
Evaluation of the Hogg Foundation Texas Psychology Internship Initiative

Phase I and II Reports
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Phase I – Executive Summary

In 2011, the Hogg Foundation launched the first of two grant programs intended to expand doctoral psychology internship training in the state of Texas, with an emphasis on underserved areas. These two grant programs, jointly known as the Texas Psychology Internships (TPI) Initiative, served as a mechanism for addressing the shortage of accredited psychology internship opportunities in Texas and for developing and retaining a high quality behavioral health workforce in the state. In 2015, Hogg contracted with Clover Educational Consulting Group to conduct an evaluation in order to assess the outcomes of the initiative. Phase I of the planned two-phase evaluation project has now been completed and the results are reported here.

Evaluation methods included a review of records, key informant interviews with a sample of interns and Training Directors, and a survey of current and previous TPI interns. The survey was disseminated to 102 of the 104 TPI interns and graduates. Email addresses could not be obtained for two individuals. Sixty-four completed surveys were received, resulting in a 62.7% response rate. The sample was diverse in terms of racial/ethnic makeup (57.8% White; 15.6% Black/African-American; 14.1% Hispanic/Latino; 3.1% Asian/Asian-American; 7.8% Multi-Racial; 1.6% Other) and gender (73.4% Female; 25.0% Male; 1.6% “Genderqueer”), and 23% of respondents endorsed being Bilingual.

The TPI initiative resulted in the creation of four new internship programs and the expansion and enhancement of four pre-existing programs. Six of the eight funded programs are now accredited, and one has been approved for an accreditation site visit and will likely be accredited in the near future. One funded program, a state-wide consortium, has ceased operations; however, one of the consortium’s training sites has continued operations as a stand-alone program and is currently seeking accreditation. Thus, if the accreditation processes of the two remaining programs are successful, the TPI initiative will have led to the accreditation of eight internship programs since 2011. Phase II of the evaluation in the summer of 2016 will provide an update on the accreditation status of the remaining two TPI-supported internship programs.

The total number of interns trained thus far as a result of the TPI initiative is 104. Of those interns, 59 (42%) have been trained in programs accredited by the APA, with the proportion of interns training in accredited programs increasing annually as more of the Hogg-funded internship programs have obtained accreditation.

A primary goal of the TPI project was to develop accredited training programs and positions in areas that are underserved. Of the eight TPI-funded internship programs, three are in Mental Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs), as designated by the Health Resources and Services Administration (HRSA). Between 2012-2013 and 2015-2016, those three programs trained a combined total of 42 interns. Of the interns that remained in Texas for postdoctoral employment following the completion of the internship program, 19% were retained in underserved areas of the state.

Development of new internship positions creates opportunities for in-state doctoral students to remain in Texas for internship as well as opportunities to draw in out-of-state doctoral students who are interested in relocating to Texas for internship. Overall, the proportion of interns in the survey sample from doctoral programs in Texas was 42%, while 58% were from doctoral programs outside of Texas. In terms of retention, 77% of in-state students and 62% of out-of-state students have been retained in Texas for postdoctoral employment following the completion of the internship program. Of the total group of graduates that remained in Texas for postdoctoral employment (67% of total sample), 31% were hired by the training site at which they completed their internship training.

Key factors that influenced retention appeared to be the accreditation status of the internship program and the bilingual status of the trainee. Of the interns that completed accredited TPI internship positions, 80% remained in the state for postdoctoral employment compared to 61% from unaccredited internship programs. With regard to bilingualism, 80% of bilingual interns were retained in Texas for postdoctoral employment.

A key outcome of the TPI initiative has been a clear increase in the quality of the workforce recruited and trained by the grant-supported programs as a result of achieving accreditation. Key informant interviews with Training Directors whose programs have achieved accreditation during the grant program indicated that accreditation has resulted in an increase in the overall number of applications and an improvement in the quality of the applicant pool. Applicant data for the 2016-2017 internship year supports this assertion, as accredited TPI programs have received almost four times more applicants than have unaccredited TPI programs. Additionally, accredited TPI internship programs have received a significantly higher proportion of applications from students from accredited doctoral programs, which may be viewed as an indicator of the overall quality of the applicant pool.

A comprehensive report follows, including a discussion of what the outcomes may mean for stakeholders as well as potential funders of similar future initiatives.

Introduction

The national shortage of accredited doctoral psychology internship programs represents a significant issue for the field of psychology and specifically for underserved rural areas. Clinical internships are a required component of doctoral training in psychology and accreditation by the American Psychological Association (APA) is increasingly considered the essential standard for quality in internship programs. However, an imbalance exists between the number of internship candidates and the number of available accredited training slots – leaving a significant number of would-be psychologists unable to complete the final year of training within an accredited internship program. This imbalance is felt most acutely in rural and underserved areas, where both accredited and unaccredited internship programs are scarce, resources to create and maintain internship sites are limited, and the level of unmet need for behavioral healthcare is higher than national averages. The vacancy rates for behavioral health providers in many rural areas are significant, and training programs such as internship programs that would recruit and retain these providers are virtually non-existent. Development of new internship positions is an imperative in the field of psychology. It is additionally important for these internship positions to be APA-accredited, which ensures a high standard of quality and serves as a protection to both the public and the profession.

In the state of Texas, the vast majority of counties are designated by the Health Resources and Services Administration (HRSA) as Mental Health Professional Shortage Areas. Creating doctoral psychology internship positions in Texas supports the recruitment and retention of providers who are trained to serve the needs of the state's underserved populations, improving access to and quality of care for these individuals. In 2012, Texas had 23 (5%) of the 458 APA-accredited psychology internship programs in the nation despite being home to about 8.5% of the population. Furthermore, Texas was among the states with the largest number of *unaccredited* APPIC-member internship programs (13). The Association of Psychology Postdoctoral and Internship Centers (APPIC) is the organization responsible for coordinating the National Internship Match, which is the official national process for placing interns in formal internship programs. Membership in APPIC by internship programs, which requires meeting specific membership criteria, allows for participation in the Match.

Beginning in 2011, the Hogg Foundation initiated two grant programs to support the development and accreditation of doctoral psychology internship programs in Texas. The first program, titled the "Texas Psychology Internships Initiative," was initiated in 2011 and was targeted toward the development and accreditation of new internship programs. Four recipients were selected and awarded a combined total of nearly \$2.2 million over a five-year period. The second program, titled the "Texas Psychology Internships Accreditation Initiative," was initiated in 2012 and designed to support the accreditation processes of existing non-accredited psychology internship programs. Four recipients were awarded a total of approximately \$770,000 over a three-year period.

The Hogg Foundation contracted with Clover Educational Consulting Group to conduct an evaluation of the two grant programs, jointly discussed here as the Texas Psychology Internships

(TPI) Initiative. The first of two evaluation phases has been completed, and the following serves as a summary of the outcomes of Phase I.

Methodology

A review of records was conducted in order to ensure that the evaluators had sufficient contextual understanding of the TPI Initiative. The initial grant proposals and subsequent required progress reports submitted to the Hogg Foundation by grant-funded internship programs were reviewed. Budgets and associated documentation were also reviewed in order to provide additional information as needed. Through this process, the evaluators gained understanding about the funding cycles of each grantee, as well as details related to their development and accreditation processes.

Phase I methodology included conducting key informant interviews with five of the eight internship Training Directors and with five graduates of Hogg-funded internship programs. The Training Directors were selected for interview based upon the accredited status of their grant-funded internship program. The remaining three programs were unaccredited at the time of these key informant interviews. The Training Directors of those three programs will be interviewed in Phase II. Phase I key informant interviews with Training Directors and graduates were conducted for the purpose of informing survey development as well as to provide supplemental qualitative data. A Phase I survey was then developed in the Survey Monkey platform and administered via a web link in early October. All current and former interns from all TPI-funded internship programs were provided with the link and asked to participate.

Data were cleaned and analyzed by two of the evaluators. When confronted with apparent inconsistencies, the evaluators determined via consensus whether enough information was available to code and analyze those data or if it should be treated as missing. In situations where an individual's responses were unclear or contradictory, the evaluators determined via consensus how such data should be treated for the purpose of analysis (e.g., recoded, treated as missing).

In analyzing outcomes related to underserved areas, evaluators utilized designations by the Health Resources and Services Administration (HRSA). Specifically, the designations of Mental Health Professional Shortage Area and Medically Underserved Community/Population were utilized as indicators of underserved areas for purposes of these analyses.

Results

As mentioned above, the two grant programs are jointly discussed here as the "TPI Initiative". When necessary and for ease of reporting, results which are relevant specifically to the four new internship programs that were developed as a part of the first grant program will be referred to herein as "TPI-1". Results specific to the four pre-existing internship programs that were supported and expanded by the second grant program will be referred to as "TPI-2".

Outcomes are organized below into the following categories: Survey Sample, Workforce Development, Workforce Retention, and Quality of Workforce.

Survey Sample

Response Rate

The survey was distributed to 102 current interns and graduates of the grant-funded internship programs. Sixty-four individuals responded to the survey, yielding a 62.7% response rate, which is considered a high response rate for survey research. Meta-analysis data indicate that average response rates for online surveys of healthcare professionals is approximately 38%, and that there is a decreasing trend in online response rates in recent years.¹ A high response rate in survey research increases the likelihood that the sample is representative of the full population.

Sample Demographics

The demographics of the sample (N=64) were as follows:

Racial/Ethnic Background

Hispanic/Latino	9	14.1 %
White	37	57.8 %
Black / African-American	10	15.6 %
American Indian / Alaska Native	0	0.0 %
Asian / Asian-American	2	3.1 %
Native Hawaiian / Pacific Islander	0	0.0 %
Multi-Racial	5	7.8 %
Other ("Mediterranean")	1	1.6 %

Gender

Female	47	73.4%
Male	16	25.0%
"Genderqueer"	1	1.6%

Bilingual

Yes	15	23.4%
No	49	76.6%

Of the 15 respondents who endorsed being bilingual, 12 indicated that they speak English and Spanish. Of those 12, one indicated also speaking Tiv, Hausa, and French, and one reported also speaking Italian. The three other bilingual respondents endorsed speaking English and Korean, English and Greek, and English and Polish, respectively.

¹ Cho, Y.I., Johnson, T.P., VanGeest, J.B. (2013). Enhancing surveys of health care professionals: A meta-analysis of techniques to improve response. *Evaluation and the Health Professionals*, 36, 382-407.

Additional information about the survey sample, including the proportion of respondents from each internship training year, and the type and accreditation status of the doctoral programs in which they are/were enrolled, is provided in Tables 1-4 in the Appendix.

