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Chapter:

**Employment Trends for Early Career Psychologists:  
Implications for Education & Training Programs in  
Professional Psychology And for Those Who Wish to Become  
Successful Early Career Psychologists**

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**Abstract:** This chapter highlights issues that can impact the success of Early Career Psychologists (ECP) by focusing on the academic and clinical preparation of professional psychologists throughout the education and training sequence. The evolving healthcare system is reviewed including psychologists' preparation for interprofessional, team-based practice, economic and reimbursement changes, team science, and how various training models in professional psychology can impact success. Licensure rates, job prospects, salaries, and student debt are discussed as measurable outcomes of education. Questions about professional psychology's doctoral education, internship training, postdoctoral experiences, and lifelong learning are offered in service of seeking answers that will help maximize the professional success of ECPs as well as ensuring a robust future for the field of professional psychology.

**Keywords:** early career psychologist, professional psychology, education and training, healthcare reform

If one advances confidently in the direction of one's dreams,  
and endeavors to live the life which one has imagined,  
one will meet with a success unexpected in common hours.

– Henry David Thoreau

The purpose of this chapter is to highlight issues that can impact the success of Early Career Psychologists (ECP). It relates those issues to the academic and clinical preparation of professional psychologists throughout the education and training sequence. Topics discussed related to the evolving healthcare system include psychologists' preparation for interprofessional, team-based practice, and new systems of reimbursement for services, team science, and the impact of various

training models in professional psychology. Measurable outcomes of the education and training experience such as licensure rates, job prospects, salaries, and even student debt are described. Suggestions for curricular components of doctoral education, internship training, postdoctoral experiences, and lifelong learning are offered that would assure that the educational sequence in psychology maximizes the professional success of individuals as well as enhances the overall growth and future robustness of the field of professional psychology.

The American Psychological Association (APA) (APA, 2006) defines an ECP as someone who is within seven years of having received his or her doctoral degree. However, one might consider first-year graduate students in psychology, or even first-year undergraduate psychology majors, to be “early career” in that they are embarking on a lifetime of ongoing preparation for successes within their chosen field. This might even apply to the high school senior taking an advanced placement course in psychology—a student who only now is discovering the rich scientific and applied aspects of, and career opportunities in, psychology and who is just beginning to formulate high hopes for a successful future as a psychologist.

Having a clear picture of outcome variables that reflect defined successes for postlicensure ECPs can be most helpful for those embarking on each step of the education and training ladder as they chart their own plan of study towards becoming a psychologist. These outcome variables also apply to those psychologists who, as academic faculty or staff in training programs, will shape education and training opportunities within and across those steps. As educators, their goal should be to concentrate on formulating curricula, educational objectives, and training opportunities that will maximize ultimate professional success for their students and trainees.

Trends both within and outside the field of psychology will have an impact on what is defined as professional success. Attention to trends in society, in the health-care system, in scientific inquiry, and in the psychology workforce will help shape the content of education and assist in delineating the competencies needed to be successful (Rozensky, 2011). McFall (2006, p

37) underscored the importance of the field *adapting* to “. . . major forces operating outside of psychology, forces over which psychologists have little or no control. These forces are reshaping the world . . .” in which doctoral training in psychology is embedded. Before addressing those trends and the opportunities for the field to evolve, and maybe even influence those trends, developing a clear picture of what an “early career in psychology” might look like will be helpful.

### **Sources of Information**

From their perspective as members of the APA’s Early Career Psychologist Committee, Green and Hawley (2009) reviewed some of the data-based information that helps define the march toward becoming a professional psychologist including time in training, debt-load, employment trajectories, and salary base for ECPs. The ECP Committee provides many resources for both ECPs (who may be at any step along the education and training sequence) as well as for those more senior members of the field who are helping to shape the professional lives of those in training by mentoring the newest members of the professional workforce (e.g., <http://www.apa.org/careers/early-career/index.aspx>).

Source material that includes data describing the activities and attributes of the professional workforce in psychology in general, and early career colleagues more specifically, can be found at the APA’s Center for Workforce Studies (CWS; <http://www.apa.org/workforce/index.aspx> ). This site provides the most current information on salaries, demographic, and educational backgrounds of students moving through the educational pipeline in psychology. It also contains a growing focus on estimates of society’s workforce need for psychologists across the employment spectrum.

For those considering a career in professional psychology, the APA’s *Graduate Study in Psychology* (<http://www.apa.org/pubs/books/4270096.aspx>) provides comparative information regarding 660 graduate programs in psychology. Information presented that will inform the “consumer” of the education and training opportunities in professional psychology includes

program acceptance rates, tuition costs, time to degree, and employment information regarding program graduates, among other information.

Finally, the APA's Commission on Accreditation (<http://www.apa.org/ed/accreditation/about/program-choice.aspx>) provides a wealth of information concerning the importance of education and training within accredited institutions, how accreditation is designed to protect the public and guide students seeking quality graduate education towards programs meet predefined standards of education and training, and lists those programs in professional psychology that are indeed accredited. Understanding the context within which training takes place will help direct curricular development that meets the standards of accreditation, the expectation of quality education and training, and helps assure a competent start towards the professional success of program graduates.

### **A Picture of Early Psychologists in the Workforce**

Data regarding the professional psychology workforce is collected and published routinely by the APA's CWS (e.g., Michalski & Kohout, 2011; Michalski, Kohout, Wicherski, & Hart, 2011). This information helps describe the employment environment toward which ECPs are headed or into which they have entered recently. It also can strategically guide those educators developing the curricula for preparing the next generation of psychologists so that they possess the competencies needed for the workplace venues where those psychologists will be employed now and in the future. Although Rozensky (2011) and Sweet, Meyer, Nelson, and Moberg (2011) have raised some concerns about the veridicality of the CWS data due to small samples, and the CWS itself offers appropriate caveats about sample size and generalizability of its own information, “. . . for the sake of the discussion, . . . this is an accurate snapshot of the field of psychology since these are the only specific data available on the employment locations of psychology's practice workforce” (Rozensky, 2011, p 798). It should be noted that Rozensky (2011) has raised similar concerns about the job data provided by the United States (U.S.) Bureau of Labor Statistics (2010) regarding the

professional psychology workforce due to the Bureau's inclusion of individuals with masters and bachelor degrees in their definition of the psychology workforce.

The doctorate employment data for ECPs entering the professional workforce in 2009 (Michalski, et al, 2011), the most current information available, found that the median starting salary for recent graduates was \$64,000 (average of \$66,008; *SD*= \$23,861). Women reported a median salary \$8,000 lower than men (\$62,000 versus \$70,000), whereas the median and mean salary reported by psychologists across various minority groups were similar to that of nonminorities. The majority of all salaries were between \$50,000 and \$70,000, which Michalski et al. noted was a slight downtick from two years earlier. Clinical psychologists working in the field of criminal justice reported the highest median starting salary (\$80,500) and graduates working in applied psychology positions tended to have the highest median salaries overall (\$73,332; which includes those in consulting firms at \$75,000). ECP faculty members in academic departments, identified as departments "other than psychology," had the highest median 9–10 month salaries (as assistant professors; \$60,000) reflecting higher salaries for those psychologists teaching within such professions as business, for example.

