



PLAYBOOK

FOR ENHANCING INDIANA'S MENTAL
& BEHAVIORAL HEALTH WORKFORCE

The Landscape Assessment: Training Program Perceptions of the Postsecondary Pipeline to Practice

TECHNICAL REPORT

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Key Findings

- The following report includes insights provided from a brief “pulse check” survey of 61 Indiana mental and behavioral health workforce training programs, including those preparing students for careers in selected professions.
- When asked about student enrollment, 20% of programs reported decreases.
- Faculty recruitment and retention was reported as a top challenge by 35% of programs.
- Financial support was cited by about half (48%) of all training programs as the most helpful way to enhance the pipeline. Referenced supports included scholarships for students, paid clinical internships, funding for faculty or financial support for clinical internships/local employers.
- Psychiatric nurse practitioner (NP) programs also reported issues with recruitment but focused specifically on clinical preceptors. Psychiatric NP programs reported difficulties in creating employer partnerships that lead to clinical experiences for students. These programs also mentioned the current inability to track psychiatric NP workforce data.
- Similar themes focusing on issues with faculty recruitment and retention and financial support for students were identified by five doctoral psychology programs. Additional considerations revolve around reducing confusion with the naming conventions and increasing doctoral clinical internships in the state.

Background

Access to critical mental and behavioral health treatment depends upon a workforce available and accessible to serve those in need of care. [The Playbook for Enhancing Indiana's Mental and Behavioral Health Workforce](#) is focused on understanding Indiana's postsecondary pipeline to practice for mental and behavioral health professionals ([selected professionals](#)) and identifying opportunities to strengthen the workforce by stopping "leaks" in the pipeline. As part of the Playbook Project, insights were gathered from Indiana's current mental and behavioral health professionals regarding their postsecondary education and postgraduate licensure experiences as well as perceived opportunities to strengthen this pipeline for future professionals.

Methodology

Survey

A brief survey was developed and administered electronically to 142 training programs included in an extract from the Indiana Commission for Higher Education of behavioral health-related degrees. More information on the methodology for program extraction can be found in [The Landscape Assessment: Inventory and Trends Technical Report](#). In brief, a "qualifying status" for each surveyed degree program was verified by the Indiana Behavioral Health and Human Services (BHHS) Licensing Board. Each degree program either qualifies graduates "as-is," meaning the degree satisfies the educational requirements for licensure, or "conditionally," meaning the degree program qualifies graduates for licensure only if specified courses or course content is completed. Specific survey questions are provided in the Appendix. The survey was designed, with subject matter expert feedback to capture information on:

- Trends and Drivers of Program Matriculation and Graduation
- Typical Career Pathways
- Resources for New Graduates and Field/Clinical Supervisors
- Program Challenges
- Opportunities to Enhance the Pipeline
- Evidenced-Based Practice Training

Program Contacts

To identify training program contacts, the Indiana Commission for Higher Education reached out to institutional academic officers and requested specific points of contact for the associated training program at their institution. In the instance of non-response, the program director's contact information was identified by the Bowen Center and an attempt was made to verify this contact with institutional-level contacts. Several individuals were listed as points of contact for multiple programs within one institution. Unique survey links mapped back to each individual program were disseminated through the Qualtrics email system on October 10, 2023. Individuals listed as contacts for more than three training programs were excluded from survey distribution and were offered key informant interviews during which survey information for each program was collected.

Reviewing and Coding Data

Upon the closing of the training program survey, quantitative and qualitative data were extracted from Qualtrics.

Quantitative data were cleaned and prepared for descriptive analysis. The qualitative data were then prepared for coding

and analysis. The coding of qualitative data occurred in three phases by members of the Bowen Center. In the initial phase, responses were labeled based on their inherent meaning, allowing for the identification of content and trends through assumptions. In the second phase, members convened to review results of individual coding, identify incidents of discordance between individual results, and discuss recoding strategies for such incidents. Recoding of discordant responses was accomplished once consensus was achieved within the research team. The coding system employed was comprehensive, with codes carefully defined and designed to be mutually exclusive.

