudes	
3A.2 - Valuing the integrated primary care context and conveying an attitude of flexibility (e.g., willing to adapt role and activities in best interest of patient care)	NA
3B. Individual, cultural and disciplinary d	liversity
3B.2 - Identifying the relationship of social and cultural factors in the development of health problems (e.g., modifying interventions for behavioral health change in response to social and cultural factors)	B.4.b - Knowledge about the nature and impact of diversity in different clinical situations (e.g., clinical work with specific racial/ethnic populations)

3C. Ethics in primary care			
3C.1 - Identifying and addressing distinctive ethical issues encountered in integrated primary care (e.g., identifying the multiple consumers of primary care services and potential role conflicts)	B.5.b - Recognize and analyze ethical and legal issues across the range of professional activities in the practicum setting		
3D. Reflective practice/self-assessment/self	f-care		
3D.2 - Understanding the importance of self-assessment in integrated primary care (e.g., evaluating one's own competencies and appropriately seeking support from team members)	B.1.c.iv - Ability to self-reflect and self- evaluate clinical skills and use of supervision, including using good judgment, and ability to negotiate needs for autonomy from and dependency on supervisors		
3D.3 - Understands the importance of health professional self-care in integrated primary care (e.g., promoting self-care consultation for other health professionals)	B.6.a.iv - Identifies personal distress, particularly as it relates to clinical work, and uses resources that support healthy functioning		

Cluster 4: Relationships

Student Survey Competency Items	Supervisor Evaluation Items		
4A. Interprofessional			
4A.1 - Valuing the interprofessional team approach to health care (e.g., viewing self as essential team member in care of patient)	B.1.f - For the practicum site itself: observe procedures, participate fully, contribute to the site		
4A.3 - Developing collaborative relationships with other health professionals (e.g., working with team when stressful events occur)	B.1.b.i - Ability to work collegially with fellow professionals		
4A.4 - Assessing team dynamics and coaching teams to improve functioning (e.g., using psychological skills to address malfunctioning team behavior)	NA		
4B. Building and sustaining relationships in primary care			
4B.1 - Understanding the importance of communicating clearly, concisely, and respectfully to various audiences (e.g., using language appropriate to patient's and clinician's education and culture)	B.1.a.i - Ability to take a respectful, helpful professional approach		

Cluster 5: Application

Student Survey Competency Items	Supervisor Evaluation Items	
5A. Practice management		
5A.2 - Applying population-based care along a continuum from prevention to subclinical problems to chronic clinical needs (e.g., following evidence-based models of assessment and intervention across consultations)	B.3.c - Ability to implement intervention skills, covering a wide range of developmental, preventive, and "remedial" interventions, including psychotherapy, psychoeducational interventions, crisis management and psychological/psychiatric emergency situations	
5A.3 - Operating at a variety of paces consistent with realities of integrated primary care (e.g., allocating time based on patient need – not wedded to 50-minute hours)	NA	
5A.4 - Co-interviewing, co-assessing, and co-intervening with other providers (e.g., creating treatment plans with other relevant primary care professionals)	NA	
5B. Assessment		
5B.1 - Selecting and implementing screening methods using evidence-based assessment measures (e.g., assisting primary care team in selecting measures to include in routine appointments)	B.2.b.i - Ability to select and implement multiple methods and means of evaluation in ways that are responsive to and respectful of diverse individuals, couples, families and groups	
5B.3 - Using assessment measures while simultaneously incorporating psychological, behavioral, and physical components of health and well-being (e.g., using assessment strategies that can be tied to behavioral change plan)	B.2.b.iv - Ability to integrate, in verbal and written form, assessment data from different sources for diagnostic purposes and treatment purposes	
5B.4 - Identifying patient needs rapidly (e.g., quickly identifying problem, degree of functional impairment, and symptoms using focused interviewing skills)	B.2.a.i - Ability to utilize the initial interview process to collect sufficient information to formulate initial diagnoses and initial treatment plan.	

5C. Intervention	
5C.2 - Offering interventions that	NA
encourage proper use of health care	
resources (e.g., using appropriate	
techniques to increase or decrease use of	
healthcare resources)	
5C.3 - Using current evidence-based interventions appropriate for integrated primary care to treat health and mental health issues (e.g., implementing evidence- based interventions)	B.3.e - Knowledge and skill in incorporating the concepts of EBPP in intervention
5C.4 - Using evidence-based interventions that can be reinforced and monitored by all team members (e.g., effectively engaging family members or primary care providers in the intervention)	NA
5C.5 - Using the biopsychosocial model to provide effective patient education and communication (e.g., providing empirical evidence to the patient about how the intervention offered will lead to functional improvement)	NA
5C.6 - Using evidence-based interventions to improve chronic care management (e.g., using behavioral intervention strategies to improve a patient's diabetes self- management)	NA
5C.9 - Bridging between behavioral services in integrated primary care, specialty mental health, and community resources (e.g., referring patient to specialty mental health care when intensity of service needed in beyond the scope of primary care)	NA
5D. Clinical consultation	
5D.3 - Helping the integrated primary care	B.3.a - Ability to formulate and
team conceptualize challenging patients in	conceptualize cases
a manner that enhances patient care (e.g.,	
convening case conferences as needed on	
complex cases)	

5D.4 - Tailoring recommendations to work pace of environment of integrated primary care (e.g., giving primary care providers actionable recommendations that are brief, concrete, and evidence-based)	B.3.h - Consultation: Knowledge and skill to effectively engage in consultation, including knowledge of others' roles at the site, knowing when to seek and offer consultation, and appropriate communication (e.g., avoiding "jargon") when consulting with others
5D.5 - Following up with other providers (e.g., conveying clinical information using appropriate infrastructure/clinical procedures such as face-to-face, email, EMR, consults, etc.)	B.6.a.iii - Presenting case material (orally and in writing for diverse groups)