Of the 2009 cohort of new doctorates, 75% were women, an increase of 5% in 10 years and 18% over 20 years. The CWS reported that 10 years ago just over 83% of new graduates were White, whereas Hispanics/Latinos and Blacks/African Americans each comprised 5% of the new doctorates and Asians represented 7%. The number of new doctorates younger than 35 years has increased 13% from 58% to 71%. Of the respondents, 75% earned a PhD, whereas 24% were awarded a PsyD in 2009 (PsyDs comprised less than 8% of new doctorates during the mid-1980s). Michalski et al. noted that 63% of the new doctorates were employed full time, approximately 8% were employed part time, and 24% were working in postdoctorate positions. Nearly 6% were unemployed with nearly two thirds of those unemployed actively seeking employment. The proportion of those working full time has declined steadily (from 82% in 1986 and 69% in 1997).

The number of new doctorates employed in postdoctoral positions has more than doubled from about 6% in 1986 to 20% in 2007. In all, 47% of 2009 doctorate recipients were engaged in or had completed postdoctoral study. According to Michalski et al., men were more likely than women to be employed full time (67% versus 62%). Ethnic minority psychologists reported full-time employment at a slightly higher rate than White respondents (65% versus 62%), with minorities just as likely as Whites to have engaged in postdoctoral study. The highest rates of full-time employment (70%) were reported by Asian psychologists.

Michalski et al. found that toward the end of the first decade of the 21st century, the overall unemployment rate remained relatively low among new psychologists (6% as noted earlier) despite the severity of the economic downturn that began in 2008. However, this does represent an increase from 2007 when approximately (only) 2% of new doctorates were unemployed. The largest single proportion of those seeking work (36%) indicated that they did not want to relocate and could find no suitable position in their geographic location. The rates of full-time employment, part-time employment, postdoctoral involvement, and unemployment did not vary substantially between graduates from health-service provider training and those in research subfields when considered in the aggregate according to the CWS. Of those full-time positions, 37% were in the human service sector; 32% were in academia, 21% were located in business, government, and other settings, and 8% could be found in schools and other educational settings.

Most of those employed in full-time human service positions worked in organized care settings rather than individual or group private practices (31% versus 6%). Rozensky (2011) noted that, according to the CWS, across the general population of all psychologists (early career and more senior colleagues), there are *more* psychologists now employed in *institutional* settings than in independent practice. He went on to predict that this trend will continue to increase given the changes to the health care system brought on by the recent Affordable Care Act (Public Law No: 111–148, 111th Congress: Patient Protection and Affordable Care Act, 2010).

Almost 30% of newly employed psychologists began their current, primary employment within three months of completing their doctoral degree, 38% found a position before completion of their degree, and 6% had had the job when they began their graduate program. Nearly 75% of the newly hired psychologists stated that their general graduate training was closely related to their current employment, with 66% acknowledging that courses in their major subfield were closely related to their (new) job.

Looking at specific workplace venues, university settings and business, government, and other such settings each accounted for 21% of the employment sites, hospitals (predominantly VA medical centers) represented 14%, followed by other human service settings at 11% (including university/college counseling centers, outpatient clinics, and primary care offices or community health centers), Eight percent indicated schools and educational settings, slightly less than 6% indicated independent practice as their primary position, with another 6% working in managed care. Of note, “most new doctorates appeared to be fairly satisfied with their current positions” (Michalski et al., 2011, p. 6).

The CWS then looked at student funding and debt load of the newest graduates entering the field (in 2009) and found that almost 78% of the respondents used their own or family resources to help complete their graduate studies. Most *also* received support from an overlapping range of other funding sources at some point during their graduate education, including university-based funding (71%), student loans (56%), and nonuniversity grant support (15%) . Ethnic minority and White graduates reported using their own earnings/family support in similar proportions (79% versus 75%) with little variance in the proportions of ethnic minority and White doctorates whose primary support were personal resources (12% and 17%, respectively). Michalski et al. go on to note “differential debt levels being assumed by those seeking PhDs versus PsyDs” (p. 9). PhD students (52%) indicated that they relied primarily on university sources of support, with 18% using loans and only 15% using their own resources. PsyD recipients, on the other hand, reported that (only) 4%

of them had university sources as their primary means of financial support, 65% utilized nonuniversity or federal loans, with 22% using personal or family financial support. Of all 2009 doctorates, 68% reported some level of debt upon receipt of the doctoral degree. Seventy-eight percent of health service provider trained graduates and 48% of those in research subfields reported carrying debt. Across all models of training, graduates in health, counseling, and clinical psychology reported the highest proportion of debt (94%, 81%, and 79% respectively). Almost half the health service provider graduates owed \$80,000 with 11% having debt in excess of \$160,000. According to Michalski et al., the median debt for those in the practice subfields was \$80,000—more than double that for those in the research subfields (\$32,000). Eighty-nine percent of PsyD recipients and 62% of PhD recipient reported some amount of debt. Those with a PsyD in clinical psychology reported a median debt load of \$120,000 in 2009, up from \$100,000 in 2007, \$70,000 in 1999, and \$53,000 in 1997. Clinical PhD recipients reported a median level of debt of \$68,000, up from \$55,000 in 2007. Those with PhDs in the research subfields had a median debt of \$38,500. Almost 60% of PsyD graduates owed more than \$100,000 compared to less than 17% of those with PhDs. Michalski et al. (2011) noted that “these debts have real implications for productivity and lifetime earnings among substantial segments of the doctoral population in psychology” (p. 10).

For that same cohort of new ECP graduates, Michalski et al. (2011) reported that the most utilized and most successful mechanism for job hunting by those in the human services area was through informational job search channels (69%) followed by electronic resources (32%), faculty advisors (29%), *APA Monitor on Psychology* ads (25%), and *Chronicle of Higher Education* advertisements and other classified ads in newspapers (15%). They noted that over the past decade the most successful job search strategies have shifted from print media to informal sources with electronic resources a distance second.

### **Trends Impacting the Psychology Workforce**



Given the preceding picture of the personal issues impacting ECPs like debt load, salaries, job searches, and workplace settings, we will discuss next a range of trends that can impact the day-to-day activities of early career psychologists. We will look at trends within society in general, trends within health care, and then trends within the field of psychology. We then will relate those trends to current developments within graduate education in professional psychology as well as opportunities to adapt our education and training models and programs in anticipation of these evolving developments. First, however, we will review several outcome measures that reflect the attainment of success at work and across the span of one's career. Those outcomes can be used to further focus the discussion of the necessary components of education and training to assure the ultimate success of ECPs within the context of the trends presented. A series of questions will be presented regarding how to assure ECP success and then be summarized at the end of the article.