Workforce Development

Development of Internship Programs

Prior to the TPI initiative, in the 2011-2012 academic year, there were 23 internship programs accredited by the American Psychological Association (APA) and 13 unaccredited programs in the state of Texas. As a result of the initiative, four new programs have been created (TPI-1), and all of those new programs are now accredited. The initiative also allowed for development of additional training slots in four existing internship programs (TPI-2), each of which was unaccredited prior to the initiative. Of those programs, two have earned accreditation, one has been approved for an accreditation site visit, and one program, a state-wide consortium, has ceased operations. However, it should be noted that while this consortium will not continue, one of the consortium's training sites has continued operations as a stand-alone program beginning with the 2015-16 training year. The Hogg Foundation's investment in the consortium program allowed for the development of that site, which is in a rural and underserved area of the state and has recently received grant funding from the APA to pursue accreditation. Note that in the discussion below, all outcomes related to the development of internship programs and positions include this new stand-alone program. Figure A shows the accreditation status by year of the eight internship programs that received funding from the TPI initiative.

Figure A: Accreditation Status of TPI Internship Programs by Year

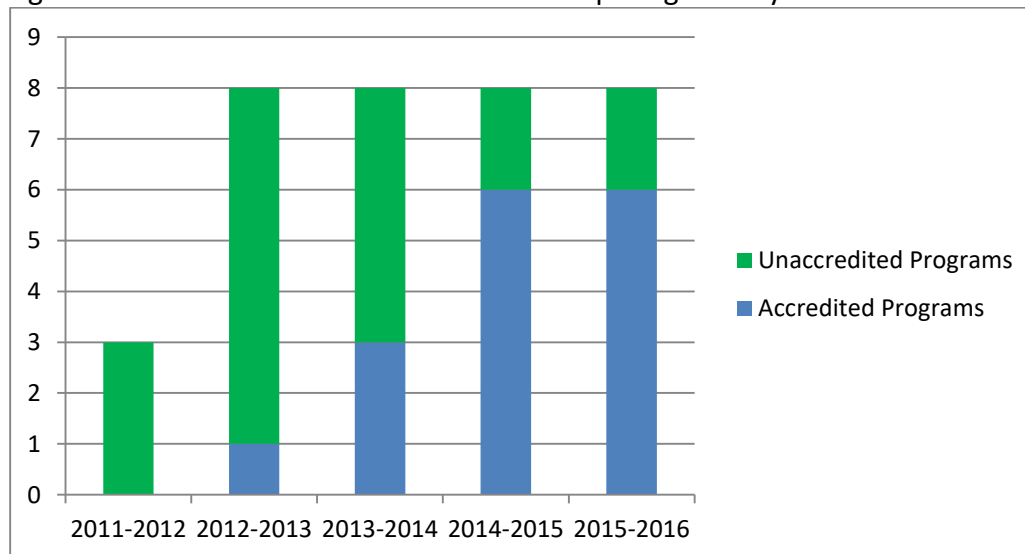


FIGURE A DATA TABLE	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016
Accredited Programs	0	1	3	6	6
Unaccredited Programs	3	7	5	2	2

The number of accredited programs in the state increased from 23 to 31 between 2011 and 2015. Of the eight new accredited programs, six (75%) were programs funded through the TPI initiative. The number of unaccredited programs decreased between 2011 and 2015, from 13 to 12. This decrease is in part due to the TPI initiative, as two of the unaccredited programs that existed prior to the initiative are now accredited. At least one new unaccredited program has been developed outside of the Hogg initiative between 2011 and 2015. Figure B depicts these numbers.

Figure B: Accredited and Unaccredited Internship Programs in Texas

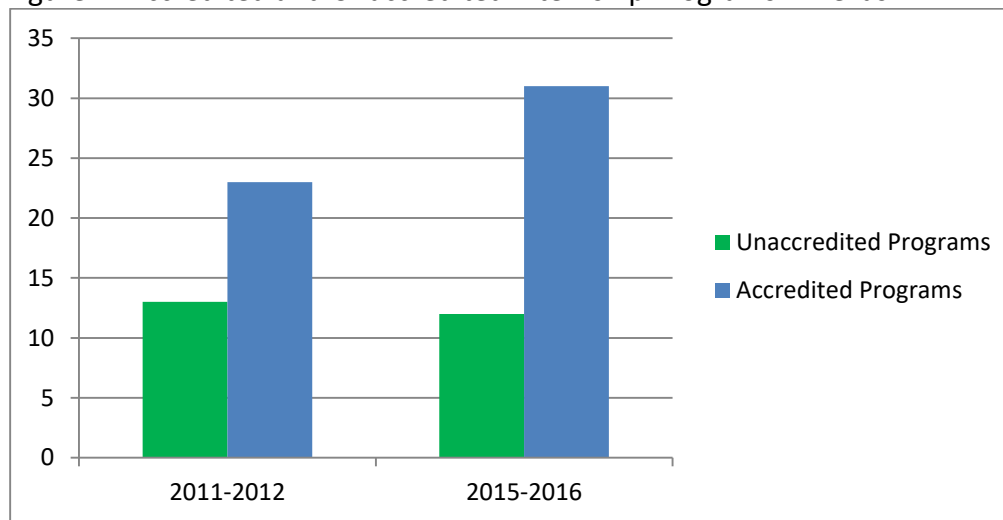


FIGURE B DATA TABLE	2011-2012	2015-2016
Unaccredited Programs	13	12
Accredited Programs	23	31

Internship programs developed or expanded through the TPI initiative provide training within a variety of settings. All internship programs that are members of the Association of Psychology Postdoctoral and Internship Centers (APPIC) have the opportunity to self-identify their setting type(s) from a list of options provided within APPIC's online directory. The setting types identified by the TPI programs and the number of programs that identified each setting type are as follows: Consortium(3), Prison or Other Correctional Facility (3), Academic Health Center (2), Medical School (2), Child/Adolescent Psychiatrics or Pediatrics (2), University Counseling Center (2), State/County/Other Public Hospital (2), Private General Hospital (2), Private Psychiatric Hospital (1), Private Outpatient Clinic (3), and Other (1). Note that programs may select as many descriptions as are applicable to their training sites.

Comparison to Other States

Data was obtained from the National Matching Service in order to compare internship training opportunities in Texas with internships available in other states. Table 5 in the appendix provides

the total number of internship programs and the number of accredited programs participating in the APPIC Match by state in 2015. As these data include only those programs that participate in the APPIC Match administered by the National Matching Service, it is not a complete representation of all doctoral psychology internship programs in the nation. Some internship programs exist which do not participate in the APPIC Match and instead recruit their interns through other means. These programs are a small proportion of the total internship programs in the nation, with the exception of California, where the existence of the California Psychology Internship Council (CAPIC) provides an additional formal mechanism through which California doctoral students may match with internship sites in the state. It is estimated that approximately 100 internship programs in California recruit interns through the CAPIC Match, a small proportion of which also utilize the APPIC Match. Because CAPIC maintains a private internship directory, precise numbers are not available.

In addition to data provided in the above-referenced table, population data were used to compare the availability of internship programs in Texas with states of comparable size. Texas is within the top five most populous states in the United States, preceded only by California and followed by Florida, New York, and Illinois, respectively. Of these five states, Texas and Illinois have the smallest number of internship programs (41), yet Texas has the highest proportion of accredited programs (78%). When comparing the availability of internship programs with the overall population of the state, Texas has fewer internship programs per capita than any of the other four largest states. Specifically, the ratio of population to internship programs in Texas is over 657,000:1. The ratios in the four comparison states are approximately as follows: California- 436,000:1; Florida- 485,000:1; New York- 340,000:1; and Illinois- 263,000:1.

Development of Internship Positions

Including the current (2015-16) training class, the total number of interns trained thus far as a result of the TPI initiative is 104. Of those interns, 59 (42%) have been trained in programs accredited by the APA. Each year, the proportion of interns training in accredited programs has increased, as more of the Hogg-funded internship programs have obtained accreditation. The number of annually available internship positions created as a result of TPI funding is 23. Note that this number is not expected to remain static, as programs may increase or decrease the number of training slots offered each year. The initiative created 15 positions in the four TPI-1 programs, all of which are now accredited positions, and added eight positions in the four TPI-2 programs. These four programs trained a combined total of eight interns per year prior to the initiative, meaning that the Hogg funding allowed for a 100% increase in internship positions in those pre-existing internship programs. Of the eight positions that were added to those programs due to the TPI initiative, four are in programs that are now accredited and two more are in a program that has been approved for a site visit and will likely become accredited this fall. The remaining two are in a program that plans to seek accreditation in 2016. Currently, 23 positions are available in accredited TPI-funded internship programs. Figure C shows the accreditation status of the internship positions that were created using TPI funding by year. Note that positions that existed in the TPI-2 programs prior to receiving Hogg funding are not depicted in Figure C, only those that were created as a result of the funding. Table 5 in the appendix shows the

accreditation status by year of all positions in the TPI-1 and TPI-2 programs, including those that existed prior to the initiation of TPI funding.

Figure C: Accreditation Status of TPI-funded Internship Positions by Year

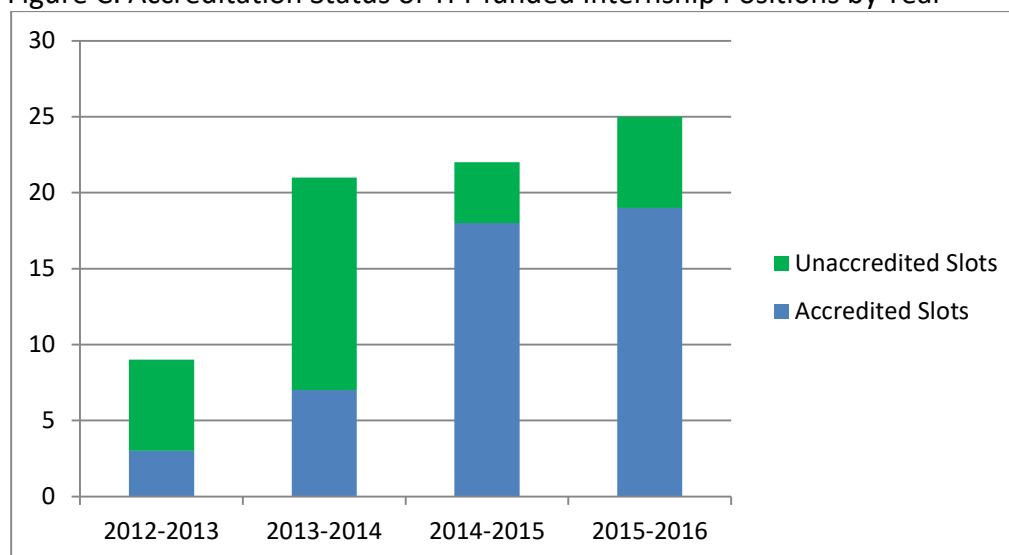


FIGURE C DATA TABLE	2012-2013	2013-2014	2014-2015	2015-2016
Accredited Positions	3	7	18	19
Unaccredited Positions	6	15	4	6

Development in Underserved Areas

One of the goals of the TPI project was to develop accredited training programs/positions in areas that are underserved. Of the eight TPI-funded internship programs, three are in Mental Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs), as designated by the Health Resources and Services Administration (HRSA). Between 2012-2013 and 2014-2015, those three programs trained a combined total of 30 interns. Recall that one of the three programs in underserved areas has ceased operations beginning in 2015-2016; however, the stand-alone program that was developed as a result is also in an underserved area. In 2015-2016, the three internship programs in underserved areas will train a total of 12 interns.