Cluster 6: Education

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Student Survey Competency Items	Supervisor Evaluation Items
6A. Teaching	
6A.1 - Teaching about integrated primary care psychology (e.g., developing portfolio of educational strategies to demonstrate and teach integrated primary care psychology competencies)	NA
6A.2 - Understanding teaching approaches used by other health professionals about behavioral health issues (e.g., adapting to training models of other disciplines)	NA
6A.4 - Facilitating the teaching of psychology trainees by other health care professionals (e.g., encouraging teaching activities for psychology trainees by physicians and other health care professionals)	NA
6A.6 - Training multiple stakeholders in the health care system about integrated primary care psychology (e.g., presenting at a community health care forum on a common behavioral health issue)	NA

6B. Supervision	
6B.1 - Understanding the ethical, legal, and	B.7.c. Skill in providing
contextual issues of being a supervisor in integrated	supervision, including
primary care (e.g., ensuring that training standards	interpersonal skills and
meet all accreditation requirements)	delivering feedback.

APPENDIX C

Student Survey

Practicum Experience

The following questions ask about your applied experiences in the Combined Program. For most students, the 1st year is the pre-practicum year and the 6th year is spent on internship, although this varies by student. Include your training trajectory below including an *estimate* of the direct hours accrued at each site. If you did not engage in applied training during a given academic year (including summer), please list NA. If you engaged in applied training during the summer as part of your previous or upcoming applied training, you do not need to list the summer training separately. If you completed more than one applied training experiences in the year, please list the additional training in the blank box below. Applied experience in the context of research should not be included in this table.

	Applied Training Site	Role	Approximate Direct Hours
1 st year	 7350 (Sue's Prac) Anxiety Prac Avalon Hills CAPS Cardiac Rehab Child prac primary care CPD (Clinical Services) Mt. Logan Clinic Neuropsychology Center UT School placement Student Health and Wellness The Family Place UCEBT UD-to-3 UU Rehab (Neuropsych) VA – Salt Lake City Other NA (Pre-practicum year or no applied experience) 	□Practicum student □10 hour GA □20 hour GA □Other □NA (Pre- practicum year or no applied experience)	□ Less than 75 □ 75-125 □ 125-175 □ More than 175 □ NA
2 nd year	 ☐ 7350 (Sue's Prac) ☐ Anxiety Prac ☐ Avalon Hills □ CAPS □ Cardiac Rehab □ Child prac primary care □ CPD (Clinical Services) 	□Practicum student □10 hour GA □20 hour GA □Other □NA (Pre- practicum year or	□ Less than 75 □ 75-125 □ 125-175 □ More than 175 □ NA

	□Mt Logan Clinic	no applied	
	Neuropsychology Center UT	evnerience)	
		experience)	
	\Box School placement		
	\Box Student Health and wellness		
	Li The Family Place		
	□Up-to-3		
	□UU Rehab (Neuropsych)		
	\Box VA – Salt Lake City		
	□Other		
	□NA (Pre-practicum year or no		
	applied experience)		
3 rd year	\Box 7350 (Sue's Prac)	□Practicum student	\Box Less than 75
	□ Anxiety Prac	\Box 10 hour GA	□ 75-125
	Avalon Hills	$\Box 20$ hour GA	□ 125-175
		\square Other	\square More than 175
	Cardiac Rehab	\square NA (Pre-	\square NA
	Child prac primary care	nracticum year or	
	\square CPD (Clinical Services)	no applied	
	$\Box CFD (Clinical Services)$	no applied	
	Neuropartic Logan Clinic	experience)	
	□ School placement		
	□ Student Health and Wellness		
	☐ The Family Place		
	DUCEBT		
	□Up-to-3		
	□UU Rehab (Neuropsych)		
	\Box VA – Salt Lake City		
	□Other		
	\Box NA (Pre-practicum year or no		
	applied experience)		
4 th vear	\Box 7350 (Sue's Prac)	Practicum student	\Box Less than 75
,	\square Anxiety Prac	\Box 10 hour GA	□ 75-125
	\square Avalon Hills	$\square 20$ hour GA	□ 125-175
		\square Other	\square More than 175
	\square Cardiac Rehab	$\square N \Lambda (Pr_{P})$	\square NA
	\square Child proc primary core	nracticum yoar or	
	$\square CDD (Clinical Services)$	practiculity dat of	
	$\Box CFD (Clinical Services)$	no applied	
	DNL Logan Clinic	experience)	
	Li Neuropsychology Center UT		
	□ School placement		
	□ Student Health and Wellness		
	□ The Family Place		
	UCEBT		
	□Up-to-3		
	UU Rehab (Neuropsych)		

	 VA – Salt Lake City Other NA (Pre-practicum year or no applied experience) 		
5 th year	 7350 (Sue's Prac) Anxiety Prac Avalon Hills CAPS Cardiac Rehab Child prac primary care CPD (Clinical Services) Mt. Logan Clinic Neuropsychology Center UT School placement Student Health and Wellness The Family Place UCEBT UU Rehab (Neuropsych) VA – Salt Lake City Other NA (Pre-practicum year or no applied experience) 	□Practicum student □10 hour GA □20 hour GA □Other □NA (Pre- practicum year or no applied experience)	□ Less than 75 □ 75-125 □ 125-175 □ More than 175 □ NA
6 th year	 ☐ 7350 (Sue's Prac) ☐ Anxiety Prac ☐ Avalon Hills ☐ CAPS ☐ Cardiac Rehab ☐ Child prac primary care ☐ CPD (Clinical Services) ☐ Mt. Logan Clinic ☐ Neuropsychology Center UT ☐ School placement ☐ Student Health and Wellness ☐ The Family Place ☐ UCEBT ☐ Up-to-3 ☐ UU Rehab (Neuropsych) ☐ VA – Salt Lake City ☐ Other ☐ NA (Pre-practicum year or no applied experience) 	□Practicum student □10 hour GA □20 hour GA □Other □NA (Pre- practicum year or no applied experience)	□ Less than 75 □ 75-125 □ 125-175 □ More than 175 □ NA

Competencies

The following questions ask you to consider your training in an integrated primary care setting: the Student Health Center (SHC) at Utah State University. Please think back to all of your training in at the SHC, including all your direct and indirect clinical experience, classroom training, and group/individual supervision. You will be asked to rate the amount of training you received, as well as your level of competency developed. When rating your competency, consider the following definitions.