### **Personal Success**

Judge and Hurst (2008) describe how a higher level of "core self-evaluations" are associated with both higher initial levels of work success and steeper work success trajectories with career success defined "as the real and perceived achievement individuals have accumulated as a result of their work experiences" (p. 850). Those authors suggest that early career successes help set individuals on a course for stronger career progress over time and that those with higher "self-evaluations might draw greater satisfaction from their extrinsic success" and be more "equipped psychologically to take increasing amounts of satisfaction and fulfillment from their work" (p. 851). Myers, Sweeney, Popick, Wesley, Bordfeld, and Fingerhut (2012) looked at graduate student self-care and found that "sleep hygiene, social support, emotion regulation, and acceptance within a mindfulness framework were significantly related to perceived stress" (p 55). A good question then for each ECP, and for every graduate education and training program and mentor is, how is this type of "self-assurance" addressed in the preparation of (early career) psychologists as they move through the sequence of steps in their education and ultimately embark on a career of success, growth, and fulfillment?

Further, as Myers et al. (2012) suggest, how do graduate programs assist their students in developing self-care related competencies in order to better participate and learn from their education and training?

### **Programmatic Success**

McFall (2006) warned that when making comparisons of various models of training or across programs in professional psychology it should be noted that there are no controlled studies—no random assignment of students to programs—and the majority of studies comparing programs and training models are correlational in nature. This caveat should apply to any discussion of outcomes in education and training in professional psychology.

However, McFall did note that “training models do seem to make a difference” (p. 37). For example, he highlights the workplace setting (outcome) data presented by Cherry, Messenger, and Jacoby (2000) that compared the most common workplace settings of graduates from the three prominent training models in clinical psychology: scientist-practitioners (medical center, 18%; CMHC, 15%; hospitals, 14%; postdoctoral training, 13%; and academic, 11%), scholar-practitioners (CMHC, 25%; other/multiple, 23%; and medical center, hospital, private practice, 12% each) and clinical scientists (academic, 29%; medical center, hospital, private practice, 13% each; and postdoc, 9%). Can these “outcome” data provide a measure of possible “steerage” or direction for those students choosing their graduate training (program) when they have a particular workplace venue as their ultimate goal? Do the graduate programs within these three general training models actually build specific workplace-related competencies into their curricula to assure high quality preparation for success in the venues toward which their graduates gravitate? Do these workplace choices actually reflect the program’s defined competencies and thus graduates actually go to work where they are best prepared to succeed?

Sayette, Norcross, and Dimoff (2011) compared graduate programs in clinical psychology that were members of the Academy of Clinical Science (ACS) with programs that were university-

based clinical programs but not members of the Academy and with programs that were located in “specialized schools” that did not provide academic programming beyond psychology or counseling. They conclude that, although there is a great deal of heterogeneity across training models in the field, those programs that are members of the ACS admit fewer students, provide more financial aid to students, and have very different theoretical orientations than those programs found within specialized institutions (the differences between ACS programs and university based graduate programs were considered by the authors as not significant). They raise the concern that “the programs with the least stringent admission criteria are admitting much larger proportions of applicants” (p. 10).

Graham and Kim (2011) reviewed predictors of success in professional psychology by looking at individual student characteristics as well as university and programmatic variables. They began their discussion by reiterating Peterson’s (2003) defined purpose of graduate education in professional psychology as “the attainment and advance of excellence in the education and training of psychologists for illustrious careers in professional service” (p. 797). To evaluate this concept of “attainment and advance of excellence,” Graham and Kim looked across types of graduate training programs in professional psychology and collected data on three outcome variables: number of students receiving an APA-accredited internship, graduates’ scores on the national licensing exam in psychology, and the percentage of graduates becoming board certified (by the American Board of Professional Psychology; ABPP). They considered the licensing exam score to be a measure of the knowledge necessary for the *successful practice* of psychology; accredited internships were assumed to be a measure of *quality training*; and becoming board certified was considered as a measure of *peer-perceived quality of service* practice. Graham and Kim concluded that “clinical PhD programs outperform clinical PsyD programs on the outcomes examined” (p. 349). Further, they reported that program type (PsyD versus PhD) and *not* size (number of students) or selectivity (incoming GRE scores, for example) accounted for the relative success of graduates from each

training model-type program. These authors also argue that research university based programs have better outcomes than free standing professional programs, and this might be due to financial (grant funding) and increased research opportunities that may well account for these differences. Graham and Kim conclude that the focus on *scientific rigor* in doctoral-level training might be the best predictor of better professional outcomes as measured in their study (accredited internships, higher licensing examination scores, and higher likelihood of becoming board certified). How do graduate programs evaluate their ‘scientific rigor’ in their curricula and how is that ‘rigor’ operationalized for students so they may evaluate their programmatic choices?

Schaffer, Rodolfa, Owen, Lipkins, Webb, and Horn (2012) looked at 6,937 (94%) of the total number of doctoral level individuals who took the Examination for Professional Practice of Psychology (EPPP) national licensing examination between 2008 and 2010 considered by some as a viable outcome measure of ECP success. Some general findings suggest that women had a higher pass rate than men; the longer one waits to take the exam post degree the poorer the pass rate; and the more time one spends studying for the exam (to a point) the higher the pass rate. Schaffer and colleagues concluded that “those who were trained in PhD programs passed at a rate of 82%, while those trained in PsyD programs passed at the rate of 69%” ( $p < .001$ ) (p. 3). Further, they found that those examinees from *accredited* doctoral programs (APA or CPA) passed the EPPP at a rate of 78% compared to only 58% for those from nonaccredited programs. For those who attended APA or CPA accredited (or Association of Psychology Postdoctoral and Internship Centers (APPIC) member programs) internships, the pass rate was 82% versus 68% for those who did not attend an accredited (or APPIC member) internship program. Schaffer et al. offered several recommendations to individuals as well as the field in general. Understanding a program’s EPPP pass rates, they suggest, may well help students in choosing programs with a better success rate. For the field and future students, they recommend, that the “pass rate on the EPPP should be one important variable influencing whether a graduate program *receives* (italics added) APA or CPA accreditation” (p. 6).

It is clear that pass rate is one of the (outcome) markers of successful students and successful programs, and, thus, understanding variables related to success is a key to helping prepare ECPs for their future. How are graduate programs and internships addressing the licensing pass rates of their graduates and assuring that a high standard of quality education and training is met?

Jaffe (2004) argued that professional psychology training programs have different selection criteria than academic psychology departments that might account for such differences. He opined that universities are looking for “intelligence, research capability, and a high level of competence as a scholar” and a free standing professional program looks for students who are “competent, dedicated, and capable professionals it can prepare to respond to the needs of society” (p. 648). For the individual student seeking to become a successful ECP, and for graduate programs that wish to maximize the professional and personal development of their new, soon to be successful professionals, success might be maximized by looking specifically at which training experiences, in which academic and training situations, will be most efficacious in developing those competencies needed to assure success (e.g., Collins, Callahan, & Klonoff, 2007).