Intern Recruitment

A primary goal of the TPI initiative was to create internship training opportunities in Texas. Creation of new positions allows for opportunities for in-state doctoral students to remain in Texas for internship as well as opportunities to draw in out-of-state doctoral students who are interested in relocating to Texas for internship. Survey participants were asked about the importance of 13 specific factors in influencing their decision to apply to the internship program in which they trained. The following scale was provided for each factor: 1=very unimportant; 2=unimportant; 3=neutral; 4=important; 5=very important. Overall, the factors that received the

highest proportion of endorsements of important or very important were “Ability to work with the general population you wanted (e.g. adults, children, pediatric, acute inpatient, etc.)” and “The broad training emphases fit your goals (e.g. emphasis on assessment, therapy, etc.)”. Data related to the ratings received by all 13 factors are provided in Table 6 of the Appendix.

Overall, the proportion of interns in the survey sample from doctoral programs in Texas versus from doctoral programs outside of Texas is as follows:

In-state doctoral students	27	42.2 %
Out-of-state doctoral students	37	57.8 %

Of the interns who matriculated from out of state doctoral programs, 35% came from programs in California. The remaining 24 students came from doctoral programs across 13 different states, with the highest proportions from Florida (14%) and Illinois (11%). More information about the states from which the students have matriculated, as well as a breakdown of in-state versus out-of-state students in each internship training year, is included in Tables 7-8 in the Appendix.

Workforce Retention

Overall Retention

A key objective of the TPI initiative has been to retain the interns who trained in TPI internship programs, with the goal that they will remain in the Texas workforce following the completion of their training. Of the survey participants who responded to questions related to their postdoctoral employment, 46 indicated that they have been employed following the completion of the internship program while 4 indicated not yet having been employed. Note that survey respondents that are currently enrolled in their internship program were not asked about their post-internship employment. The total number of survey respondents that indicated remaining in Texas for postdoctoral employment was 29 (67%). Of those 29 that remained in Texas, 9 (31%) were hired by the site at which they completed their internship program. Overall, the proportion of students from in-state doctoral programs versus out-of-state doctoral programs who stayed in Texas following the completion of their internship program was:

In-state doctoral students retained	13	76.5 %
Out-of-state doctoral students retained	16	61.5 %

There was an apparent impact of the accreditation status of the internship program on retention for postdoctoral employment within the state of Texas. Of the interns who completed accredited TPI internship positions, 80% remained in the state for postdoctoral employment while 20% took postdoctoral positions out of state. Of interns who completed unaccredited internship programs, 61% remained in Texas while 39% left the state for postdoctoral employment.

Additional data are included in Tables 9-10 in the Appendix, which detail the proportion of interns who were retained in state by academic year and again broken down by location of the doctoral program and accreditation status of the internship program.

Retention in Underserved Areas

Of the 46 survey participants who endorsed being employed following internship, 8 were treated as missing data due to inconsistent or incomplete responses that could not be resolved. Of the 38 that were analyzed, 12 (32%) indicated being employed in an underserved area.

Of the 29 participants who endorsed being employed *in Texas* following internship, 3 were treated as missing data due to inconsistent or incomplete responses that could not be resolved. Of the 26 that were analyzed, 5 (19%) indicated being employed in underserved areas of Texas.

Retention of Diverse Populations

Data were analyzed to determine whether the survey participants that were retained in Texas following internship represented diverse backgrounds. The demographics of the subsample of those who indicated obtaining postdoctoral employment in Texas following completion of their internship program are as follows (n=29):

Racial/Ethnic Background

Hispanic/Latino	5 of 7	71.4 %
White	17 of 24	70.8 %
Black / African-American	4 of 8	50.0 %
Asian / Asian-American	1 of 1	100.0 %
Multi-Racial	2 of 3	66.7 %

Gender

Female	21 of 33	63.6%
Male	8 of 10	80.0%

Bilingual

Yes	8 of 10	80.0%
No	21 of 33	63.6%

Reasons for Non-Retention

Survey participants who indicated that they left the state of Texas following the completion of their internship program were asked about the reasons for leaving. The following answer choices were provided: Desire to be close to family/spouse; Desire to be in a specific geographic location; Academic reasons; Higher Salary; Found an opportunity in another state; and Other- please specify. Respondents were permitted to select as many answer choices as were applicable. For those interns from in-state doctoral programs that left the state of Texas following internship,

the most frequently endorsed reason was “Desire to be close to family/spouse”. For those interns from out-of-state doctoral programs that left the state of Texas following internship, the most frequently endorsed reason was “Found an opportunity in another state.” More detail about the rates of endorsement of each reason can be found in the table below.

Reasons for Leaving Texas Following Internship by Location of Doctoral Program (In-State n= 5; Out-of-State n=10)

Desire to be close to family/spouse	In-State	3	60.0%
	Out-of-State	4	40.0%
Desire to be in a specific geographic location	In-State	2	40.0%
	Out-of-State	3	30.0%
Academic reasons	In-State	1	20.0%
	Out-of-State	0	00.0%
Higher salary	In-State	2	40.0%
	Out-of-State	5	40.0%
Found an opportunity in another state	In-State	2	40.0%
	Out-of-State	7	70.0%
Other: “Took leave from job for internship”	In-State	0	00.0%
	Out-of-State	1	10.0%

Respondents that endorsed leaving Texas following internship were also asked whether the availability of loan repayment positions would have influenced their desire to remain in the state. Most participants that provided a response (n=16) indicated that this would have influenced their desire at some level:

Would not have influenced my desire to remain in Texas	3	18.8%
Would have somewhat influenced my desire to remain in Texas	7	43.8%
Would have strongly influenced my desire to remain in Texas	6	37.5%

All survey participants were asked about the degree to which they agreed with three statements related to postdoctoral employment opportunities in the state of Texas. The following scale was provided: 1= strongly disagree; 2= disagree; 3= neutral; 4= agree; 5= strongly agree. Mean scores for each statement, as well as the percentage of respondents that endorsed “4=agree” or “5=strongly agree” for each item, were:

	n	Mean Score	% Rating 4 or 5
There were a sufficient number of opportunities	47	3	28%
There were high-quality opportunities available in to me	45	3.2	30%
There were sufficient opportunities that met my specific interests/needs	47	3	27%

Quality of Workforce

Information was gleaned from Training Director interviews regarding the overall quality of their intern applicant pool, and the extent to which that quality has been impacted by the achievement of accreditation. Interviews suggest the following about programs that have achieved accreditation and have experienced the intern selection process as an accredited program:

- The overall number of applicants each year has increased since achieving accreditation.
- The proportion of applicants from accredited doctoral programs has increased.
- The overall applicant pool demonstrates a higher level of skill and a higher quality of previous training.
- Some programs indicated that they invited more students to interview and submitted more rankings due to the higher quality of the overall applicant pool.

Data from the current intern application cycle was also utilized to compare the number and quality of the applications received by TPI programs. The full applicant pools of the two internship programs that are currently unaccredited were compared with those of the six accredited programs to determine whether accreditation appears to affect the number of overall applications received and the proportion of those applications that are from accredited doctoral programs. Accredited TPI programs received an average of 85 applications (range 50-164), 89% of them from accredited doctoral programs. Unaccredited TPI internships received an average of 22 applications (range 21-23), 57% from accredited doctoral programs. These data suggest that the accreditation status of the internship program has a significant impact on the size and quality of the applicant pool. Specifically, accreditation results in a significantly larger applicant pool with a significantly higher proportion of applicants from accredited doctoral programs. The numbers of applicants and the proportion from accredited doctoral programs for each TPI internship program is shown in the table below.

Applicant Pool for 2016-2017 Internship Year

Internship Program ID	Accreditation Status of Internship	Number of Apps	Number from Accredited Doc Programs	% from Accredited Doc Programs
1	Accredited	60	49	82%
2	Accredited	89	67	75%
3	Accredited	164	159	97%
4	Accredited	85	78	92%
5	Accredited	50	45	90%
6	Accredited	64	59	92%
7	Unaccredited	21	14	67%
8	Unaccredited	23	11	48%

Discussion

Results from the evaluation suggest clear and significant impacts of the TPI initiative in the areas of Workforce Development, Workforce Retention, and Quality of Workforce. The initiative has resulted in growth of the availability of doctoral psychology internship programs in Texas, and

has led to the accreditation of the majority of the programs it has supported. In fact, 75% of the internship programs that have been accredited in Texas since 2011 have been the direct result of the TPI initiative. These programs have expanded the opportunities for high quality doctoral training in psychology in the state.

The benefits of the initiative to underserved areas have been meaningful, as the programs and positions developed through the initiative represent the only psychology internship development that has occurred in the four years since the inception of the grant programs. However, only three of the eight funded internship programs were actually located in an underserved area, which limits the potential impact of the initiative in those areas. Creating internship programs in rural and underserved areas involves challenges such as scarcity of supervisory and other training resources and increased level of unmet need for behavioral healthcare services, which oftentimes makes grant funding even more critical to the development of these programs. The low proportion of TPI grantees in underserved areas was partly due to a limited number of applications having been received from internship programs located in these areas. Future initiatives of this kind might yield greater impact on underserved areas if they are preceded by targeted outreach in those areas. Specifically, agencies in underserved areas that do not operate internship programs but which have the necessary training resources to do so (e.g. licensed psychologists on site, access to client populations) might be provided with educational materials about the benefits of and processes for developing psychology internship programs and encouraged to respond to a Request for Proposals for funding.