Novice: Limited knowledge and understanding of (a) how to analyze problems and of (b) intervention skills and the processes and techniques of implementing them.

Intermediate: Experience with enough real situations to recognize some important recurring meaningful situational components. Support is needed to guide performance.

Advanced: Student can see his or her actions in terms of long-range goals or plans of which he or she is consciously aware. At this level, the psychologist is less flexible but does have a feeling of mastery.

In responding to the survey questions, please consider only your experience at USU's SHC.

This group of questions asks about the training provided at the SHC in the **science** related to the biopsychosocial approach and **research/evaluation** of integrated primary care psychology.

How much training was provided related to science at the SHC in the follow areas?

1. Valuing a scientific foundation in the practice of integrated primary care psychology

(e.g., using scientific literature in the daily primary care practice)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

1C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

 \Box NA – Competency not developed

 \Box Novice

□ Novice/Intermediate

- \Box Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

2. Considering the biological, cognitive, affective behavioral, and developmental aspects of health and illness (e.g., knowledge of human anatomy, physiology and/or pathophysiology)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

2C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- \Box Beyond Advanced

3. Considering sociocultural, socioeconomic, and family factors of health and illness

(e.g., knowledge about the effect of the family in medical regimen adherence)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

3C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

4. Conducting research in integrated primary care settings (e.g., understanding of methods for evaluating outcomes in primary care)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

4C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- \Box Beyond Advanced

5. Conducting research with interdisciplinary teams (e.g., consults on research conducted by interdisciplinary team members)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

5C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

This group of questions asks about the training provided at the SHC related to the **leadership**, **administration**, **and interdisciplinary systems** common in integrated primary care.

How much training was provided related to leadership, administration, and interdisciplinary systems at the SHC in the follow areas?

6. Demonstrating and promoting effective communication in a range of leadership roles (e.g., promoting effective communication and collaborative decision-making)

□ No training provided

□ Minimal training: exposure to skill, knowledge only

□ Moderate training: discussed multiple times, mostly knowledge only

- □ Substantial training: discussed multiple times, some opportunity to practice skill
- Extensive training: multiple opportunities to practice skill with feedback

6C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

 \Box NA – Competency not developed

 \Box Novice

- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

7. Appreciating that integrated primary care takes place in a larger "healthcare neighborhood" within the community and social context (e.g., engaging schools, community agencies, and healthcare systems to support optimal patient care)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

7C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

8. Demonstrating knowledge of healthcare policy and its influence on integrated primary care (e.g., understanding of where there are opportunities for better integration at community, state, and federal levels)

- □ No training provided
- ☐ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

8C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- \Box Novice/Intermediate

- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- $\hfill\square$ Beyond Advanced

This group of questions asks about the training provided at the SHC related to **professional values, cultural diversity, ethics, and self-assessment** in integrated primary care.

How much training was provided related to science at the SHC in the follow areas?

9. Valuing the integrated primary care context and conveying an attitude of flexibility (e.g., willing to adapt role and activities in best interest of patient care)

- □ No training provided
- ☐ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

9C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

10. Identifying the relationship of social and cultural factors in the development of health problems (e.g., modifying interventions for behavioral health change in response to social and cultural factors)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

10C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced

□ Beyond Advanced

11. Identifying and addressing distinctive ethical issues encountered in integrated primary care (e.g., identifying the multiple consumers of primary care services and potential role conflicts)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- $\hfill\square$ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

11C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- $\hfill\square$ Beyond Advanced

12. Understanding the importance of self-assessment in integrated primary care (e.g., evaluating one's own competencies and appropriately seeking support from team members)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

12C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

13. Understands the importance of health professional self-care in integrated primary care (e.g., promoting self-care consultation for other health professionals)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill

□ Extensive training: multiple opportunities to practice skill with feedback

13C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

This group of questions asks about the training provided at the SHC related to **interprofessional teamwork** between members of the integrated primary care team.

How much training was provided related to interprofessional teamwork at the SHC in the follow areas?

14. Valuing the interprofessional team approach to health care (e.g., viewing self as essential team member in care of patient)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

14C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- \Box Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- $\hfill\square$ Beyond Advanced

15. Developing collaborative relationships with other health professionals (e.g., working with team when stressful events occur)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

15C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

16. Assessing team dynamics and coaching teams to improve functioning (e.g., using psychological skills to address malfunctioning team behavior)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

16C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

17. Understanding the importance of communicating clearly, concisely, and respectfully to various audiences (e.g., using language appropriate to patient's and clinician's education and culture)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

17C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Beyond Advanced

This group of questions asks about the training provided at the SHC related to **practice management, assessment, intervention, and consultation** in integrated primary care.

How much training was provided related to practice management, assessment, intervention, and consultation at the SHC in the follow areas?