The APA (APA, 2011a) Commission on Accreditation (CoA) stated in its 5-year summary report on accreditation in psychology that “ensuring the quality of education and training of students/trainees is one of the ways we as a health care and mental health profession can best retain the trust of the public and of our colleagues in other professions, as well as assure our continued growth and development” (p. i). That report presents data submitted by all accredited programs at the doctoral, internship, and postdoctoral levels and across types of program (PsyD, PhD, clinical, counseling, school, combined, postdoctoral specialty). A range of metrics are presented by the CoA that include total number of students by program, percentage of student admitted to a program, gender and ethnicity of programs, time to degree, percentage of attrition, and annual financial support for interns and postdoctoral residents. Although accreditation may well be the ultimate benchmark indicating at least minimal quality (Boelen & Woollard, 2009) in professional

psychology education and training (e.g, Rozensky, 2011, 2012), some of these programmatic variables might be useful for both the individual student seeking quality education and for programs themselves to consider when measuring their program's success or as variables that predict early career success. For example, programs with higher attrition rates may well be programs with either higher expectations of their students, and, thus, a more difficult curriculum and thus more students leaving the program—or they may be programs with low initial admission criteria with many students admitted who cannot make the grade and must leave the program. Such concrete measures of program performance can be useful prospective students in assessing program choice, thereby assuring a trajectory toward ECP success. How can the field assure that these issues are routinely included in outcome measurements of quality in education and training?

### **Trends That Will Influence Success of the Professional Psychology Workforce**

Rozensky (2012a,b) has detailed a series of trends—patterns of change over time—that he believes have direct impact on society in general, the evolving health care system in the United States, and thereby, will impact the training and day-to-day activities of professional psychologists over the next several decades. Such trends should be reviewed as to their implications for the preparation of the next generation of psychologists who must work within our changed, and changing society.

**Diversity and the changing population.** The demographic picture of the United States is changing, the population is aging, and the number of those living with chronic diseases is increasing. The United States Census Bureau states that “between 2010 and 2050, the U.S. is projected to experience rapid growth in its older population” (Vincent & Velkoff, 2010, p. 1) as the number of those over the age of 65 doubles from 40.2 million in 2010 to 88.5 million by 2050. Further, “an increase in the proportion of the older population that is Hispanic and an increase in the proportion that is a race other than White” (p. 8) also is projected to increase. The 2010 census (U.S. Census Bureau, 2011) reported that half of the growth in the U.S. population between 2000 and 2010 was due to an increase in the Hispanic population, which increased some 43%. Thirteen

percent of the population was African American and 5% was Asian with a population growth of 43% in that group over those 10 years. Ortman and Guarneri (2009) state that the “racial and ethnic diversity of the U.S. population is shown to increase” well into the future with the percentage of White-only population decreasing. Plaut (2010) acknowledged the impact of this changing picture of the U.S. population on healthcare disparities and access to healthcare .

The advent of these changes presents professional psychologists the opportunity to build on its strong commitment to multiculturalism as a core competency (e.g., Rogers, 2009). Further, through their education and training and a commitment to lifelong learning, ECPs should have an ongoing focus on these societal changes. The individual student, each ECP, and education and training program(s) in general should incorporate such resources as the APA’s guidelines on aging, disabilities, multiculturalism, and lesbian, gay, and bisexual clients (APA 2002, 2004, 20011b, 2012) in their personal readings as well as formal curricula and as the basis of functional competencies that prepare the success ECP to work within the context of the changing demographics of our society.

**Changing healthcare system.** “Changes to the healthcare delivery system as detailed in the *Patient Protection and Affordable Care Act* (ACA; Public Law No: 111–148, Mar 23, 2010) focus on efficient, effective, and affordable quality healthcare, a transparent and accountable healthcare system, prevention of chronic diseases, expansion of eligibility for publically supported healthcare programs, patient involvement in their own care, and the expansion of the healthcare workforce that is educated, trained, and prepared to practice in an interprofessionally focused, team-based delivery system” (Rozenky, 2012, p. 5).

After over 100 years of attempts to transform the healthcare system in the United States, the ACA, and the various implementing regulations and rules that are promulgated to shape the day-to-day practice of healthcare , will have profound implications for patients, their families and for those who provide the clinical services within a truly comprehensive, integrated healthcare system.

Professional psychology must be focused strategically on its own readiness for these changes—especially so in the academic and clinical preparation of those ECPs who will be entering the healthcare workforce as transformed by this legislation. How are programs and students preparing for these changes?

In 2001 the APA reaffirmed its commitment to being a broad healthcare profession, broader than its roots in mental health. This was accomplished by adding “health” to the APA bylaws (Rozensky, Johnson, Goodheart, & Hammond, 2004). Clearly an important statement given that in 2005, 133 million Americans had at least one chronic medical condition and this is predicted to increase to 157 million by 2020. At the same time those with multiple chronic illnesses numbered 63 million in 2005 with a predicted 81 million in 2020 (Bodenheimer, Chen, & Bennett; 2009). Although the aging population accounts for some of this increase in chronic illness, Bodenheimer et al. noted that behaviorally related risk factors, such as obesity and tobacco usage, are responsible for adding to this rate. Those authors are concerned about increased healthcare costs due to these multiple chronic healthcare problems and have asked if “robust public health measures” (p. 66) could flatten the healthcare cost curve by addressing and preventing many of the behavioral health risk factors. Psychology *is* the profession that should be addressing these behavioral-health risk issues at the individual, family, and community levels (Rozensky, 2011, 2012). How are our ECPs being prepared to carrying out such population-based research, and evidence-based treatment research for these issues, and for ultimately providing the services needed to prevent or ameliorate these problems?

Rozensky (2012a) stated that, along with psychology’s traditions of efficacy, effectiveness, and community-based research and treatment, the profession also should prepare some of its next generation of psychologists to engage in population-based approaches to the scientific study and treatment of the human condition. As our healthcare system evolves, this additional set of competencies will position psychology to use its critical thinking and research skills to bring



important changes to the delivery system and, of course, highlight psychology's leading scientific and applied roles in understanding and positively influencing health behaviors (Rozensky, 2008). The U.S. Government's Healthy People 2010 and 2020 (U.S. Department of Health and Human Services; USDHHS, 2000) has long had a focus on the key role of health behaviors in health promotion, and the ACA, in its section Title IV—"Prevention of Chronic Disease and Improving Public Health," is looking for evidenced-based approaches to health promotion and a national disease prevention model for the public health. The *Advisory Committee on Interdisciplinary Community Base Linkages* (2012) of the USDHHS focused its 10th annual report to Congress and the Secretary of DHHS on building a robust interprofessional healthcare workforce prepared to address health behavior change in a cost-effective manner. How are health promotion, disease prevention, and population-based interventions infused in our curricula, and then, within the portfolio of scientific and clinical competencies of our new ECPs? How do our training programs assure those skills along with the already strong bedside treatment approaches for working with patients with various health and medical diagnoses (e.g., Johnson, Perry, & Rozensky, 2002)?