An interesting outcome of the TPI initiative has been the development of accredited internship programs in juvenile justice facilities. Prior to the initiative, there were no accredited programs in these types of settings in the state. Three of the four current juvenile justice internship programs in Texas are TPI grantees. Two of those three programs are now accredited as a result of the initiative, and the third has had a site visit by the APA and will likely be accredited in the coming months. Further, a search of the APPIC directory suggests that only 7 internship programs in the country provide training within juvenile justice settings (searching agency type “Prison or Other Correctional Facility” and keyword “Juvenile”), meaning that Texas now provides the majority of these training opportunities nationally. This finding demonstrates the power of a grant program to change the training landscape beyond their own state, as the state of Texas is now a national hub for juvenile justice training for psychologists.

Similarly, the TPI initiative has led to a significant increase in the number of internship programs offering training in integrated healthcare in Texas. Specifically, there are now 13 Texas internship programs offering training in integrated primary care, three of which are TPI grantee programs. The total number of Texas programs offering training in integrated specialty care is now 10, with four of those being TPI-funded programs. Integrated healthcare has been increasing in prevalence and is an important component of our national healthcare system redesign, and there is a need for more psychologists to be trained in this model of service delivery. While internship programs offering training in integrated care are not uncommon (i.e. there are 254 internship programs offering integrated primary care training and 134 offering integrated specialty care

training nationally), the development of these programs through the TPI initiative has allowed Texas to keep pace with the national trend toward training within this model.

The success of workforce development efforts must always be considered with regard to retention of that workforce. Evaluation data related to retention suggests that the TPI initiative has been successful in leading to the retention of the majority of interns, who remained in the state of Texas to begin their careers. Furthermore, a high proportion of the interns who were retained in-state were retained specifically in the area in which they completed their internship training. This suggests that development of internship programs in areas with behavioral health workforce shortages may be a useful tool in leading to workforce development in those areas. The data also indicate that the accreditation status of the internship program may have a significant effect on the likelihood of retention. This may be due to the fact that interns who graduate from accredited internship programs are more desirable applicants than those from unaccredited internships, and thus have an easier time finding employment without the need to broaden their search beyond the state in which they completed their internship training. This finding is important, as it demonstrates that supporting grantees in achieving accreditation may be equally important to funding the initial development of internship programs.

It bears mentioning that the TPI project led to the retention of a high proportion of the bilingual interns that were trained by the grantee programs. 80% of bilingual trainees remained in the state of Texas for postdoctoral employment following the completion of their internship program, which exceeds the overall retention rate for the full sample. Bilingual professionals are highly desirable candidates for employment in many areas, and this finding suggests that targeted recruitment of bilingual interns may be beneficial in areas that have a need to retain professionals to serve linguistically diverse client populations.

In examining the outcomes of the TPI Initiative, the evaluators were interested in knowing what were the core components or factors in the grant process or funding structure that were most crucial in leading to success. This question was discussed with internship Training Directors during the key informant interviews, and several themes emerged from the conversations. First, Training Directors of accredited programs consistently stated that the availability of high-quality consultation and technical assistance was critical in the program's process of development and seeking accreditation. Some informants noted that they were not aware prior to beginning the project how important consultation would become, and that they had to make adjustments in their grant budgets after the initiation of the project in order to allow for additional consultation. This finding suggests that funders of similar future projects may wish to specify a minimal level of funding that must be dedicated to technical assistance and consultation in the Request for Proposals, in order to ensure that programs budget for adequate resources in this area. The flexibility of the funder was also cited by informants as a key element related to successful projects. Specifically, Training Directors stated that adjustments in funding levels and specific funding allocations (as mentioned above related to funding for consultation services) were sometimes required due to the development and accreditation of an internship program being an organic process. Changes in program resources and lessons learned related to project needs led Training Directors to request budget changes, and it was frequently noted that this flexibility

was critical in allowing the project to remain on course. A final theme that emerged from key informant interviews important to the success of the grant project was the relationship with the funder. Several Training Directors spoke about the funder as being highly connected to and supportive of the project, including serving as an advocate for the internship programs with institutional administrators when necessary and providing ongoing guidance and assistance to the training program. This relationship with the funder was consistently perceived as a key element in the success of the grant projects.

Appendix

Survey Sample

Table 1: Internship Training Year (n=64)

2012-2013	12	19%
2013-2014	21	33%
2014-2015	18	28%
2015-2016	13	20%

Table 2: Type of Doctoral Program (n=64)

Clinical	46	71.9%
Clinical Forensic	1	1.6%
Clinical-Counseling	1	1.6%
Clinical-School	2	3.1%
Counseling	9	14.1%
Forensic	1	1.6%
School	4	6.3%

Table 3: Degree Type (n=64)

PhD	26	40.6%
PsyD	38	59.4%

Table 4: Accreditation Status of Doctoral Program (n=64)

Accredited	45	70.3%
Non-accredited	19	29.7%

Workforce Development

Table 5: Total and Accredited Internships by State

State	Total Internships in APPIC Match	Accredited Internships in APPIC Match	Percent Accredited
Alabama	3	3	100%
Alaska	2	2	100%
Arizona	12	9	75%
Arkansas	5	4	80%
California	89	65	73%
Colorado	18	13	72%
Connecticut	11	8	73%
Delaware	4	3	75%
Washington DC	8	7	88%
Florida	41	28	68%

Georgia	10	8	80%
Hawaii	7	6	86%
Idaho	3	2	67%
Illinois	49	23	47%
Indiana	16	11	69%
Iowa	4	4	100%
Kansas	9	7	78%
Kentucky	9	6	67%
Louisiana	7	5	71%
Maine	4	2	50%
Maryland	13	12	92%
Massachusetts	24	20	83%
Michigan	14	12	86%
Minnesota	29	14	48%
Mississippi	4	4	100%
Missouri	12	10	83%
Montana	2	1	50%
Nebraska	4	2	50%
Nevada	6	1	17%
New Hampshire	3	2	67%
New Jersey	12	9	75%
New Mexico	3	3	100%
New York	58	44	76%
North Carolina	18	12	67%
North Dakota	3	3	100%
Ohio	28	18	64%
Oklahoma	3	3	100%
Oregon	13	7	54%
Pennsylvania	39	24	62%
Rhode Island	1	1	100%
South Carolina	4	4	100%
South Dakota	2	2	100%
Tennessee	9	8	89%
Texas	41	32	78%
Utah	12	8	67%
Vermont	5	2	40%
Virginia	20	13	65%
Washington	17	10	59%
West Virginia	8	4	50%

Wisconsin	13	9	69%
Wyoming	4	2	50%

Table 6: Accreditation Status by Year of All TPI-1 and TPI-2 Internship Positions

	2011-2012		2012-2013		2013-2014		2014-2015		2015-2016	
	Unaccred	Accred	Unaccred	Accred	Unaccred	Accred	Unaccred	Accred	Unaccred	Accred
TPI-1	0	0	4	3	9	6	0	15	0	15
TPI-2	8*	0	10	0	12	3	8	7	8**	8

*Positions existing prior to TPI-funding

**Includes 4 positions in new Tyler program, which began in 2015-2016

Table 7: Importance of Factors in Influencing Decision to Apply to Internship Program (n=64)

Scale: 1=very unimportant; 2=unimportant; 3=neutral; 4=important; 5=very important

Factor	Mean Score	% Endorsing "Important" or "Very Important"
Internship program was APA accredited (or you felt it was likely to achieve accreditation during your internship year)	3.66	66%
Competitive salary	3.42	56%
Competitive benefits package	3.34	47%
Affordable cost of living in the area	3.31	45%
Desire to be in Texas during internship	2.92	31%
Desire to be in the specific town/area in which the internship is located	2.97	31%
Ability to work with the general population you wanted (e.g. adults, children, pediatric, acute inpatient, etc.)	4.16	84%
Ability to work with a very specific populations (e.g. patients with HIV, patients with eating disorders, developmental disabilities, etc.)	3.72	64%
Ability to work in underserved area	3.20	42%
The broad training emphases fit your goals (e.g. emphasis on assessment, therapy, etc.)	3.89	77%
Sufficient opportunities for training in specific therapeutic modalities (e.g. DBT, CBT, etc)	3.50	64%
Positive reputation of the agency/program	3.61	66%
Strong background/training of the internship faculty	3.73	66%

Table 8: State of Doctoral Program (n=64)

Texas	27	42.2%
California	13	20.3%
Florida	5	7.8%
Illinois	4	6.3%

Georgia	2	3.1%
Minnesota	2	3.1%
Missouri	2	3.1%
Virginia	2	3.1%
Alabama	1	1.6%
Arizona	1	1.6%
New Jersey	1	1.6%
Oklahoma	1	1.6%
Oregon	1	1.6%
Washington	1	1.6%
West Virginia	1	1.6%

Table 9: In-State Versus Out-of-State Doctoral Program by Training Year (n=64)

2012-2013	In-State	5	41.7%
	Out-of-State	7	58.3%
2013-2014	In-State	10	47.6%
	Out-of-State	11	52.4%
2014-2015	In-State	7	38.8%
	Out-of-State	11	61.1%
2015-2016	In-State	5	38.5%
	Out-of-State	8	61.5%

Workforce Retention

Table 10: Retention of In-State Versus Out-of-State Students by Training Year (n=43)

2012-2013	In-State	4 of 4	100.0%
	Out-of-State	7 of 7	100.0%
2013-2014	In-State	6 of 7	85.7%
	Out-of-State	4 of 10	40.0%
2014-2015	In-State	3 of 6	50.0%
	Out-of-State	5 of 9	55.6%

Table 11: Retention for In-State Postdoctoral Employment by Accreditation Status of Internship (n=43)

Accredited Internship	12 of 15	80.0%
Unaccredited Internship	17 of 28	60.7%

Phase II – Executive Summary

In 2011, the Hogg Foundation for Mental Health launched the first of two grant programs intended to expand doctoral psychology internship training in the state of Texas, with an emphasis on underserved areas. These two grant programs, jointly known as the Texas Psychology Internships (TPI) Initiative, served as a mechanism for addressing the shortage of accredited psychology internship opportunities in Texas and for developing and retaining a high quality behavioral health workforce in the state. In 2015, the foundation contracted with Clover Educational Consulting Group to conduct an evaluation to assess the outcomes of the initiative. Phase I of the planned two-phase evaluation project was completed in December of 2015 and the results were reported in the Phase I Comprehensive Report, approved by the foundation in April of 2016. Phase II of the project served as an update to Phase I, and was completed in September of 2016. The results of the combined Phase I/ Phase II evaluation project are reported here.