18. Applying population-based care along a continuum from prevention to subclinical problems to chronic clinical needs (e.g., following evidence-based models of assessment and intervention across consultations)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

18C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

19. Operating at a variety of paces consistent with realities of integrated primary care (e.g., allocating time based on patient need – not wedded to 50-minute hours)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- Extensive training: multiple opportunities to practice skill with feedback

19C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- \Box Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

20. Co-interviewing, co-assessing, and co-intervening with other providers (e.g., creating treatment plans with other relevant primary care professionals)

□ No training provided

- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

20C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- \Box Beyond Advanced

21. Selecting and implementing screening methods using evidence-based assessment measures (e.g., assisting primary care team in selecting measures to include in routine appointments)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

21C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

22. Using assessment measures while simultaneously incorporating psychological, behavioral, and physical components of health and well-being (e.g., using assessment strategies that can be tied to behavioral change plan)

□ No training provided

- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

22C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

 \Box NA – Competency not developed

 \Box Novice

□ Novice/Intermediate

- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

23. Identifying patient needs rapidly (e.g., quickly identifying problem, degree of functional impairment, and symptoms using focused interviewing skills)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

23C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Beyond Advanced

24. Offering interventions that encourage proper use of health care resources (e.g., using appropriate techniques to increase or decrease use of healthcare resources)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- Extensive training: multiple opportunities to practice skill with feedback

24C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- □ Beyond Advanced

25. Using current evidence-based interventions appropriate for integrated primary care to treat health and mental health issues (e.g., implementing evidence-based interventions)

□ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

25C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- \Box Beyond Advanced

26. Using evidence-based interventions that can be reinforced and monitored by all team members (e.g., effectively engaging family members or primary care providers in the intervention)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

26C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

27. Using the biopsychosocial model to provide effective patient education and communication (e.g., providing empirical evidence to the patient about how the intervention offered will lead to functional improvement)

□ No training provided

- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

27C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

 \Box NA – Competency not developed

 \Box Novice

□ Novice/Intermediate

- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- \Box Beyond Advanced

28. Using evidence-based interventions to improve chronic care management (e.g., using behavioral intervention strategies to improve a patient's diabetes self-management)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

28C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

29. Bridging between behavioral services in integrated primary care, specialty mental health, and community resources (e.g., referring patient to specialty mental health care when intensity of service needed in beyond the scope of primary care)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- Extensive training: multiple opportunities to practice skill with feedback

29C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

30. Helping the integrated primary care team conceptualize challenging patients in a manner that enhances patient care (e.g., convening case conferences as needed on complex cases)

- $\hfill\square$ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

30C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

31. Tailoring recommendations to work pace of environment of integrated primary care (e.g., giving primary care providers actionable recommendations that are brief, concrete, and evidence-based)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- Extensive training: multiple opportunities to practice skill with feedback

31C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- □ Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

32. Following up with other providers (e.g., conveying clinical information using appropriate infrastructure/clinical procedures such as face-to-face, email, EMR, consults, etc.)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

32C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- □ Beyond Advanced

This group of questions asks about the training provided at the SHC related to **teaching** about integrated primary care and **training/supervising** psychology trainees.

How much training was provided related to teaching, training and supervision at the SHC in the follow areas?

33. Teaching about integrated primary care psychology (e.g., developing portfolio of educational strategies to demonstrate and teach integrated primary care psychology competencies)

- □ No training provided
- ☐ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

33C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- $\hfill\square$ Beyond Advanced

34. Understanding teaching approaches used by other health professionals about behavioral health issues (e.g., adapting to training models of other disciplines)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

34C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

 \square NA – Competency not developed

 \Box Novice

□ Novice/Intermediate

- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- □ Beyond Advanced

35. Facilitating the teaching of psychology trainees by other health care professionals (e.g., encouraging teaching activities for psychology trainees by physicians and other health care professionals)

- □ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

35C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

36. Training multiple stakeholders in the health care system about integrated primary care psychology (e.g., presenting at a community health care forum on a common behavioral health issue)

- \Box No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

36C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \square NA Competency not developed
- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Beyond Advanced

37. Understanding the ethical, legal, and contextual issues of being a supervisor in integrated primary care (e.g., ensuring that training standards meet all accreditation requirements)

- $\hfill\square$ No training provided
- □ Minimal training: exposure to skill, knowledge only
- □ Moderate training: discussed multiple times, mostly knowledge only
- □ Substantial training: discussed multiple times, some opportunity to practice skill
- □ Extensive training: multiple opportunities to practice skill with feedback

37C. (If rating indicates training was provided) Please rate your level of competency in this skill at the end of your training experience at the SHC.

- \Box NA Competency not developed
- \square Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Beyond Advanced

38. Are there any areas in which you believe the SHC practicum should provide more extensive training? Select all that apply.

- □ Science related to the biopsychosocial approach
- \Box Research in primary care
- □ Leadership/administration
- □ Interdisciplinary systems
- □ Advocacy
- □ Professional values and attitudes of primary care
- □ Individual, cultural, and disciplinary diversity
- \Box Ethics in primary care
- □ Reflective practice/self-assessment/self-care
- □ Interprofessional/Team approach to care
- □ Building and maintaining relationships in primary care
- □ Practice management
- □ Assessment
- □ Intervention
- □ Clinical consultation
- □ Teaching
- □ Supervision
- \Box Other (please specify)

Interest in IPC

39. Before training at the SHC, how interested were you in pursuing a career in integrated primary care?

Not at all interested		Neutral		Very	
interested					
1	2	3	4		5

40. After training at the SHC, how interested were you in pursuing a career in integrated primary care?

Not at all interested		Neutral		Very	
interested				•	
1	2	3	4		5

Current Role

- 41. Age: _____
- 42. Sex: _____
- 43. I am currently
 - □ A pre-internship student

□ On internship

□ Post-internship, student

□ Post-internship, graduate

44. What year did you graduate, or anticipate graduating?

45. (if on internship; post-internship, student; or post-internship, graduate selected) What setting is/was your internship placement in?

Community Mental Health Center

- □ Health Maintenance Organization
- □ Medical Center
- □ Military Medical Center
- □ Private General Hospital
- □ General Hospital
- □ Veterans Affairs Medical Center
- □ Private Psychiatric Hospital
- □ State/County Hospital
- □ Correctional Facility
- □ School District/System
- □ University Counseling Center
- \Box Medical School
- □ Consortium
- \Box Other (e.g., consulting) (specify)

46. (if post-internship, graduate selected) What settings have you worked in since completing your internship and graduating from the combined program? Select all that apply.