Theming and Presenting Data

Qualitative data were categorized into overarching themes by grouping related codes and summarized in a table format. Thematic analysis, the process of identifying, analyzing, and reporting patterns/themes within data, was used to distill the essence of the data, providing a comprehensive understanding of the underlying patterns and insights.

This structured approach ensures clarity and accessibility in presenting the qualitative data and facilitating a comprehensive interpretation of the survey results.

Behavioral Health and Human Services Professions

Results

Sample

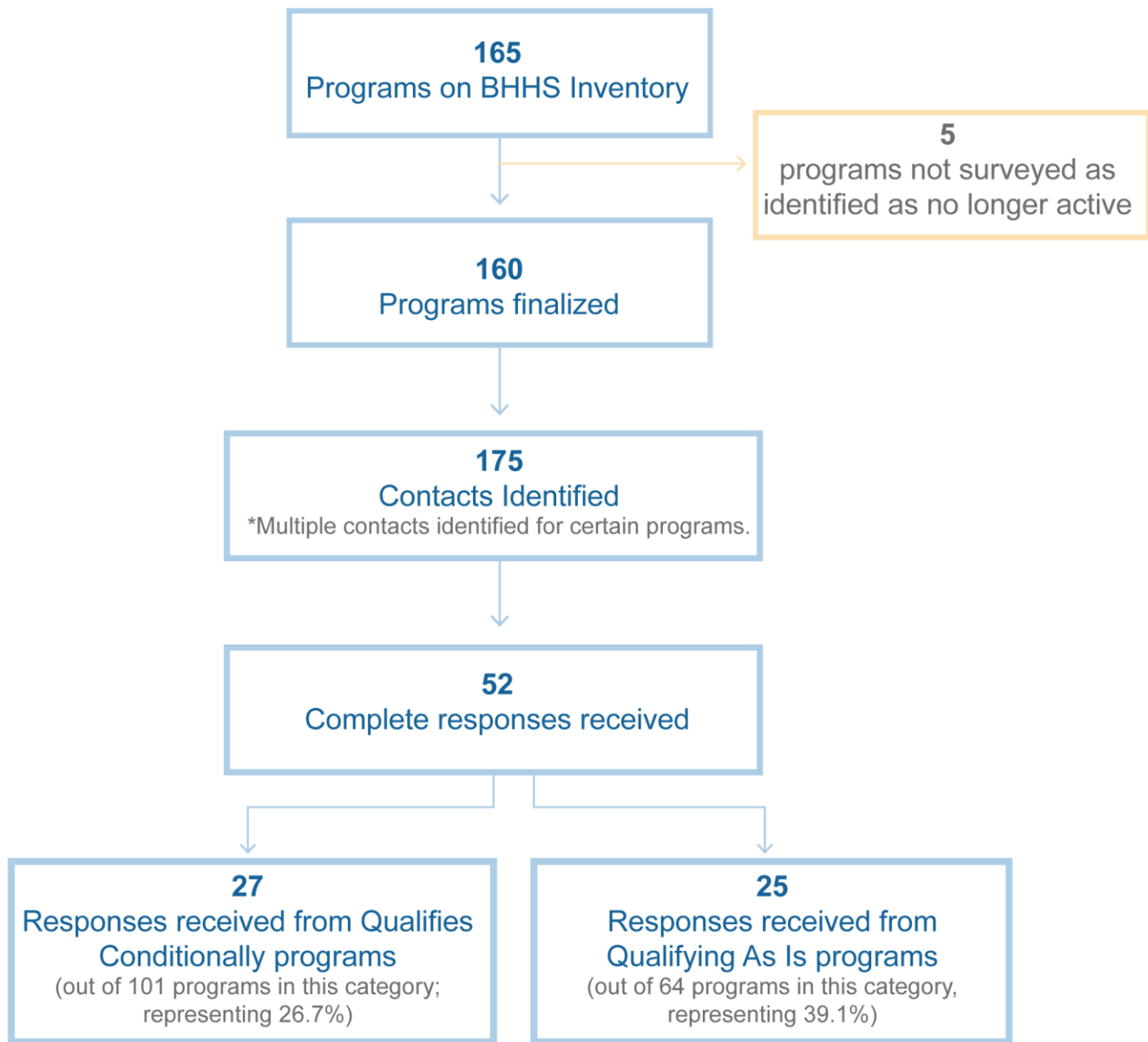


Figure 1: BHHS survey respondents

After removing incomplete results, 52 programs were represented in the final survey sample, a response rate of 38.6%. Figure 1 provides a breakdown of these responses by program qualification status.