**Accountability.** Much of the focus on "accountability" in the ACA has to do with quality care, tracking clinical outcomes, building a financially accountable healthcare system, "pay for performance," (Rosenthal & Dudley, 2007 ), and otherwise containing healthcare costs. Much has been written on healthcare finances and healthcare reform, with some readings recommended as informative and entertaining (Reid, 2009; Gruber, 2011). But given the focus on *accountability* within ACA, professional psychology must use its scientific acumen to collect and publish outcome data to illustrate how psychological services are cost effective and produce cost-savings across the healthcare system as well as having (clinical) effect sizes (e.g. Ferguson, 2009) that are equal to or surpass medical procedures—medical procedures where little question is raised about whether *those* treatments will be reimbursed within the changing healthcare system. This psychologically focused outcome information *must* include data regarding services for traditional mental health care,

psychological services to those with medical illnesses, and disease prevention and health promotion approaches as well. Goodheart (2010) noted that psychology must make a strategic transformation regarding healthcare economics given the upcoming changes to the entire system. Where in the curriculum are our ECPs exposed to the acquisition of knowledge regarding healthcare economics and day-to-day implications of costs and cost containment for their involvement in patient care?

**Evidence-based treatments and medical cost offset.** The Institute of Medicine (2001) recommended in its classic *Crossing the Quality Chasm*, that successful healthcare outcomes can be best accomplished by the practice of evidenced-based healthcare. Psychology has embraced evidence-based practice (EBP) with its own set of conclusions that EBP “is the integration of the best available research with clinical experience in the context of patient characteristics, culture, and preferences” that assures effective psychological practice and enhances public health (APA, 2005; APA Presidential Task Force on Evidence-Based Practice, 2006; p. 280).

Although evidence-based psychological treatment outcome research provides robust data to support inclusion of psychological services within the evolving, integrated, interprofessional health care system, clinical outcomes that are *cost effective* and actually can contribute to cost savings in this accountable system will be expected and be beneficial to the field. Thus, are ECPs prepared for this type of data collection and program evaluation within the new healthcare system including the clinical use of EBP when appropriate? Are ECPs prepared to advocate for the use and reimbursement of EBP both locally and nationally? And, as Levant and Hasan (2008) have suggested, how are mentors and supervisors modeling the use of EBP for graduate students and ECPs and do trainees take the responsibility to ask for this level of training?

Continued collection of *medical cost offset* research data that supports psychological services (Chiles, Lambert, & Hatch, 1999; Tovian, 2004) should be built into routine program evaluation education of all of psychology’s students. It should be a core competency taught to the next generation of healthcare psychologists. Treatment outcome research done by graduate students

for their doctoral dissertations routinely should include *healthcare cost offset data* and that data should be reported routinely in the literature. This training will prepare a subset of ECPs to take a leadership role in evaluating the new healthcare system and provide data so that advocates for psychology can use that information in discussions with policy makers at the national, state and local services system levels (Rozenky, 2011).

**Electronic healthcare records.** The ACA is projected to lower healthcare expenditures by 0.5% (as part of the gross domestic product) and reduce the federal deficit by more than \$100 billion over its first decade and then by \$1 trillion between 2020 and 2030 (Orszag & Emanuel, 2010). Orszag and Emanuel go on to say that this decrement in costs will result from the establishment of “dynamic and flexible structures that can develop and institute policies that respond in real time to changes in the system in order to improve quality and restrain unnecessary cost growth” (p. 601). Some of this savings will be generated by more efficient information sharing via electronic health records through “greater integration” (p. 602) of care throughout the system (hospitals and outpatient services) and amongst providers (interprofessionalism). Richards (2009) attempted to strike a balance between professional psychology’s focus on ethical responsibilities for maintaining patient confidentiality and the requirements of the Health Insurance Portability and Accountability Act (HIPAA) regarding the limitations of sharing of patients’ personal health information (HIPAA, 1996). This is particularly important given the complications for psychologists working within an integrated, interprofessional healthcare work environment with medically ill patients where sharing information is key to quality care. How are ECPs being educated about the use of electronic healthcare records? Education and training programs should include literature in their curricula focused on the ethical, legal, regulatory and financial issues surrounding the evolving use of telehealth and electronic healthcare recordkeeping (e.g., Baker & Bufka, 2011). When possible, practicum opportunities that provide hands on use of direct services

via telehealth technologies and direct exposure to the use of electronic healthcare records should be part of training. How else will ECPs be prepared for this component of the healthcare system?

**Competency-based education.** Continued preparation of the next generation of psychologists using competency-based education will be very important given a growing movement towards shared competencies in healthcare (Kaslow, Dunn, & Smith, 2008). Education and training programs and each individual ECP must have an appreciation of the issues surrounding development of a psychology workforce that will be responsive to evolving healthcare demands of the country. Roberts, Borden, Christiansen, and Lopez, (2005) described the importance of this “culture of competency” in professional psychology and Fouad and colleagues (2009) highlighted the need for consistent, agreed upon, and measurable competencies in professional psychology. Measurable competencies will be key (D’Amour & Oandasan, 2005), given the focus on accountable care that must include a healthcare workforce with shared, interprofessional competencies. How does each education and training program in professional psychology incorporate defined and measurable foundational and functional competencies (Kaslow et al., 2002) in preparing our ECPs? Can each ECP innumerate the competencies they will need to successfully work within the (new) interprofessional, healthcare system? Does each psychologist have a clear picture of their own acquired competencies and those competencies they need to develop further?

**Interprofessionalism.** Possibly the most far reaching, functional change to healthcare is the ACA’s focus on interprofessionalism. The history and current development of federal policy recommendations supporting “the integration of interprofessional education (IPE) into health professions education as a means of assuring a more collaborative health care workforce” has been described by Wilson, Rozensky, and Weiss (2010; p. 210). Interprofessionalism “is defined as the development of a cohesive practice between professionals from different disciplines. It is the process by which professionals reflect on and develop ways of practicing that provides integrated and cohesive answers to the needs of the client/family/population” (D’Amour & Oandasan 2005, p.

9). The collaborative education of *all* health professionals for team-based care actually provides better clinical and financial performance while reducing clinician workload (Schuetz, Mann, & Evertt, 2010). Four shared competency domains—values and ethics, roles and responsibilities for collaborative practice, interprofessional communication, and team work and team-based care—form the basis of this interprofessional approach to healthcare (Interprofessional Education Collaborative, 2011; Interprofessional Education Collaborative Expert Panel, 2011).

The ACA clearly recognizes the value of interprofessional care and its impact on quality and cost savings in Section 3502, “Establishing Community Health Teams to Support the Patient-Centered Medical Home.” In Section 935, the Act recognizes provision of interprofessional, integrated disease prevention and health promotion services and provision of interprofessional treatment of chronic diseases. Section 747, “Primary Care Training and Enhancement,” discusses clinical teaching settings and interprofessional models of health care including integration of physical and mental health services. How are ECPs being prepared for this interprofessional, team-based healthcare system? How are these interprofessional, team-based competencies built into the education and training system and graduate education curricula with real, practical opportunities to train ECPS to succeed in interprofessional teams (Schuetz, Mann, & Evertt, 2010)?