Medical/Mental Health

□ Community Mental Health Center

□ Health Maintenance Organization

□ Medical Center

□ Military Medical Center

Private General Hospital

□ General Hospital

□ Veterans Affairs Medical Center

□ Private Psychiatric Hospital

□ State/County Hospital

□ Correctional Facility

□ School District/System

□ University Counseling Center

□ Independent Practice

□ Medical School

Academia

□ Teaching Position (doctoral program)

□ Teaching Position (master's program)

□ Teaching Position (4-year college)

□ Teaching Position (community/2 yr. College)

□ Teaching Position (adjunct professor)

□ Non-Teaching Position (research, administration)

Other

 \Box Other (please specify)

47. (if on internship; post-internship, student; or post-internship, graduate selected) Are you currently working and/or supervising in an integrated primary care setting?

 \Box Yes \Box No

48. (if on internship; post-internship, student; or post-internship, graduate selected) What percentage of your time do you spend in integrated primary care?

49. (if currently working and/or supervising in an integrated primary care setting) How well did your work at the SHC prepare you for professional work in integrated primary care?

□ 1 - not at all
 □ 2
 □ 3
 □ 4
 □ 5 - completely prepared me

50. (if post-internship, student or post-internship, graduate selected) What activities do you currently participate in? Include percent of time spent in each activity.

□ Psychotherapy %_____ □ Assessment

0/0
Research
0/0
Administration/program direction
0⁄0
Supervision
0/0
Teaching
0/0
Consultation
0/0
Other (please specify activity)
%

51. (if post-internship, student or post-internship, graduate selected) Please indicate what stage you are in of the process of licensure (select all that apply)

- □ Accruing practice hours to qualify to take EPPP
- □ Preparing to take EPPP
- \Box Passed EPPP and preparing for the clinical exam
- □ Passed EPPP, clinical exam and preparing for the jurisprudence exam/other requirements
- □ Licensed to practice psychology in the US or Canada
- □ Other (please specify)

Thank you for your responses. After clicking next, you will be redirected to a separate survey to record your answer to the final question.

APPENDIX D

Primary Care Provider Survey

The following questions ask you to consider your work with Clinical/Counseling PhD student providers in an integrated primary care setting: the Student Health Center (SHC) at Utah State University. Please think back to all of your experiences with PhD student providers in at the SHC. You will be asked to rate the PhD students' general level of competency following their training at the SHC.

In responding to the survey questions, please consider only your experience with PhD student providers at USU's SHC.

Competencies

1. PhD students at the SHC may complete training in the science related to the biopsychosocial approach and research/evaluation of integrated primary care psychology.

Examples: Using scientific literature in the daily primary care practice; knowledge of human anatomy, physiology and/or pathophysiology; and evaluating broad patient outcomes.

After completing applied training at the SHC, how competent is the average psychology PhD student in the science related to the biopsychosocial approach and research/evaluation of integrated primary care?

- \square *NA Unable to adequately rate competence*
- \Box 1 Competency not developed
- $\Box 2$
- \Box 3
- $\Box 4$
- \Box 5 Extremely competent, able to practice with minimal supervisory support)
- 2. PhD students at the SHC may complete training in the leadership, administration, and interdisciplinary systems common in integrated primary care.

Examples: Effective communication and collaborative decision-making; engaging schools, community agencies, and healthcare systems to support optimal patient care; and knowledge of healthcare policy and its influence on integrated primary care.

After completing applied training at the SHC, how competent is the average psychology PhD student in the **leadership**, administration, and interdisciplinary systems common in integrated primary care?

- \square *NA Unable to adequately rate competence*
- \Box 1 Competency not developed
- $\Box 2$
- \Box 3

 $\Box \quad 4 \\ \Box \quad 5 - Extremely \ competent$

3. PhD students at the SHC may complete training in **professional values**, cultural diversity, ethics, and self-assessment in integrated primary care.

Examples: Valuing the integrated primary care context and conveying an attitude of flexibility; modifying interventions for behavioral health change in response to social and cultural factors; and understanding the importance of health professional self-care in integrated primary care.

After completing applied training at the SHC, how competent is the average psychology PhD student in **professional values**, cultural diversity, ethics, and self-assessment in integrated primary care?

- NA Unable to adequately rate competence
 1 Competency not developed
 2
 3
 4
 5 Extremely competent
- 4. PhD students at the SHC may complete training in **interprofessional teamwork between members of the integrated primary care team**.

Examples: Valuing the interprofessional team approach to health care; developing collaborative relationships with other health professionals; and using language appropriate to patient's and clinician's education and culture.

After completing applied training at the SHC, how competent is the average psychology PhD student in **interprofessional teamwork between members of the integrated primary care team**?

NA - Unable to adequately rate competence
1 - Competency not developed
2
3
4
5 - Extremely competent

5. PhD students at the SHC may complete training in **practice management**. *Examples: Applying population-based care along a continuum from prevention to subclinical problems to chronic clinical needs; operating at a variety of paces consistent with realities of integrated primary care; and co-interviewing, co-assessing, and co-intervening with other providers.*

After completing applied training at the SHC, how competent is the average psychology PhD student in **practice management**?

 \square NA – Unable to adequately rate competence

 \Box 1 – Competency not developed

□ 2
 □ 3
 □ 4
 □ 5 - Extremely competent

6. PhD students at the SHC may complete training in **assessment and intervention**. *Examples: Using evidence-based assessment and intervention measures; identifying patient needs rapidly; and using evidence-based interventions that can be reinforced and monitored by all team members.*

After completing applied training at the SHC, how competent is the average psychology PhD student in **assessment and intervention**?

NA – Unable to adequately rate competence
1 – Competency not developed
2
3
4
5 – Extremely competent

7. PhD students at the SHC may complete training in **clinical consultation**.

Examples: Helping the integrated primary care team conceptualize challenging patients; giving primary care providers actionable recommendations that are brief, concrete, and evidence-based; and using appropriate infrastructure/clinical procedures such as face-to-face, email, EMR, consults.