Matriculation Trends

When asked about trends in program matriculation, about 40% of as-is programs reported increases while slightly fewer (37.0%) conditional programs reported the same. Table 1 provides more detail. About 25% of conditional programs reported decreases in student enrollment, while only 16% of as-is programs reported the same. When asked about drivers

of matriculation trends, programs most often cited program reputation and student interest as drivers, which are presented in Table 2 across all respondents due to similarities between conditional and as-is programs.

Table 1: Matriculation trends reported by BHHS programs

	As-Is (n=25)	Conditional (n=27)	Total (n=52)
Increases	10	10	20 (38.5%)
Decreases	4	7	11 (21.2%)
About the same	10	8	18 (34.6%)
Unsure	1	2	3 (5.8%)

Table 2: Drivers of matriculation trends across all respondents

	Count	Percent of Sample
Program reputation	29	55.8
Student interest	29	55.8
Faculty and resources	17	32.7
Cost and financial aid	16	30.8
Other (Please specify):	14	26.9
Graduation rates and placements	14	26.9
Accreditation	14	26.9
Enrollment cliff (fewer students entering college)	13	25.0
Location	10	19.2
Competition	9	17.3
Flexibility in admission requirements	8	15.4
Students support services/networking opportunities	7	13.5
Clinical placement availability	7	13.5

Note: Participants were able to select more than one answer for this question.

Graduation Trends

All programs were asked similar questions about graduation trends, which are included in Tables 3 and 4. More than 60% of as-is training programs reported no changes in graduations, 12% reported decreases, and 24% reported increases in graduations. Similarly, 60% of conditional programs reported no changes in graduations, 22% reported increases, and 7% reported decreases. When looking at factors influencing graduations, most survey respondents indicated these trends were due to retention strategies and program quality.

Table 3: Graduation trends reported by BHHS programs

	As-Is (n=25)	Conditional (n=27)	Total (n=52)
Increases	6	6	12 (23.1%)
Decreases	3	2	5 (9.6%)
About the same	16	16	32 (61.5%)
Unsure	0	3	3 (5.8%)

Table 4: Drivers of graduation trends across all respondents

	Count	Percent of Sample
Retention strategies	28	53.8
Program quality	27	51.9
Academic support	20	38.5
Student interest	19	36.5
Internship opportunities and career services	13	25.0
Prioritization of student mental health and well-being	12	23.1
Other (Please specify):	10	19.2
Admission standards	7	13.5
Cultural competency	7	13.5
Financial aid and scholarships	6	11.5
Licensure and certification exam preparation	6	11.5
Students unsatisfied with career choice after direct patient experience and switched programs	1	1.9

Note: Participants were able to select more than one answer for this question.

Challenges to Continuity

Programs were asked to provide more detail on any issues or challenges that have threatened their program continuity. The qualitative analysis methods detailed above were used to evaluate the responses for themes, which are included in Table 5. Just over a third of as-is (32%) programs reported experiencing issues with faculty recruitment. Similarly, 37% of conditional programs reported issues with faculty recruitment and retention. Overall, 35% of programs reported this as a top issue potentially threatening program quality and continuity. While student interest was the other most reported theme for as-is programs, conditional programs more often reported program changes and transitions as impacting program

continuity. Additionally, one conditional program and two as-is programs reported closing due to a lack of student interest or a lack of employer interest in hiring graduates.