**Structural changes and enhanced accountability in the healthcare system.** The ACA describes the advent of structural changes to the healthcare system and enhanced expectations of accountability with the advent of accountable care organizations (ACO) and patient centered healthcare (medical) homes (PCMH) built on the foundation of interprofessionalism, interprofessional competencies, and team-based care. ACOs are designed to align financial incentives with accountability (quality-based outcomes) across the care continuum (Rittenhouse, Shortell, & Fisher, 2009), whereas PCMHs emphasizes strongly coordinated primary care services as the key to delivery system reforms. Fisher, Staiger, Bynum, and Gottlieb (2007) recommend that ACOs utilize an enhanced hospital medical staff model, in concert with hospitals themselves as the

hub of the healthcare wheel. This structure will assure continuity of care designed to accomplish the mandates of the ACO concept—including performance measures that hold the healthcare professionals (the professional staff) in their community care and institutional roles and hospitals themselves accountable for quality, cost-effective care.

These hospital-based ACOs, most likely, will require enhanced accountability including the issues of measurable clinical and financial outcomes discussed earlier as well as explicit credentialing of providers. Credentialing of staff will assure that these systems of care only include the highest qualified providers as part of their system of care; an easily reviewable measure a priori. That is, credentialing will require *graduation from accredited education and training programs*, which, to many, suggests that providers have met (at least minimal) defined standards of training (Rozensky, 2011). There also will be an increasing expectation of specialty board certification—already routine expectations of hospital-based healthcare providers on the “professional staff” (Rozensky, 2012). Robiner, Dixon, Miner, and Hong (2012) and Kaslow Graves, and Smith (2012) reinforce the importance of board certification for psychologists noting that, in medicine, board certification is a response to consumer desire for a measure of quality in healthcare and that patient prefer to see board certified providers.

These system-based expectations should stimulate professional psychology to review its training models, its commitment as a field to requiring universal accreditation of its training programs as a statement of quality assurance, and taking a hard look at the importance of both the general practice and specialized practice of psychology (Rozensky, 2011; 2012). This too requires the ECP to understand the credentialing requirements for participation in this evolving, accountable-care system. How are the graduate programs preparing soon to be ECPs for the mechanics of seeking staff privileges, for understanding specialization and board certification, and assuring that they are preparing the next generation within only accredited education and training programs?

Nutting et al. (2011) describe PCMHs as a major improvement to primary care delivery with their focus on access, coordination, and comprehensive/integrated care, and the sustained (long-term) personal relationship between patient and a provider group, with patients actively engaged in this healthcare partnership. The Carter Center (2011) recommends that, in order to maximize the success of this enhanced primary care system, all health profession education and training programs should include education about the demographic, socioeconomic, financial, quality, political, and cultural issues affecting healthcare services, educate students about development of high-functioning teams in primary care, and educate providers about the incidence and prevalence of behavioral conditions in primary care settings. How are professional psychology programs doing in following the Carter Center's recommendations so that ECPs demonstrate competencies in these areas and thus, can be viable members of the PCHM movement?

Are graduate training programs in professional psychology incorporating knowledge-based content and practical, clinical competencies for practice in the accountable care and primary care environments? Is the field of psychology, and each individual program making certain that ECPs are being trained in only accredited programs, given the increased demand for accountability in the evolving healthcare system (Rozensky, 2012)? How are students being prepared to enter the healthcare system where specialization is a growing expectation and where lifelong learning might suggest specialization is even more pressing (Rozensky and Kaslow, 2012)?

**Supply, demand, and the professional psychology workforce.** Professional psychology must have an accurate accounting of the current psychology workforce (who is doing what and where are they working?) and an understanding of its readiness for the service demands based on the upcoming changes to the healthcare system (Rozensky 2011; 2012). We must have a clear picture of the future demands for psychological services (what *should* we be doing and in what work setting?) so the field can prepare the correct number of psychologists needed, with the

requisite special(ist) skills\competencies required by healthcare reform. Do our graduates know what those demands will be so they can place themselves in jobs to meet those demands?

Some authors (e.g. Stedman, Schoenfeld, Carroll, & Allen, 2007) have raised concerns about a possible oversupply of psychologists, while others (Rozensky, Grus, Belar, Nelson, & Kohout, 2007) advocate for a systematic workforce analysis to provide a data-based approach in order to plan for the future of education and training programs in psychology—especially when the field must consider the number of graduate students seeking predoctoral internships. This becomes even more acute when that training only occurs within accredited programs. The CWS (APA, 2009) reported that the majority (54.5%) of psychologists work in a wide range of institutional work environments as their primary place of employment while 45.5% indicated their work setting was “private practice.” It remains to be known if this is the appropriate number of psychologists and if they are working in the correct healthcare venues in anticipation of the evolving healthcare system demands. How are academic and clinical training programs using the available workforce data to help shape their training of the next, and next, cohorts of ECPs? How are the ECPs of tomorrow—whether beginning their education today, choosing their next training venue, or establishing their own lifelong learning plans—using available workforce data and available data on professional success to choose from which academic institutions they will seek their training, what competencies they will need to develop to succeed in their chosen career work setting, or whether they should consider additional, specialized training?

**Preparation for Success in the World of Tomorrow: The Responsibilities of both Early Career Psychologists and Education and Training Programs in Professional Psychology**

“America’s health care system is methodically entering into the 21st century with society’s leaders steadily developing the expectation of possessing an unprecedented availability for documented accountability” (DeLeon & Kazdin, 2010, p. 314). In order for ECPs to succeed in an environment of heightened accountability, each individual ECP must take responsibility for being accountable



for their own preparation for success. But, more so, each graduate education and training program must be accountable for providing the highest quality of education and training necessary to prepare the next, and next, and next cohorts of successful ECPs. We will review briefly the trends identified earlier and make some recommendations for programs and students to maximize opportunities for success as ECPs.

### **Truth in Advertising, Student and Early Career Choices, and the Professional Psychology Workforce**

The legal doctrine of *caveat emptor*—buyer beware (e.g., Garner, 2009)—suggests that the buyer cannot recover damages from the seller if the property in question has defects unless such defects are concealed or misrepresented. Further, the doctrine suggests that the buyer must examine or judge for themselves a given product that they are considering purchasing. However, in the majority opinion in one of the more notable, interesting, and entertaining legal cases on this topic (*Stambovsky v. Ackley*, 1991), the Court said that the “plaintiff, to his horror, discovered that the house he had recently contracted to purchase was widely reputed to be possessed by poltergeists” and he had *not been informed* of this information when purchasing the house. The court eventually ruled that when this “haunted house” was sold to this uninformed buyer “the seller not only takes unfair advantage of the buyer’s ignorance but has created and perpetuated a condition about which he (the buyer) is unlikely even to inquire . . .” and that the buyer “cannot be expected to have any familiarity with the folklore” of the town where the house in question was located.