Evaluation methods for Phase II included key informant interviews with a sample of Training Directors and an update survey administered to the 2015-2016 TPI interns in order to report on retention data for that most recent cohort of internship graduates. The survey was disseminated to the complete population of 2015-2016 TPI interns (N=30). Eighteen completed surveys were received, resulting in a 60% response rate. In order to provide a comprehensive analysis of these data, the Phase II report focuses on presenting an analysis of the combined Phase I and Phase II data. The combined dataset was created by utilizing the Phase II data to replace the data for the 2015-2016 intern cohort in the Phase I dataset. Analyses of the Phase II sample are also presented separately where appropriate.

Introduction

The doctoral internship is a requirement for licensure as a psychologist, and is thus a required component of all doctoral psychology training programs within the clinical/practical areas of psychology. Specifically, the internship is a full-time, year-long (or, in some cases, a half-time, two-year long) practical training experience in a clinical treatment setting. The internship is completed after the fulfillment of all required doctoral coursework, and is typically the final requirement for conferral of the doctoral degree in psychology, along with completion of a dissertation. Internship programs are separate training entities and are thus operated and accredited independently from the doctoral program. Psychology doctoral and internship programs are accredited by the American Psychological Association (APA), which ensures a high standard for training. The development and accreditation of psychology internship programs has been an important consideration for the field of psychology in recent years, as critical shortages in internship positions have created challenges for significant numbers of would-be psychologists in completing their training and becoming licensed. Development of internship program within rural and underserved areas is especially important, as these programs, along with postdoctoral training programs, serve as an essential component of a behavioral health workforce pipeline.

As noted in the Phase I Comprehensive Report, beginning in 2011, the Hogg Foundation for Mental Health initiated two grant programs to support the development and accreditation of doctoral psychology internship programs in Texas. The first program, titled the "Texas Psychology Internships Initiative," was initiated in 2011 and was targeted toward the development and accreditation of new internship programs. Four recipients were selected and awarded a combined total of nearly \$2.2 million over a five-year period. The second program, titled the "Texas Psychology Internships Accreditation Initiative," was initiated in 2012 and designed to support the accreditation processes of existing non-accredited psychology internship programs. Four recipients were awarded a total of approximately \$770,000 over a three-year period.

The foundation contracted with Clover Educational Consulting Group to conduct an evaluation of the two grant programs, jointly discussed here as the Texas Psychology Internships (TPI) Initiative. Both phases of the evaluation have been completed. The outcomes of Phase I were presented in a separate comprehensive report. Phase II serves as an update to the primary evaluation activities conducted in Phase I.

Methodology

Phase II methodology included conducting key informant interviews with the Training Directors of three of the eight funded internship programs. In Phase I, five Training Directors were selected for interview based upon the accredited status of their grant-funded internship program. The remaining three programs were unaccredited at the time of those Phase I interviews, and the Training Directors of those three programs were thus interviewed in Phase II. A Phase II survey was also developed and administered in September 2016 via the Survey Monkey platform. The survey conducted in Phase I collected comprehensive data on all interns and graduates of the Hogg-funded internship programs. The purpose of the Phase II survey was to collect updated data

specifically on the 2015-2016 intern cohort at the end of their internship year, in order to compile complete retention data on the full population of interns and graduates. In Phase I, only 13 of the 30 2015-2016 interns responded to the survey. In Phase II, 18 of the 30 2015-2016 interns responded to the update survey. Because the identities of each Phase I respondent could not be identified through the anonymous survey, the 13 records completed by 2015-2016 interns in Phase I were replaced with the 18 records completed in Phase II, and the combined Phase I/Phase II analyses were conducted using the new combined dataset. The focus of this report is a presentation of the combined Phase I/Phase II analyses, although separate Phase II data analyses are presented where appropriate.

As in the Phase I report, when analyzing outcomes related to underserved areas, evaluators utilized designations by the Health Resources and Services Administration (HRSA). Specifically, the designations of Mental Health Professional Shortage Area and Medically Underserved Community/Population were utilized as indicators of underserved areas for purposes of these analyses.

Results

As mentioned above, the two grant programs are jointly discussed here as the "TPI Initiative". When necessary and for ease of reporting, results which are relevant specifically to the four new internship programs that were developed as a part of the first grant program will be referred to herein as "TPI-1". Results specific to the four pre-existing internship programs that were supported and expanded by the second grant program will be referred to as "TPI-2".

As in the Phase I report, outcomes are organized below into the following categories: Survey Sample, Workforce Development, Workforce Retention, and Quality of Workforce. Two additional categories and associated data have also been added to the Phase II report: Workforce Development in Specialty Areas and State and National Internship Development.

Survey Sample

Response Rate

The Phase II survey was distributed to 30 individuals who completed their grant-funded internship program in 2015-2016. Eighteen individuals responded to the survey, yielding a 60% response rate to the Phase II survey. When the Phase II data were incorporated into the Phase I dataset, 69 responses are available for analysis out of 102 potential survey respondents, yielding a 67.6% overall response rate. This is considered a high response rate for survey research, and reflects an improvement over the 62.7% response rate reported in Phase I. A high response rate in survey research increases the likelihood that the sample is representative of the full population.

Sample Demographics

When Phase II data were incorporated into the Phase I dataset as described in the Methodology section, the demographics of the combined sample (n=69) were as follows:

<u>Racial/Ethnic Background</u>		
Hispanic/Latino	10	14.5 %
White	38	55.1 %
Black / African-American	11	15.9 %
American Indian / Alaska Native	0	0.0 %
Asian / Asian-American	1	1.4 %
Native Hawaiian / Pacific Islander	0	0.0 %
Multi-Racial	7	10.1 %
Other ("Mediterranean")	2	2.9 %
<u>Gender</u>		
Female	50	72.4%
Male	18	26.1%
"Genderqueer"	1	1.4%
<u>Bilingual</u>		
Yes	16	23.2%
No	53	76.8%

Of the 16 respondents who endorsed being bilingual in the combined sample, 13 indicated that they speak English and Spanish. Of those 13, one indicated also speaking Tiv, Hausa, and French, and one reported also speaking Italian. The three other bilingual respondents endorsed speaking English and Arabic, English and Greek, and English and Polish, respectively.

Additional demographics of the combined Phase I/Phase II sample, as well as demographics of the separate Phase II sample, can be found in Tables 1-4 in the appendix.

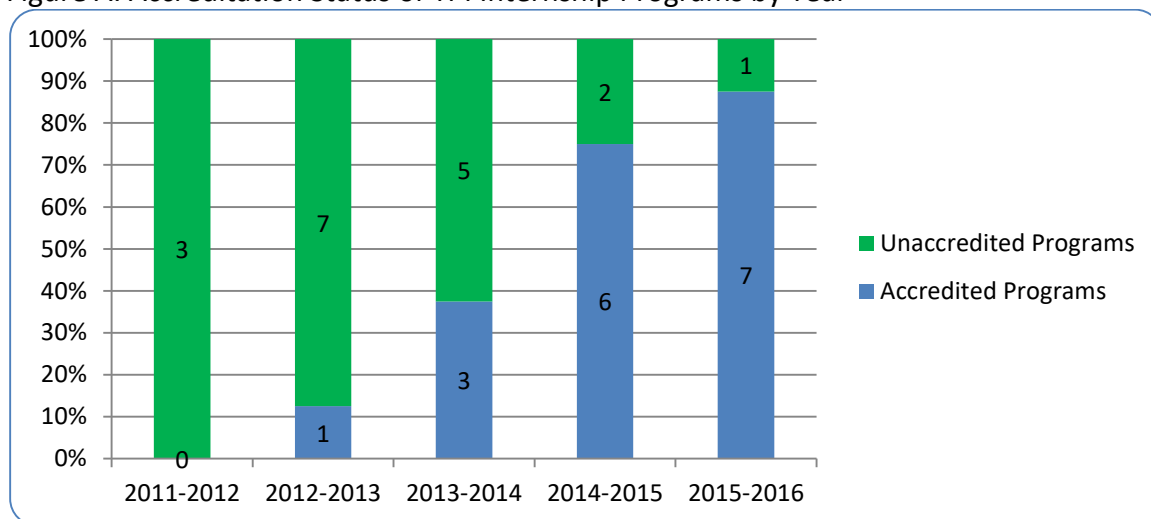
Workforce Development

Development of Internship Programs

As detailed in the Phase I Comprehensive Report, four new programs were created as a result of the grant initiative (TPI-1), all of which are now accredited. The initiative also allowed for development of additional training slots in four existing internship programs (TPI-2), two of which had earned accreditation as of the Phase I report. Since that time, one additional TPI-2 program has earned accreditation. The fourth TPI-2 internship program, a statewide consortium, had ceased operations prior to the Phase I report. As noted in that report, while the consortium did not continue, one of the consortium's training sites did continue operations as a stand-alone program beginning with the 2015-16 training year. That program, which is in a rural and underserved area of the state, received the balance of the TPI funding originally intended for the consortium of which it was originally a part. The standalone program received additional grant

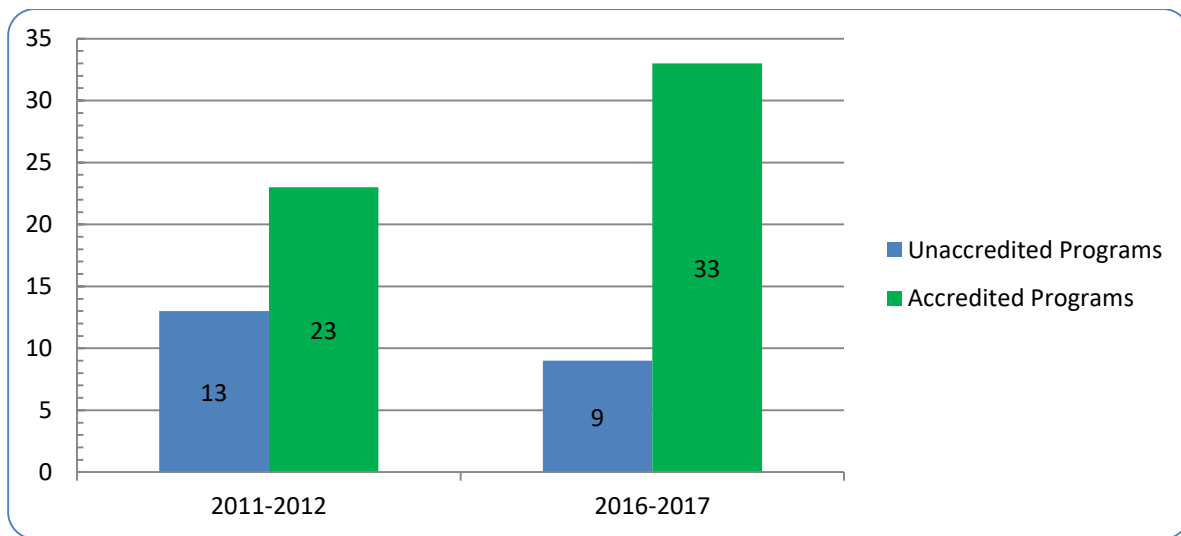
funding from the APA to pursue accreditation, successfully submitted a self-study for accreditation, and was approved for and has received an accreditation site visit in October 2016. The internship program is currently awaiting a final accreditation decision by the APA. Note that in the discussion below, all outcomes related to the development of internship programs and positions include this new stand-alone program. Figure A shows the accreditation status by year of the eight internship programs that received funding from the TPI initiative.