Table 5: Program reported challenges to program continuity by qualifying status

Theme	Total As-Is Responses	Total Conditional Responses	Sample Responses
Faculty recruitment and retention	8	10	<p>“It is hard to hire faculty for what a regional campus can afford. We have been down one faculty member for over a year while we have consistently had between 17 and 18 students per cohort.”</p> <p>“Identifying, hiring and retaining qualified full-time faculty.”</p> <p>“Faculty capacity—i.e. minimal full-time faculty, reliance on associate (adjunct) faculty; minimal financial supports for students”</p>
Program changes and transition	3	5	<p>“I think the transition in campus location was confusing about that has raised some concerns.”</p> <p>“The program is no longer offered. The degree was not something local employers supported or hired. They did not understand what the degree meant.”</p>
Student interest	4	2	<p>“This program is closing because students haven’t been interested.”</p> <p>“All programs are closing at this location due to a lack of student interest.”</p>
Student responsibilities	0	2	<p>“Students have so many responsibilities in addition to school: full-time employment, close and extended family.”</p> <p>“Rising costs of college degree, needing to work more during college, and competitiveness of graduate programs”</p>
Financial barriers	2	2	<p>“Decreasing resources (financially) to provide scholarships and assistantships”</p> <p>“Budget constraints”</p>
Competitiveness of graduate programs	0	3	<p>“Rising costs of college degree, needing to work more during college, and competitiveness of graduate programs.”</p> <p>“Programs growing even more competitive/having smaller cohorts”</p>

Table 5: Program reported challenges to program continuity by qualifying status

Theme	Total As-Is Responses	Total Conditional Responses	Sample Responses
Training opportunities	0	2	“Available preceptors” “We are continuously struggling with finding clinical training experiences for our students while they are attending our graduate program.”
Administrative challenges	0	2	“Varying state standards are difficult to manage.”

Career Pathways

Table 6 and Table 7 detail reported student career pathways. Of the as-is programs, 80% reported that most of their students planned to pursue a career in clinical counseling compared to only 15% of conditional programs. Altogether, almost 30% of programs reported that the majority of their students did not plan to pursue direct patient care, which is exclusively attributed to the conditional programs.

Table 6: Proportion of students planning to pursue a career in clinical counseling

	As-Is	Conditional	Total
Most of them	20	4	24
About half of them	4	8	12
Fewer than half	0	4	4
Very few	0	11	11
Unsure	1	0	1
Total	25	27	52

When asked generally about career pathways, as-is programs most often reported clinical practice (26%), followed by community health settings (21%) and private practice (13%). On the other hand, conditional programs most often reported that students plan to pursue further education (24%), followed by community health (18%) and clinical practice (14%).

Table 7: Commonly pursued career pathways and settings

	As-Is Programs	Conditional Programs
Academic and research careers	0	4
Administration and leadership	1	2

Table 7: Commonly pursued career pathways and settings

	As-Is Programs	Conditional Programs
Case management	6	5
Clinical practice	20	10
Clinical supervision	4	0
Community health	16	13
Consultation and training	0	4
Law	0	1
Medicine	0	1
Non-profit and advocacy organization (mental health advocacy, policy development)	5	8
Other (Please specify):	2	9
Private practice	10	3
Pursue a career in higher education	3	1
Pursue further education	7	17
School counseling	1	3
TOTAL	75	72

All survey respondents were asked to report the resources they provide to new graduates from their program as they attempt to obtain state licensure, as well as any resources provided for individuals serving as field instructors or supervisors for newly licensed professionals. These resources are summarized in Tables 8 and 9 below. Education on the importance of field experience and supervision (52%) was the most reported resource for supervisors, while career counseling to understand licensure requirements was the most common resource (60%) for new graduates. Results are presented overall as there were few differences between as-is and conditional programs.

Table 8: Resources available for new graduates across all programs

Resources available for new graduates seeking licensure		
	Count	Percent of Sample
Career counseling to understand the requirements	31	59.6
We have a network of organizations and share their information with graduates	29	55.8

Other (Please specify):	17	32.7
Hosting career fairs for graduates	10	19.2
Licensure preparation workshops	9	17.3
We find training for an individuals' associate-level time	2	3.8

Note: The percentage in this table does not add up to 100% due to respondents' ability to select multiple options.