After completing applied training at the SHC, how competent is the average psychology PhD student in **clinical consultation**?

NA – Unable to adequately rate competence
1 – Competency not developed
2
3
4
5 – Extremely competent

8. PhD students at the SHC may complete training in **teaching about integrated primary care and training/supervising psychology trainees**.

Examples: Teaching about integrated primary care psychology; adapting to training models of other disciplines; presenting at community health care forums; and understanding the ethical issues of being a supervisor in integrated primary care.

After completing applied training at the SHC, how competent is the average psychology PhD student in **teaching about integrated primary care and training/supervising psychology trainees**?

NA – Unable to adequately rate competence
 1 – Competency not developed
 2

- \square 3
- \Box 5 Extremely competent
- 9. Are there any areas in which you believe the SHC practicum should provide more extensive training? Select all that apply.
 - $\hfill\square$ Science related to the biopsychosocial approach
 - \Box Research in primary care
 - □ Leadership/administration
 - □ Interdisciplinary systems
 - \Box Advocacy
 - \Box Professional values and attitudes of primary care
 - □ Individual, cultural, and disciplinary diversity
 - \Box Ethics in primary care
 - □ Reflective practice/self-assessment/self-care
 - □ Interprofessional/Team approach to care
 - □ Building and maintaining relationships in primary care
 - □ Practice management
 - \Box Assessment
 - □ Intervention
 - \Box Clinical consultation
 - □ Teaching
 - □ Supervision
 - \Box Other (please specify)

Provider/PhD Relationship Information

- 10. How long have you worked as a medical provider at the SHC?
 - \Box Less than 1 year
 - \Box 1-2 years
 - \Box 3-5 years
 - \Box 5-7 years
 - □ 8-10 years
 - \Box 10+ years

11. How often do you consult with a psychology PhD student provider?

- \Box Less than once a month
- \Box Once a month
- \Box Every other week
- \Box Once or more a week

12. How often do **you** *provide* information on referred patients to the psychology PhD student providers?

- □ Always
- □ Often
- \Box Sometimes

- □ Seldom
- □ Never

13. How often do **you** *receive* information on referred patients from the psychology PhD student providers?

- □ Always
- □ Often
- \Box Sometimes
- □ Seldom
- □ Never

14. Please estimate the percentage of information regarding referred patients you receive from graduate student mental health providers at your site (total percent should sum to 100).

Reports on patient status%	
Direct face to face discussion of patient status%	
Phone calls regarding patients%	
Regular meetings with Graduate Student Mental Health Provider	%

15. At what phase of care do you most often consult with the psychology PhD student provider?

- □ Assessment
- □ During short term management
- □ During long term management
- \Box When patient presents with crisis
- \Box When patient terminates care

16. What recommendations do you have for improvements of the current PhD student training at the Student Health Center?

Demographics

17. What is your age? _____

- 18. What is your sex? _____
- 19. What is your ethnicity?
 - □ White
 - □ Black or African American
 - □ Latino/a
 - □ American Indian or Alaska Native
 - □ Asian
 - □ Native Hawaiian or Pacific Islander
 - □ Other

APPENDIX E

Supervisor Clinical Evaluation Rating Form

Section 1: Student and Site Summary

Semester:

Total number of semesters at Student Health Center:

Section 2: Clinical Hours Summary

	Summer	Fall	Spring	Year Total
Direct hours				
Indirect hours				
Individual				
supervision				
Group				
supervision				

Section 3: Clinical Skills Ratings

B.1.a.i. Ability to take a respectful, helpful professional approach

- □ Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.1.b.i. Ability to work collegially with fellow professionals.

- \Box Novice
- □ Novice/Intermediate
- \Box Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- □ Advanced/Proficient
- \square Proficient
- □ Proficient/Expert
- □ Expert

B.1.c.iv. Ability to self-reflect and self-evaluate clinical skills and use of supervision, including using good judgment, and ability to negotiate needs for autonomy from and dependency on supervisors.

- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.1.f. For the practicum site itself: observe procedures, participate fully, contribute to the site.

- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- □ Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.2.a.i. Ability to utilize the initial interview process to collect sufficient information to formulate initial diagnoses and initial treatment plan.

- □ Novice
- \Box Novice/Intermediate
- \Box Intermediate
- □ Intermediate/Advanced
- □ Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.2.b.i. Ability to select and implement multiple methods and means of evaluation in ways that are responsive to and respectful of diverse individuals, couples, families and groups.

- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced

- □ Advanced/Proficient
- \Box Proficient
- □ Proficient/Expert
- □ Expert

B.2.b.iv. Ability to integrate, in verbal and written form, assessment data from different sources for diagnostic purposes and treatment purposes.

- \Box Novice
- \Box Novice/Intermediate
- \Box Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.3.a. Ability to formulate and conceptualize cases.

- □ Novice
- \Box Novice/Intermediate
- \Box Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- \Box Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.3.c. Ability to implement intervention skills, covering a wide range of developmental, preventive, and "remedial" interventions, including psychotherapy, psychoeducational interventions, crisis management and psychological/psychiatric emergency situations.

- \Box Novice
- \Box Novice/Intermediate
- \Box Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.3.e. Knowledge and skill in incorporating the concepts of EBPP in intervention.

- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced

 \Box Advanced

 \Box Advanced/Proficient

□ Proficient

□ Proficient/Expert

□ Expert

B.3.h. Consultation: Knowledge and skill to effectively engage in consultation, including knowledge of others' roles at the site, knowing when to seek and offer consultation, and appropriate communication (e.g., avoiding "jargon") when consulting with others.

 \Box Novice

□ Novice/Intermediate

□ Intermediate

□ Intermediate/Advanced

□ Advanced

□ Advanced/Proficient

□ Proficient

□ Proficient/Expert

□ Expert

B.4.b. Knowledge about the nature and impact of diversity in different clinical situations (e.g., clinical work with specific racial/ethnic populations).