It is imperative that young psychologists in training take responsibility for understanding the education and training issues in the field into which they are entering. They should work directly with their faculty mentor on, but be responsible for their ownership of, their own plan of study, and they must take care to understand the trends and workforce issues in their new field. This would include choice of their educational and training programs, knowledge of emerging areas of practice,

employment opportunities, and what continuing education responsibilities exist in order to remain current in both the broad and general and specialized practice areas in professional psychology.

However, it may be even more clear that the *providers* of education and training in professional psychology (that is, faculty, program administrators, and training staff members) have a responsibility to the next generation(s) they are educating; a responsibility *to inform the consumer* of the education and training system about all these issues including “product information” about the house they are about to enter. This might even be considered as explicit in the APA Ethics Code (APA, 2002) section 7.0 where those responsible for education and training programs “take responsible steps to ensure that there is a current and accurate description of the program content . . . ., training goals and objectives, stipends and benefits . . . made readily available to all interested parties” (p. 1068). Graduate programs *must* be responsible for making programmatic information transparent to students who might well be naïve as to a broader range of variables leading to what makes a successful career (that folklore described in *Stambovsky*). Likewise, they must *communicate* those variables clearly, so when students choose an academic home for their own education, they can make an informed decision about their training options by understanding such variables as financial support, debt load, chances of passing the national licensing examination, internship match rates, initial salary expectations, and the ultimate (professional) trajectory of the program’s graduates. Although program statistics do not necessarily speak directly to the success of any one individual student or trainee, clearly, program output—the ultimate success of program graduates—should be made as concrete to students as poltergeists are transparent to the unwary homebuyer.

With that in mind, programs routinely should publish and update, and potential students should review in detail, the type of programmatic outcome data suggested by Gaddy, Charlott-Swilley, Nelson, and Reich (1995; that is, student involvement in teaching, research, publications, and clinical work; time to degree, initial and subsequent employment); these data are part and parcel

of the CoA information collected and are used to support the review of accredited programs and programs seeking accreditation (APA, 2011a). Gaddy et al. clearly state that educational programs “are obliged to establish systematic assessment procedures to account for the outcomes of their operation, including the types of outcomes that reflect faculty and student development, contributions of the program to its institution’s mission, and the *achievements of its graduates* (italics added)” (p. 512).

Possibly the most pressing issue for many of those young colleagues working toward soon becoming ECPs is the ongoing question of “supply and demand” in both the number of students seeking doctoral internships and the question of the needed supply of psychologists to meet the service demands of the general population over the next epoch of healthcare in the United States (Rozensky, et al, 2007; Rozensky, 2011). Rodolfa et al. (2007) even suggested that it is an *ethical mandate* to address this issue and that graduate programs must report internship match rates, time to degree, and costs to students. Grus, McCutcheon, and Berry (2011) detailed the history of the internship imbalance and the Herculean efforts undertaken to help manage that challenge. Callahan, Collins, and Klonoff (2010) found that the only significant variable that predicted whether given student is chosen for an internship (matching or not matching) was the number of invitations for interviews for internship with the participants in their study submitting an average of 14.47 applications for internship, obtaining an average of 7.81 interviews, and 85.2% of the total sample being chosen\matched with an internship. Is it possible that the number of interviews offered, however, reflects the overall quality of the application, while the many variables studied by Callahan et al. (gender, sexual orientation, ethnicity, socioeconomic status, geographic restrictions, having dependents, PsyD versus PhD, status of dissertation, etc.) are just parts of the gestalt that even their multivariant approach has not explicated? No matter what, Parent and Williamson (2010), in identifying the specific, relatively small number of graduate programs that contributed almost 30% of those students who did not find accredited internships, said, “Failure of programs to take

action to improve internship match rates and to consider the impact of disparities in different demand curves that exist in psychology (student demand for graduate programs and market demand for psychologists) is a disservice to psychology as a profession, to students of psychology, to professionals, and to all the populations psychologists serve” (p 120). How adherent are programs to the concept of “truth in advertising,” what information is routinely presented (and updated), how are undergraduates prepared to evaluate possible graduate programs in professional psychology wherein they are considering matriculating, and how do matriculated students participate with their faculty in reviewing program quality and outcome to assure success of graduates?

### **Recommendations for Those on the Way to Becoming ECPs and for the Programs Helping Them Achieve that Goal**

Although predicting the future is not easy, studies by Prinstein (2012) and Taylor, Neimeyer, and Rozensky (2012 a,b) offer pictures of what rank-and-file members and experts in the field see as the evolution of professional psychology over the next 20 years. The APA CWS provides snapshots regarding current workforce issues in professional psychology like salaries and workplace settings. Individual, soon-to-be ECPs must avail themselves of as much information as they can to make the best choices they can as they construct their plans of study in preparation for their future. Graduate, internship, postdoctoral, and continuing education programs in professional psychology must use available data as part of their ongoing strategic planning efforts as they review and modify their curricula and seek contemporary training opportunities to assure they are preparing a competent workforce of (new) psychologists to enter the professional workforce of tomorrow.

Throughout this article, recommendations were embedded in the form of questions for ECPs and for the faculty and staff of education and training programs. These questions suggest topics for discussion when planning successful education and training programs and for soon-to-be ECPs to consider at various steps throughout their education and training sequence. Outcome data was

presented that authors suggest relates to learning opportunities that will maximize the success of the next generation(s) of ECPs.

Table 1 brings together, rephrases, or expands some of those questions presented in this chapter. This table can serve as a list of discussion points for faculty, for each student, for faculty and students together, and for national leaders in professional psychology. This list should be part of planning strategically for the field of professional psychology, for programmatic improvement and quality education and training at the local level, and for each individual student as they prepare for their own plan of study to become a successful ECP.

### **Conclusion**

Foran-Tuller, Robiner, Breland-Noble, Otey-Scot, Wybork, King and Sanders (2012) presented the details of an “early career boot camp” (p 117) that took place as part of a professional conference. This intensive workshop engaged ECP participants in addressing strategic career goals including a focus on the domains of research, teaching/training/supervision, clinical service responsibilities, program development and evaluation, and professional issues such as work and personal life balance, departmental politics, keeping a job, networking, and involvement in professional organizations. Although this particular boot camp was focused on the immediate needs of ECPs, a similar type workshop could be conducted in any graduate department or training program, *at any level* of the education and training sequence, with doctoral students, interns, or postdoctoral fellows. Content could address similar domains, but be tailored to the current knowledge level and competencies of the attendees, with the ultimate goal of maximizing early career success.