Figure A: Accreditation Status of TPI Internship Programs by Year



The total number of accredited programs in the state of Texas increased from 23 to 33 between 2011 and 2016. Of the 10 newly accredited programs, seven (70%) were programs funded through the TPI initiative. Eight of the newly accredited programs were reported in the Phase I report, and two additional programs have received accreditation since that time. The number of unaccredited programs decreased between 2011 and 2015, from 13 to 12, and has decreased again in 2016 to nine. This decrease is in part due to the TPI initiative, as three of the unaccredited programs that existed prior to the initiative are now accredited. At least one new unaccredited program has been developed outside of the Hogg initiative between 2011 and 2016. Figure B depicts these numbers.

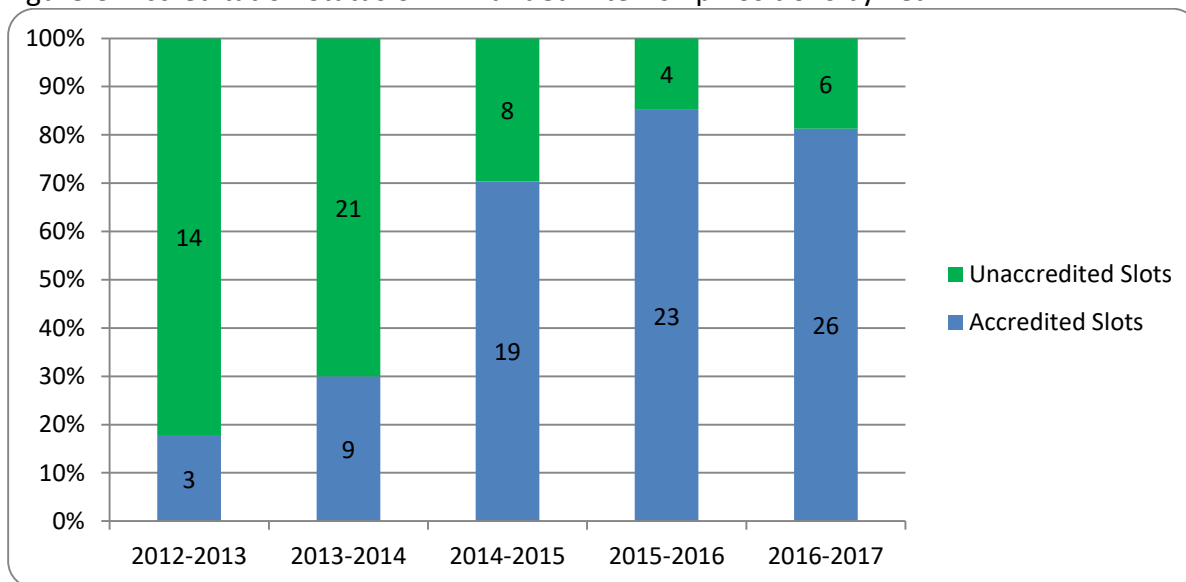
Figure B: Accredited and Unaccredited Internship Programs in Texas



Development of Internship Positions

As of the date of this report, the total number of interns trained as a result of the TPI initiative is 104. Of those interns, 61 (59%) have been trained in internship programs accredited by the APA. Each year, the proportion of interns training in accredited programs has increased, as more of the Hogg-funded internship programs have obtained accreditation. See the Phase I report for more details on the overall development of internship positions as a result of the TPI grant program. Figure C depicts the accreditation status of all positions with the TPI-funded internship programs by year.

Figure C: Accreditation Status of TPI-funded Internship Positions by Year



Workforce Retention

Overall Retention

A key objective of the TPI initiative has been to retain the interns who trained in TPI internship programs, with the goal that they will remain in the Texas workforce following the completion of their training. The Phase II survey serves to update the data provided in the Phase I report, through the inclusion of the 2015-2016 intern graduates, who had just begun their internship year at the time of the Phase I survey. It should be noted that because the Phase II survey was administered only to the 2015-2016 interns, updated employment information is not available for the Phase I respondents. For this reason, data regarding the proportion of respondents who secured employment following the completion of the internship year are not presented in combination with the Phase I data. Of the 18 2015-2016 interns who responded to the survey, 15 indicated that they had secured employment following the completion of the internship program, while three indicated not yet having secured employment.

Of those respondents who indicated having secured post-internship employment across the combined Phase I and Phase II samples (n=61, 88% of combined sample), 36 (59%) described positions in the state of Texas, while 21 (36.8%) indicated leaving the state for work. Four individuals did not complete the section of the survey that asked follow-up questions related to employment, and those cases were treated as missing data.

Of the 36 individuals that indicated remaining in Texas for postdoctoral employment, 14 (39%) were hired by the site at which they completed their internship program. Of the survey participants in the combined sample who responded to follow-up questions about their postdoctoral employment (n=59), 20 indicated that they were completing their doctoral degree within a Texas-based academic program, whereas 39 indicated having come to Texas for internship from out of state doctoral programs. Overall, the proportion of students from in-state doctoral programs versus out-of-state doctoral programs who stayed in Texas following the completion of their internship program was:

In-state doctoral students retained	16 of 20	80%
Out-of-state doctoral students retained	20 of 39	51.3%

While the Phase I report showed an apparent impact of the accreditation status of the internship program on retention for postdoctoral employment within the state of Texas, that effect was not present in the Phase II results or in the combined sample. Because nearly all respondents in Phase II completed an accredited internship program, the effect of accreditation status on retention was eliminated.

Retention in Underserved Areas

Of the 59 survey respondents in the combined Phase I/Phase II sample that endorsed being employed following internship and provided responses to follow-up questions related to that employment, 52 provided information that was analyzable with respect to whether the

employment was in an underserved area. Of the 52 analyzable records, 17 (33%) demonstrated post-internship employment within underserved areas.

Of the 36 survey respondents in the combined sample who endorsed being employed *in Texas* following internship, 33 cases were analyzable with respect to whether the employment was in an underserved area, and seven of the 33 analyzable records (21%) indicated post-internship employment within underserved areas of the state.

Retention of Diverse Populations

Data were analyzed to determine whether the survey participants that were retained in Texas following internship represented diverse backgrounds. The data presented below demonstrates the proportion of survey respondents in the combined Phase I/Phase II sample from each demographic group who indicated obtaining postdoctoral employment in Texas following completion of their internship program. Note that these data include only the subset of respondents that indicated having secured employment following internship (n=57). Unemployed individuals and missing data are omitted.

<u>Racial/Ethnic Background</u>		
Hispanic/Latino	6 of 8	75.0 % retained
White	20 of 32	62.5 % retained
Black / African-American	7 of 11	63.6 % retained
Asian / Asian-American	1 of 1	100.0 % retained
Multi-Racial	2 of 4	50.0 % retained
Other	0 of 1	0% retained
<u>Gender</u>		
Female	28 of 43	65.1% retained
Male	8 of 13	61.5% retained
“Genderqueer”	0 of 1	0% retained
<u>Bilingual</u>		
Yes	9 of 12	75.0% retained
No	27 of 45	60.0% retained

Reasons for Non-Retention

Survey participants who indicated that they left the state of Texas following the completion of their internship program were asked about the reasons for leaving. The following answer choices were provided: Desire to be close to family/spouse; Desire to be in a specific geographic location; Academic reasons; Higher Salary; Found an opportunity in another state; and Other- please specify. Respondents were permitted to select as many answer choices as were applicable. The following data depict the reasons provided by Phase II survey respondents who left the state of Texas following internship. Because no respondents from in-state doctoral programs left the state for employment in the Phase II sample, these data reflect only respondents from out-of-

state doctoral programs. The most frequently endorsed reason was “Found an opportunity in another state.” The one respondent that endorsed “Other” provided a text response indicating that they wished to remain in the specific area where their internship was located, but that no job opportunities were available in that area. The respondent elaborated that their desire to remain in that area did not extend to other areas of Texas, and thus they sought employment out of state when opportunities could not be found in that specific area. Note that only Phase II data are shown here, as combining the Phase I and Phase II data did result in changes to the data presented in the Phase I comprehensive report.

Reasons for Leaving Texas Following Internship (n=7)

Desire to be close to family/spouse	2	28.6%
Desire to be in a specific geographic location	3	42.9%
Academic reasons	0	00.0%
Higher salary	3	42.9%
Found an opportunity in another state	5	71.4%
Other	1	28.6%

Survey respondents that endorsed leaving Texas following internship were also asked whether the availability of loan repayment positions would have influenced their desire to remain in the state. Most participants that provided a response in the combined sample (n=23) indicated that this would have influenced their desire at some level:

	# Endorsing	% Endorsing
Would not have influenced my desire to remain in Texas	5	21.7%
Would have somewhat influenced my desire to remain in Texas	11	47.8%
Would have strongly influenced my desire to remain in Texas	7	30.4%

Survey participants were also asked about the degree to which they agreed with three statements related to postdoctoral employment opportunities in the state of Texas. The following scale was provided: 1= strongly disagree; 2= disagree; 3= neutral; 4= agree; 5= strongly agree. The number of individuals who provided responses to these items across the combined Phase I/Phase II sample, mean scores for each statement, and the percentage of respondents that endorsed “4=agree” or “5=strongly agree” for each item, were:

	n	Mean Score	% Rating 4 or 5
There were a sufficient number of opportunities	59	3.0	41%
There were high-quality opportunities available in to me	60	3.3	48%
There were sufficient opportunities that met my specific interests/needs	61	3.1	41%

Quality of Workforce

In the Phase I report, information was gleaned from Training Director interviews regarding the overall quality of their intern applicant pool, and the extent to which that quality had been impacted by the achievement of accreditation. The Training Director interviews conducted in Phase II included two accredited programs as well as the one remaining unaccredited TPI-funded program. One of the accredited internship programs included in the Phase II interviews received notification of their accreditation after the 2016-2017 intern selection process had come to an end; thus, accreditation had no impact on recruitment of the 2016-2017 intern class. The other recently accredited program received notification late in the 2016-2017 selection process, which limited the program's ability to disseminate the information to potential applicants. The latter Training Director noted that, even with the limited dissemination of information about the program's accreditation, recruitment was enhanced and the overall quality of the applicant pool increased.