 \Box Novice

 \Box Novice/Intermediate

□ Intermediate

□ Intermediate/Advanced

□ Advanced

 \Box Advanced/Proficient

□ Proficient

□ Proficient/Expert

□ Expert

B.5.b. Recognize and analyze ethical and legal issues across the range of professional activities in the practicum setting.

 \Box Novice

□ Novice/Intermediate

 \Box Intermediate

□ Intermediate/Advanced

□ Advanced

□ Advanced/Proficient

□ Proficient

□ Proficient/Expert

□ Expert

B.6.a.iii. Presenting case material (orally and in writing for diverse groups).

 \Box Novice

 \Box Novice/Intermediate

- □ Intermediate
- \Box Intermediate/Advanced
- \Box Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.6.a.iv. Identifies personal distress, particularly as it relates to clinical work, and uses resources that support healthy functioning.

- \Box Novice
- \Box Novice/Intermediate
- \Box Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- \Box Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.6.b.v. Leadership skills: development of leadership skills appropriate to site.

- \Box Novice
- \Box Novice/Intermediate
- □ Intermediate
- \Box Intermediate/Advanced
- □ Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.6.b.v. Leadership skills: development of leadership skills appropriate to site.

- \Box Novice
- □ Novice/Intermediate
- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

B.7.c. Skill in providing supervision, including interpersonal skills and delivering feedback.

- □ Novice
- \Box Novice/Intermediate

- □ Intermediate
- □ Intermediate/Advanced
- \Box Advanced
- □ Advanced/Proficient
- □ Proficient
- □ Proficient/Expert
- □ Expert

APPENDIX F

Syllabus Rating Form

Mark each essential component that has evidence of training provided in the syllabus.

Competencies	Present in syllabus?	Notes
	(Y/N)	
1A. Science related to the biopsychosocial approach		
1B. Research/evaluation		
2A. Leadership/administration		
2B. Interdisciplinary systems		
2C. Advocacy		
3A. Professional values and attitudes		
3B. Individual, cultural ad disciplinary diversity		
3C. Ethics in primary care		
3D. Reflective practice/self- assessment/self-care		
4A. Interprofessional		
4B. Building and sustaining relationships in primary care		
5A. Practice management		
5B. Assessment		
5C. Intervention		
5D. Clinical consultation		
6A. Teaching		
6B. Supervision		

APPENDIX G

Supervisor Interview Questions

- Average # patients (total medical and mental health) per week at SHC (2015-2020): _____
- 2. Average # patients receiving mental health services per week at SHC: _____
- 3. Prac student's client load
 - a. # consultations per week
 - i. 10 hour: _____
 - ii. 20 hour: _____
 - b. # therapy clients per week
 - i. 10 hour: _____
 - ii. 20 hour: _____
- 4. Average number of sessions a single client is seen for:
- 5. Therapy sessions length: _____
- 6. Average # sessions for 1 client:
- 7. Please describe where (e.g., class, therapy, etc.), how much (e.g., weekly, once

over training, etc.), and to what degree (e.g., intensive, relaxed, etc.) students are

offered training in each of the following competencies:

Cluster 1: Science

1A. Science related to the biopsychosocial approach		
Essential Component(s)		
1A.1 Scientific Mindedness: values a scientific foundation the practice of PC		
psychology		
1A.2 Knowledge of the biological components of health and illness		
1A.3 Knowledge of the cognitive components of health and illness		
1A.4 Knowledge of the affective components of health and illness		
1A.5 Knowledge of behavioral and developmental aspects of health and illness		

1A.6 Knowledge of the role and effect of families on health

1A.7 Knowledge of the effect of sociocultural and socioeconomic factors and historical context on health and illness

1A.8 Knowledge of epidemiology, public services, and health policy research

1A.9 Knowledge and understanding of evidence-based practice and its application to the practice of PC psychology

1B. Research/evaluation

Essential Component(s)

1B.1 Ability to <u>conduct research</u> in PC setting

1B.2 Ability to select valid, brief and actionable measures for conducting research in PC settings

1.B.3 Ability to conduct research in an ethically responsible manner in the PC setting

1B.4 Ability to <u>conduct research within the context of an interdisciplinary team</u> 1B.5 Application of research skills for evaluating practice, interventions, and

programs

1B.6 Ability to <u>select valid</u>, <u>brief and actionable measures for evaluating applied</u> <u>clinical activity in PC</u>

1B.7 Effectively <u>uses information technology to track patient outcomes</u> and provide a means for program evaluation

1B.8 Awareness of and participation in <u>developing and measuring Quality</u> Improvement standards in PC

Cluster 2: Systems

2A. Leadership/administration

Essential Component(s) 2A.1 Understands the mission and organizational structure, relevant historical factors,

and position of psychology in the organization

2A.2 Along with other practice leaders, facilities integration across multiple domains (clinical, operational, and financial)

2A.3 <u>Contributes to planning and implementing organizational change</u> to optimize service delivery

2A.4 Demonstrates and promotes effective communication in a range of leadership roles

2A. 5 Understands and applies organizational policies regarding health care professional employment, particularly for psychologists and other behavioral health clinicians

2A.6 Supports training programs in PC psychology and interprofessional education at local, regional, and national levels

2B. Interdisciplinary systems

Essential Component(s)

2B.1 Appreciates that PC takes place in the larger "healthcare neighborhood," within the community and social context

2C. Advocacy

Essential Component(s)

2C.1 Demonstrates <u>knowledge of health care policy</u> and its influence on health and illness and PC services

2C.2 <u>Recognizes and addresses the healthcare needs of the community</u>, and works to address how they are prioritized in care delivery, state funding, and resource allocation

2C.3 Recognizes that advocacy to improve population health may involve interacting with a number of systems

2C.4 Informs policy relevant to PC psychology care at local, state, and federal levels