Departments and programs could stipulate in their job expectations for faculty, a mentoring policy that includes *specific* expectations that mentoring include discussions of maximizing success for the soon-to-be ECPs. Faculty culture could include an expectation of directly discussing how mentoring skills (Forehand, 2008) could be enhanced with the goal of assuring alumni success. Honoring the accomplishments of program graduates (i.e., awards, publications, promotions, job

changes, and personal individual and family activities) would assure that success is an explicitly acknowledged, discussed, and valued part of the education and training experience. Bringing back program alumni to speak about their scientific, scholarly, and applied accomplishments would introduce students and trainees to successful role models, offer a broader opportunity for students to ask questions about what brings about future success, and encourages program faculty to seek feedback about how they can maximize ECP accomplishment.

Using the questions listed in Table 1, faculty, those soon-to-be ECPs, and ECPs, can engage in a dialogue to assure that contemporary issues in society and the field of professional psychology are being addressed within each student's plan of study and within each education and training program's self-study and strategic plan for program development and growth. This will assure the success of the next generations of Early Career Psychologists and the continued vitality of the field of professional psychology.

You must live in the present,  
Launch yourself on every wave,  
Find your eternity in each moment.  
– Henry David Thoreau

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Table 1:

Questions to Consider When Maximizing the Opportunity for the Future Success of ECPS

<p><b>□ Programmatic Variables</b></p> <ul style="list-style-type: none"><li>o How are academic and clinical training programs using the available psychology workforce data to help shape their training of the next, and next, cohorts of ECPs?</li><li>o How clearly are graduate programs making ‘truth in advertising’ information transparent (e.g., financial support, debt load, chances of passing the national licensing examination, initial salary</li></ul>
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expectations, ultimate (professional) trajectory of the program's graduates, accreditation status) to students who need that data to choose an academic home for their education? Is there similar information that internships, postdoctoral programs, and continuing education programs should share with potential students?

1. How adherent are programs to the concept of 'truth in advertising,' what information is presented, and how often is it truly updated?

o How are undergraduates who wish to become psychologists prepared to evaluate possible graduate programs? How do matriculated graduate students participate *with* their faculty in reviewing program quality and program outcomes to assure success of (future) graduates?

o Do the graduate programs within each of the three general training models in professional psychology (clinical scientist, scientist practitioner, scholar-practitioner) actually build into their curricula specific, workplace-related competencies to assure preparation for success in the venues towards which their specific graduates gravitate?

1. Do the workplace choices reflected by graduates of a given program actually reflect acquisition of those competencies and thus graduates go to work where they are best prepared to succeed?

o Given that scientific rigor in doctoral-level training might be the best predictor of better professional outcomes (accredited internships, higher licensing examination scores, higher likelihood of becoming board certified), how do programs plan for, and then evaluate, the scientific focus and critical thinking competencies within their curriculum?

1. Given the growing interprofessional healthcare environment, how are students acquainted with the concepts and competencies of successful team science (<http://teamscience.net/about.html>)?

o Given higher pass rates on the EPPP for those examinees who graduated from *accredited* doctoral programs than those from non-accredited programs, what are non-accredited programs doing to enhance quality and seek and attain accreditation?

o What academic and training situations (course work and practical training) are most efficacious in developing those competencies needed to assure success as an ECP? How are those competencies measured and evaluated by each program?

o How is evidenced based treatment built into education & training experience of each soon to be ECP? How are those ECPs prepared to utilize that approach within the evolving healthcare system?

o How has each education and training program in professional psychology incorporated defined



and measurable competencies (foundational and functional; knowledge, skills and attitudes) into their knowledge and skills based curricula?

- o How are ECPs being prepared for the evolving, interprofessional, team-based healthcare system based upon the expectations of the Affordable Care Act?
  1. How are these interprofessional, team-based competencies built into the education and training system with real time, practical opportunities to train ECPS to succeed when working in interprofessional teams?
  2. How are the graduate programs and internships preparing soon to be ECPs for seeking staff privileges within accountable care organizations?
  3. Are graduate training programs in professional psychology incorporating knowledge-based content and practical, clinical team-based competencies for practice in the upcoming accountable care organization and primary care environments?
  4. How are students being prepared to enter the healthcare system where specialization (board certification) is a growing expectation as part of enhanced accountability and where lifelong learning might suggest specialization is even more pressing?
  5. Once again, are all programs accredited so as to provide the most face-valid, basic, entry level credential of quality education for each of its graduates who are joining healthcare workforce in the accountable care system?

**□ Individual Student-Trainee-ECP variables**

- o How is the concept of “self assurance” addressed in the preparation of each ECP as they embark on their career of success, growth, and fulfillment?
- o How is the ECP prepared for managing the competency of “self care?”
- o Do healthcare workforce data and program outcome data provide a measure of possible ‘steerage’ or direction for those choosing their graduate training (program) especially when they have a particular workplace venue or specialty focus as their ultimate professional goal?
- o How do we define quality education to those seeking training in professional psychology?  
How do students understand the importance of matriculating in an accredited training program as the first step towards quality training and ultimately maximizing successful outcomes from their training?
- o How does each soon be ECP understand that it is imperative, as young psychologists in training, that they take responsibility for understanding the contemporary education and training issues of the field into which they are entering, that they work directly with their faculty mentor on—but be responsible for ownership of—their own plan of study, and they take care to understand the

workforce issues in their new field? How do faculty maximize this positive interaction as part of their prescribed mentoring role?

- o What does a soon to be ECP need to ask of his or her graduate program and mentor—whether beginning their education, choosing their next training venue, or establishing their own lifelong learning plans—in order to receive the guidance necessary to use available workforce data and available data on predictors of professional success, to choose which institutions they will seek their training and what competencies they must develop to succeed in their chosen career work setting?
- o Can each ECP innumerate the competencies needed to successfully work within the (new) healthcare system? Does each individual have a clear picture of their own (current) acquired competencies and those competencies in need of further development?
- o How does each individual ECP establish their own lifelong learning plan to assure ongoing success?
- o How does each individual ECP determine whether they need additional preparation to practice within a specialty in professional psychology (e.g., <http://www.apa.org/ed/graduate/specialize/crsppp.aspx> ) and whether they should seek board certification (e.g., <http://www.abpp.org/i4a/pages/index.cfm?pageid=3285>) to enhance their career success with the new, accountable healthcare system?

#### **Societal Trends**

- o How have programs incorporated awareness of society's demographic trends (diversity, aging, chronic illness) into their curricula? How do programs utilize available practice guidelines focused on diversity and cultural issues (e.g., <http://www.apa.org/practice/guidelines/index.aspx> ) as part of the preparation of soon to be ECPs to enhance opportunities for success within our changing society?
- o Given the changes to healthcare system based on the ACA, where in the preparation of ECPs do we find preparation for success given the following?
  1. Accountable care
  2. Team-based, interprofessional care & interprofessionalism
  3. Healthcare economics
  4. Evidence-based care
  5. Medical cost offset, program evaluation, cost effectiveness
  6. Electronic healthcare records and telehealth-based services including legal and ethical issues brought forth by this type of change to the healthcare system
- o Psychology *is* the profession that should be addressing behavioral health risk issues at the

individual, family and community levels. How are our ECPs being prepared for these services needs given their focus in the ACA (e.g., ACICBL, 2012; Healthy People 2020)?