Workforce Development and Retention in Specialty Areas

At the request of the foundation, new survey questions were added to the Phase II survey in order to evaluate whether the TPI initiative has impacted workforce development and retention within the specialty areas of Integrated Care and Juvenile Justice. Of the 18 survey respondents, 10 (58.8%) completed their internship within an Integrated Care setting, five (27.7%) within a Juvenile Justice setting, and three (16.7%) in a setting that provides neither integrated care nor juvenile justice services.

Of the 10 Phase II survey respondents that completed their internship within an Integrated Care setting, five (50%) indicated having secured employment in an Integrated Care setting following internship. Of the remaining five respondents that completed their internship within an Integrated Care setting, one indicated having secured employment in a Juvenile Justice setting following internship, two indicated being employed in settings other than Integrated Care or Juvenile Justice, and two did not respond to these items and were thus treated as missing data. Of the five respondents that completed their internship within a Juvenile Justice setting, four (80%) indicated having secured employment in a Juvenile Justice setting following internship. One of those four indicated having secured a position in a setting that the respondent considered both a Juvenile Justice and an Integrated Care setting. The other respondent that completed a Juvenile Justice internship did not respond to these items and the case was thus treated as missing data. Of the three respondents that completed their internship within a setting that provides neither integrated care nor juvenile justice services, two indicated having secured employment beyond internship in settings that provide neither integrated care nor juvenile justice services, and one did not respond to these survey items.

State and National Internship Development

National Data

At the request of the foundation, APPIC Match data were also analyzed to determine the overall change in the number of internship positions, number of accredited internship positions, and number of internship-eligible students, both nationally and within the state of Texas, between 2011 and 2016. When the TPI initiative began in 2011, there were 3,166 internship positions offered in the APPIC Match, of which 2,350 (74%) were within accredited internship programs. That year, there were 4,199 internship-eligible doctoral students registered for the Match, creating an overall shortage of 1,033 internship positions (25% shortage). A total of 300 applicants formally withdrew from the Match or did not submit rankings which would allow for them to be matched with an internship program. A total of 56 positions (2%) were formally withdrawn or not submitted for match by the internship program. Following the conclusion of the 2011 Match, 3,095 applicants had been matched, leaving 804 (21%) unmatched. Of the applicants who matched, 2,339 (76%) were matched with positions in accredited internship programs. Only 15 positions remained unfilled, 10 (67%) of which were in unaccredited internship programs.

In 2016, there were 3,812 internship positions offered in the APPIC Match, of which 2,981 (78%) were in accredited training programs. In terms of applicants, there were 3,999 registered, resulting in an overall shortage of 187 internship positions (5% shortage). A total of 3,814 participated in the Match after 185 either withdrew or did not submit rankings. A total of 70 positions (2%) were withdrawn or not submitted for match. The outcomes of the 2016 Match were 3,595 applicants matched with internship programs, leaving 219 (6%) unmatched. Of the applicants who matched, 2,934 (82%) were matched with positions in accredited internship programs. 147 positions remained unfilled, 113 (77%) of which were unaccredited positions.

State Data

Data from Texas-based internship and graduate programs provide a means for comparing whether Texas has kept pace with the national trends related to the availability of internship positions compared to the number of students in need of positions. Note that because the Match occurs on a national scale, these data are only presented in order to show the overall balance between the number of applicants and the number of positions. In essence, these data demonstrate whether the state of Texas could have had the capacity to train a large proportion of its psychology doctoral students within in-state internship positions in 2011-2016.

In 2011, there were 153 Texas-based internship positions available in the APPIC Match, 116 (76%) of which were accredited. That year, 171 doctoral students registered for the Match from Texas-based graduate programs, suggesting that the overall shortage of Texas-based internship positions compared to internship-eligible students was approximately 18 (11% shortage). After 12 students (7%) withdrew, 159 Texas-based students participated in the national APPIC Match. A total of one position was withdrawn from the Match. Of the students who participated, approximately 86% matched with internship positions, leaving 14% unmatched. Of those who matched, approximately 82% matched with positions within accredited internship programs.

Only one position in Texas was left unfilled, and that position was in an unaccredited internship program.

In 2016, there were 196 Texas-based internship positions in the APPIC Match, 163 (83%) of which were within accredited programs. That year, 138 doctoral students in Texas-based graduate psychology programs registered for the Match. This suggests an overall surplus of Texas-based internship positions of approximately 58 (42% surplus), as compared to the number of internship-eligible students in Texas in 2016. After three students (2%) withdrew from the Match, 135 students participated in the national APPIC Match from Texas-based graduate programs. As in 2011, only one position was formally withdrawn from the Match. Of the students who participated, approximately 97% matched with internship positions, and 3% did not match. Of those who match, approximately 99% matched with positions within accredited internship programs. A total of 11 positions in Texas were left unfilled, three of which were in accredited internship programs and eight of which were in unaccredited programs.

Detailed national and state data for each year between 2011-2016 can be found in Tables 8 & 9 in the Appendix.

Discussion

Results from the Phase II evaluation suggest a continuation of the impacts of the TPI initiative described in the Phase I Comprehensive Report. The initiative has resulted in growth of the availability of doctoral psychology internship programs in Texas, and has led to the accreditation of the majority of the programs it has supported. Only one of the TPI-funded internship programs- a consortium- did not become accredited, although one agency continued to train interns as a standalone program following the dissolution of the consortium, and that program hosted a site visit by the Commission on Accreditation in October of 2016 and currently awaits an accreditation decision.

The Phase II evaluation serves as an update to the Phase I report, with the primary intent of evaluating the retention of the 2015-2016 internship cohorts in the TPI-funded programs. Retention outcomes continue to be strong, as roughly half of the interns in the 2015-2016 cohorts who have secured employment following the completion of the internship have been retained in the state of Texas. The internship sites have served as the primary continued employer of those individuals, as the majority of interns who remained in-state have accepted positions within the site where they completed their internship. Across the combined Phase I/Phase II samples, nearly 60% of the internship graduates were retained in Texas. As was found in the Phase I evaluation, Phase II interns from in-state doctoral programs continue to be retained at a higher rate than out-of-state students, suggesting that internship recruitment efforts focused on in-state doctoral programs may be especially beneficial for internship programs located in professional shortage areas where recruitment of providers tends to be challenging. The Training Director interviews conducted in Phase II strongly supported the conclusion that retention has been a significant benefit of the internship initiative, as multiple interviewees indicated that they have developed

additional postdoctoral positions within their sites and/or have had increased success filling existing postdoctoral positions as a direct result of the TPI initiative.

In terms of retention in underserved areas, approximately one third of the graduates across the Phase I/Phase II samples indicated postdoctoral employment within underserved areas, and approximately one fifth of the graduates who were retained in Texas indicated employment within underserved areas of the state. These numbers are impressive when considered in light of the fact that only three of the eight TPI internship programs were located in underserved areas. However, a number of respondents across the combined Phase I/Phase II samples indicated that, while they desired to remain in Texas following internship, the availability of postdoctoral opportunities was inadequate. An interesting example of how the lack of postdoctoral opportunities impacted retention in underserved areas was in El Paso, as multiple survey respondents specifically stated in their open-ended comments that they preferred to remain in the El Paso area following the completion of their internship, but could not due to lack of postdoctoral opportunities. Development of postdoctoral opportunities in El Paso, as well as in the other underserved areas of the state, would likely allow for an enhanced impact of the internship programs on the overall behavioral health workforce, as postdoctoral employment is an important next step in the career trajectory for most psychologists.

Another notable finding in both Phases of the evaluation has been the high rate of retention of individuals representing racial/ethnic diversity as well as bilingual individuals. Professionals who represent areas of diversity and can thus contribute to the ability of a healthcare agency to adequately reflect the diversity found in the communities it serves are highly desirable candidates. Thus, these findings related to racial/ethnic diversity and to bilingualism suggest that strategic recruitment efforts focused on diverse and bilingual interns may be beneficial in areas that have a need to enhance the diversity of their professional staff and to serve linguistically diverse client populations.

As discussed in the Phase I Comprehensive Report, an interesting outcome of the TPI initiative has been the development of accredited internship programs in Juvenile Justice and Integrated Care settings. With regard to Juvenile Justice, three of the eight TPI grantee internship programs are within Juvenile Justice settings, and all three are accredited. Prior to the initiative, there were no accredited programs in these types of settings in the state. Currently, there are a total of four accredited Juvenile Justice internship programs in the state of Texas, more than in any other state, and comprising more than half of the available Juvenile Justice internship programs in the country, meaning that Texas now provides the majority of these training opportunities nationally. As mentioned in the Phase I report, this finding demonstrates the power of a grant program to change the national training landscape, as the state of Texas is now a national hub for juvenile justice training for psychologists. These training programs are also an important tool for workforce development with Juvenile Justice, as results of the Phase II survey indicate that the majority of survey respondents that completed their internship training within Juvenile Justice settings went on to accept postdoctoral employment positions with Juvenile Justice settings.

With regard to Integrated Care, four of the TPI grantee internship programs offer training within integrated primary and/or specialty care. Unlike in Juvenile Justice settings, internship training in Integrated Care settings is not uncommon within Texas or nationally; however, the continued development and accreditation of training programs within these settings is crucial given the trend toward expansion of integrated care within the healthcare delivery system as a whole. Integrated Care is an important component of our national healthcare system redesign, and thus there is a need for psychologists to be trained within this model of service delivery. Similar to retention within Juvenile Justice settings, results of the Phase II survey demonstrated that interns who completed their internship training within Integrated Care settings tended to accept postdoctoral employment positions within Integrated Care settings, with half of the applicable respondents demonstrating this pattern.