2C.5 <u>Ability to advocate</u> within the psychology profession for increased research, training, and practice in PC

Cluster 3: Professionalism

3A. Professional values and attitudes

Essential Component(s)

3A.1 Consolidates professional identity as a PC psychologist

3A.2 Values the culture of the PC setting and conveys an attitude of flexibility

3B. Individual, cultural and disciplinary diversity Essential Component(s)

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

3C. Ethics in primary care Essential Component(s)

3C.1 <u>Identifies and addresses the distinctive ethical issues</u> encountered in PC practice 3C.2 Demonstrates knowledge about the <u>legal issues</u> associated with health care practice

3C.3 Articulates aspects of policies that regulate the delivery of services in health care systems

3D. Reflective practice/self-assessment/self-care
Essential Component(s)
3D.1 Supports importance of <u>reflective practice</u> in PC settings
3D.2 Understands importance of self-assessment in PC setting
3D.3 Understands importance of health professional self-care in PC

Cluster 4: Relationships

4A.	Inter	professional	
			_

Essential Component(s)

4A.1 Values interprofessional team approach to care

4A.2 <u>Appreciates the unique contributions that different health care professionals</u> bring to the PC team

4A.3 Develops <u>collaborative relationships</u> to promote healthy interprofessional team functioning characterized by mutual respect and shared values

4A.4 Able to assess team dynamics and coach teams to improve functioning

4A.5 Demonstrates awareness, sensitivity and skills in working professionally with diverse individuals

4B. Building and sustaining relationships in primary care Essential Component(s)

4B.1 Understands the importance of <u>communicating clearly</u>, concisely, respectfully in a manner that is understandable and meaningful to various audiences (e.g., clinicians, patients, staff)

4B.2 <u>Negotiates resolution of conflict</u> between clinicians, staff, patients, and systems 4B.3 Able to <u>set appropriate boundaries for patients</u>, families, clinicians, and teams

Cluster 5: Application

5A. Practice management

Essential Component(s)

5A.1 <u>Meets the needs of the patients</u>, 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

5A.2 Applies principles of population-based care along a continuum from prevention and wellness to subclinical problems, to acute and chronic clinical needs

5A.3 Operates at a variety of paces consistent with the needs and realities of PC

5A.4 Can co-interview, co-assess, and co-intervene with other PC providers

5A.5 Understands how payment for services may influence the type of services and treatment provided

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

5A.7 Uses most up to date technology and methods to guide clinical service delivery

5B. Assessment

Essential Component(s)

5B.1 Selects and implements screening methods using evidence-based assessment measures to identify patients at risk or in need of specialized services

5B.2 Ensures that psychological assessments for the PC setting are utilized, administered, and interpreted in a manner that maintains test integrity

5B.3 Uses assessment questions and measures geared towards current functioning, while simultaneously incorporating psychological, behavioral, and physical components of health and well being

5B.4 Identifies patient's needs and rationale for appointment rapidly

5B.5 Assesses pertinent behavioral risk factors

5B.6 Involves input of significant others in the assessment process as indicated

5B.7 Evaluates and uses intrapersonal, family, and community strengths, resilience,

and wellness to inform understanding of patient's needs and to promote health

5B.8 <u>Monitors patients longitudinally</u>, as indicated, to identify changes in presenting problems and effectiveness of recommended interventions

5C. Intervention

Essential Component(s)

5C.1 <u>Focuses</u> patient recommendations and interventions on <u>functional outcomes and</u> <u>symptom reduction</u> in a targeted manner

5C.2 Offers interventions that encourage proper use of health care resources

5C.3 Effectively uses <u>current evidence-based interventions</u> appropriate for PC to treat health and mental health related issues

5C.4 Offers and solicits evidence-based interventions that <u>can be reinforced and</u> <u>monitored by all PC team members</u>

5C.5 <u>Uses biopsychosocial model</u> to provide effective patient education and communication

5C.6 Targets evidence-based interventions to improve chronic care management

5C.7 Offers interventions that are inclusive of the family system

5C.8 Provides responsive care along the continuum of prevention and wellness promotion

5C.9 Bridges appropriately between behavioral services offered in PC and specialty mental health and community resources

5D. Clinical consultation

Essential Component(s)

5D.1 Assists in the development of standardized and reliable processes for consultative serves for PC psychology

5D.2 Clarifies, focuses on, and <u>responds to consultation question raised</u>, in an efficient <u>manner</u>

5D.3 <u>Helps PC team conceptualize challenging patients</u> in a manner that enhances patient care

5D.4 Tailors recommendations to work pace and environment of PC

5D.5 Follows up with other PC clinicians as indicated

5D.6 Ensures integrity of the consultation process when algorithm-based automated triggers for consultation occur

Cluster 6: Education

6A. Teaching	
Essential Componen	nt(s)
6A.1 Understands and	d is able to apply teaching strategies about PC psychology
6A.2 Completes need	s assessment and <u>understands teaching approaches used by other</u>
health professions abo	out behavioral health issues
6A.3 Knowledge of s	trategies to evaluate effectiveness of teaching methods and
procedures in PC psy	chology
6A.4 Understands im	portance of and facilitates teaching of psychology trainees by
other health care prof	essionals
6A.5 Educates and tra	ains psychologists regarding (physical and mental) health
promotion, disease pr	evention, and management of acute and chronic disease across
the lifespan to prepare	e psychologists for integrated PC in varied settings
6A.6 Participates in th	he education and training of multiple stakeholders in the larger
health care system ab	out PC psychology
-	

6B. Supervision	
Essential Componen	nt(s)
6B.1 Understands the	e ethical, legal, and contextual issues of the supervisor role in PC
6B.2 Applies a range	of methods to the supervision of psychology trainees

- 8. Clarify any points of confusion from syllabus review.
 - a. Leadership/Administration: Does "presenting client information" and

"contributing to group supervision" imply leadership training?

b. Teaching: Are presentations used to teach about the IPC model?