As mentioned in the introduction, the national shortage of doctoral psychology internship programs represented a critical issue for the field of psychology, and for underserved rural areas and underrepresented populations specifically, at the time of the inception of the foundation's TPI grants. The growing imbalance between the number of internship candidates and the number of available training slots each year had reached a critical state at that time. Challenges related to funding and operating these training programs had caused many to reduce the number of interns they trained or to close altogether, and each year a staggering number of would-be psychologists were unable to complete the final year of their training due to these shortages. In 2012, which was the year of the most significant imbalance in the history of the Match, roughly 22% of internship-ready doctoral students who applied for the national internship matching program went unmatched, due largely to the national shortage of training positions. Across the country, this imbalance was felt most acutely in the highly rural and underserved states, where internship programs are scarcer, resources to create and maintain them are limited, and the level of unmet need for behavioral healthcare is substantially increased. In 2016, the overall Match imbalance has been nearly resolved, as the number of registered applicants and the number of available internship positions was closer to equivalent as it has ever been in the history of the Match.

Findings in this report related to changes in APPIC Match data demonstrate that Texas has been more successful than the national average with regard to ensuring an adequate balance of available internship positions compared to internship-eligible doctoral students, even during the years that reflected the greatest imbalance nationally. While the internship Match occurs nationally and, thus, internship positions in Texas are not necessarily filled by students from Texas-based graduate programs, it is reasonable for a state to aspire to have at least the number of internship slots necessary to train the full contingent of internship-eligible students produced by that state in any given year. This is especially true when state-funded Universities are a major producer of internship-ready students. Essentially, when the state is providing funding to produce doctoral-level providers, it is sensible to ensure that capacity exists to retain at least an equivalent number of providers within its own workforce. In Texas, the shortage of internship positions was much less significant in 2011 than it was nationally, and in 2012 the numbers of positions and applicants were nearly balanced. Since 2013, Texas has had a surplus of internship positions compared to the number of Texas-based internship applicants registered for the Match

each year. In terms of internship development, there are approximately 20% more positions nationally in 2016 than there were in 2011. In Texas, the growth of positions over that time has been approximately 22%.

Although internship development in Texas has been strong, it is important to stress the need for further development of postdoctoral employment opportunities. In most states, Texas included, the postdoctoral year is a requirement for licensed psychologists. The specific requirements vary from state to state in terms of number of required hours, types of permissible experiences, etc; however, most typically, they include the completion of approximately one year of post-degree work, supervised by a licensed psychologist. In Texas, this requirement is 1,750 hours of postdoctoral experience over a minimum of one year, supervised by a licensed psychologist. Thus, if postdoctoral employment opportunities which meet the minimal requirements are not accessible to internship graduates in the area where they complete their internship, it is likely that they will seek employment elsewhere, in order to gain an experience that can lead to licensure. Again, the development of these postdoctoral opportunities in underserved areas is even more pressing. The existence of doctoral psychology internship programs provides the ability to recruit highly-trained providers into underserved areas. Because many interns will accept first employment positions in the same geographical area where they completed their training, internship positions can lead to retention of professionals when desirable postdoctoral employment opportunities are present. The vacancy rates for behavioral health providers in many rural areas are significant, and career ladders such as internship programs and postdoctoral training for these providers are frequently non-existent. Development within rural and underserved areas can serve as an essential component of a behavioral health workforce pipeline.

An additional goal of the Phase II evaluation was to further the understanding gained in the Phase I evaluation related to determining the core components or factors of the grant process or structure that were crucial in leading to success. This question was again discussed with internship Training Directors during the key informant interviews. The three primary themes that emerged in the Phase I evaluation were again present in the Phase II interviews: the importance of high-quality consultation and technical assistance, the flexibility of the funder with regard to budget modifications, and the relationship between the grantee and funder.

With regard to consultation and technical assistance, all TPI grantees included funding for these services within their grant budgets, and it was consistently stated by Training Directors that these services were essential to their success. The amount and type of consultation services utilized varied greatly across grantees. Some budgeted for as few as 25 hours of consultation in a given year and limited the scope to a specific task such as obtaining support and guidance around completing the self-study for accreditation. Other programs budgeted for as much as 240 consultation hours in a given year and utilized a higher level of support across a greater number of tasks, including such things as development of curriculum and program governance, development of program policies, evaluation and data-collection processes, marketing the program, and seeking accreditation. This variability is related to the second theme which emerged consistently across key informant interviews, which was the flexibility of the funder.

Grantees were provided the flexibility to determine the level of support that would be needed, and in what areas, in order to be successful, and then were later permitted to adjust their budgets if they found that they had misjudged what would be needed. Some grantees that included lower levels of consultation in their initial budgets adjusted their subsequent budgets to include more funding for consultation after determining that a higher level of consultative support would be necessary for them to be successful within their intended timeline.

The flexibility of the funder was also apparent with regard to the variety of ways in which intern positions were supported by grant funding. In some cases, the Hogg Foundation provided funding to support full intern positions and benefits for a certain number of years, with a plan for the grantee agency to take over the responsibility for this funding in a stepwise manner and/or at a predetermined point in time. In other cases, the grantor provided funding for a certain portion of the full salary and/or benefits, again with a plan for the grantee agency to assume responsibility for funding these expenses over a specific period of time. Grantees stated that the flexibility of the funder allowed the grantee agency to utilize the funding in a manner that was best suited to the needs of the specific organization, rather than attempting to fit the needs of each grantee within a strictly prescribed budget structure. Related to this, in cases where grantees under-spent their grant funding within a specific budget category, they were frequently allowed to reallocate those funds toward other expenses, such as conference attendance and other trainings, as long as those expenditures would support the agency in attaining goals relevant to the grant program.

Lastly, an additional theme emerged in the Phase II interviews, related to the collaboration, training, and networking opportunities provided by the funder. Several interviewees indicated that these opportunities, which were made available as a component of the grant funding, served to improve their internship programs by allowing for collaboration with other programs and providing adjunctive training opportunities for the interns. Training Directors stated that the overall quality of the training program was improved through their participation in these events. A thorough discussion of the three primary themes found across both phases of the evaluation can be found in the Phase I Comprehensive Report.

Appendix

Table 1: Demographics of the Phase II sample (n=18):

<u>Racial/Ethnic Background</u>		
Hispanic/Latino	1	5.6 %
White	10	55.6 %
Black / African-American	3	16.7 %
American Indian / Alaska Native	0	0.0 %
Asian / Asian-American	0	0.0 %
Native Hawaiian / Pacific Islander	0	0.0 %
Multi-Racial	3	16.7 %
Other ("Mediterranean")	1	5.6 %
<u>Gender</u>		
Female	12	72.4%
Male	5	26.1%
"Genderqueer"	1	1.4%
<u>Bilingual</u>		
Yes	2	11.1%
No	16	88.9%

Table 2: Internship Training Year of combined Phase I/Phase II sample (n=69)

2012-2013	12	17%
2013-2014	21	30%
2014-2015	18	26%
2015-2016	18	26%

Table 3: State of Doctoral Program for combined Phase I/Phase II sample (n=69)

Texas	26	37.7%
California	16	23.2%
Florida	5	7.2%
Illinois	3	4.3%
Georgia	2	2.9%
Minnesota	2	2.9%
Missouri	2	2.9%
Virginia	2	2.9%
Oklahoma	2	2.9%
Oregon	2	2.9%
Alabama	1	1.4%
Arizona	1	1.4%
New Jersey	1	1.4%

Washington DC	1	1.4%
West Virginia	1	1.4%
Utah	1	1.4%
Mississippi	1	1.4%

Table 4: In-State vs Out-of-State Doctoral Program by Training Year, combined sample (n=69)

2012-2013	In-State Out-of-State	5 7	41.7% 58.3%
2013-2014	In-State Out-of-State	10 11	47.6% 52.4%
2014-2015	In-State Out-of-State	7 11	38.8% 61.1%
2015-2016	In-State Out-of-State	4 14	22.2% 77.8%

Table 5: Retention of Phase II Sample, by In-State vs. Out-of-State Status of Doctoral Program (n=18)

	Total in Sample	Retained in Texas	Hired by Training Site	Left Texas	Employed in Underserved Area	Unemployed or Unknown
In-state doc program	4	3	2	0	2	1
Out-of-State doc program	14	4	3	7	4	3

Table 6: Demographic of Phase II Survey Respondents Retained in Texas n=15

<u>Racial/Ethnic Background</u>		
Hispanic/Latino	1 of 1	100% retained
White	3 of 9	33.3% retained
Black / African-American	3 of 3	100% retained
Multi-Racial	0 of 1	0% retained
Other ("Mediterranean")	0 of 1	0% retained
<u>Gender</u>		
Female	7 of 11	63.6% retained
Male	0 of 3	0% retained
"Genderqueer"	0 of 1	0% retained
<u>Bilingual</u>		
Yes	1 of 2	50.0% retained

No	6 of 13	46.2% retained
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Table 7: Phase II Postdoctoral Employment in Specialty Areas, by Specialty Area of Internship Training (n=18)

	Total Interns	Employed in Integrated Care	Employed in Juvenile Justice	Employed in combined IC/JJ Setting	Employed in Other Setting	Unknown or Unemployed
Integrated Care Internship	10	5	1	0	2	2
Juvenile Justice Internship	5	3	0	1	0	1
Neither IC nor JJ Internship	3	0	0	0	2	1

Table 8: National Match Data by Year, 2011-2016

Match Year	Positions Offered	Applicants Registered	Overall Shortage	Applicants Matched	Accredited Positions Filled	Unaccredited Positions Filled
2011	3,166	4,199	-1033	3,095 (79%)	2,339 (100%)	756 (93%)
2012	3,202	4,435	-1233	3,152 (78%)	2,363 (100%)	789 (94%)
2013	3,397	4,481	-1084	3,326 (81%)	2,506 (99%)	820 (94%)
2014	3,534	4,335	-801	3,458 (80%)	2,587 (99%)	871 (93%)
2015	3,701	4,247	-546	3,569 (84%)	2,716 (99%)	853 (89%)
2016	3,812	3,999	-187	3,595 (90%)	2,934 (98%)	661 (80%)

Table 9: Texas Match Data by Year, 2011-2016 (NOTE: because the Match occurs on a national scale, these figures are intended only to demonstrate the overall balance between applicants and positions within the state. These data do not necessarily indicate in-state matches)

Match Year	Positions Offered	Applicants Registered	Shortage / Surplus	Applicants Matched	Accredited Positions Filled	Unaccredited Positions Filled
2011	153	171	-18	137 (80%)	116 (100%)	35 (95%)
2012	160	164	-4	125 (76%)	113 (100%)	46 (98%)
2013	182	180	+2	142 (79%)	124 (100%)	55 (95%)
2014	199	147	+52	121 (82%)	131 (100%)	63 (93%)
2015	186	125	+61	109 (87%)	141 (100%)	42 (93%)
2016	196	138	+58	131 (95%)	159 (98%)	25 (76%)