Table 9: Resources available for new supervisors across all programs

Resources available for supervisors		
	Count	Percent of Sample
Education on the role and importance of field experience	27	51.9
Financial incentives	1	1.9
Formal connection with university/college	25	48.1
Non-financial incentives	8	15.4
Other (Please specify):	15	28.8
Professional development opportunities	17	32.7

Note: The percentage in this table does not add up to 100% due to respondents' ability to select multiple options.

Pipeline Opportunities

All training programs were given the opportunity to share their thoughts on resources or policies that would support the training pipeline and the themes mentioned are included in Table 10. Almost half of all training programs reported some type of financial support as the most helpful initiative. These responses varied from financial support through grants or scholarships for students in training programs, paid clinical internships/rotations, funding for faculty hiring, and pay and financial support for local employers/clinical internship sites. Both as-is and conditional programs most often reported financial support. The second most common response for all programs was the expansion of clinical training experiences, especially those that pay students for their services. This was followed by advertising and marketing and increased wages.

Table 10: Program reported ideas for strengthening the pipeline

Theme	Total As Is Responses	Total Conditional Responses	Sample Responses
Financial support	15	10	“Faculty hiring and appropriate pay for faculty.” “Students are interested in paid internships/internship stipends; full or partial tuition waivers are useful incentives to promote enrollment.” “More paid internships for students.” “Scholarships and grants for students.” “More resources to local facilities.” “Assistantships and scholarships”
Training opportunities	2	5	“More clinical training experiences.” “Increasing the number of community placements that pay students for their work.”
Advertising and marketing	2	2	“Spreading awareness about the social work major in high schools, in community colleges as social work is one of the mental and behavioral health pipeline that can be licensed at the bachelor’s level.” “Increasing faculty awareness so they discuss pathways to licensure more with students.”
Increase wages	0	4	“increase in salaries for mental health professionals”
Expand career pathways	0	3	“More paid internship and research experiences at the undergraduate level; ability to work in more clinically relevant settings without a license”
Innovative program strategies	3	0	“We are looking to transition the MSW program to an online format to provide clinical training in rural practice nationwide.” “Accelerated master’s program pathways would help”

Note: The “n” in this table may not line up with the number of survey respondents as responses may have more than one theme and survey respondents were not required to respond. Any themes with less than two responses have been removed (n=4).

Evidence-Based Practice

Multiple state-level discussions surrounding evidence-based behavioral and mental health care are ongoing; thus, several questions were added to the survey to gauge the breadth and depth of training on different interventions. These interventions are below.

- Parent Management Training (STAND, Defiant Children, Defiant Teens)
- Parent-Child Interaction Training (PCIT)
- Motivational Interviewing (MI) for substance use disorders
- Dialectical Behavioral Therapy (DBT)
- Trauma-Focused Cognitive Behavior Therapy (tfCBT)

Table 11 shows a breakdown of whether programs reported providing any training for the evidence-based interventions. Across all interventions, as-is programs reported providing some type of training more often than conditional programs. MI and tfCBT were the most reported modalities for both as-is and conditional programs. Very few programs reported

providing training on either Parent Management Training or Parent-Child Interaction Training. Table 12 depicts the average reported total program hours dedicated to each evidence-based practices (EBPs). Many of the programs that indicated they provide training on the interventions were unable to quantify the extent of the training. As-is programs reported more time on all EBPs than conditional programs except for DBT (31.6 vs 35.3 hours). A full curricular review would be necessary to quantify the true extent of evidence-based training.

Table 11: Program reported hours of training on specific modalities

Intervention	Yes		No		Unsure	
	As-Is	Conditional	As-Is	Conditional	As-Is	Conditional
Parent Management Training	3	2	16	19	6	6
PCIT	3	2	16	20	6	5
MI	15	9	6	15	4	3
DBT	12	5	9	16	4	6
tfCBT	15	8	8	13	2	6

Table 12: Total program hours spent on specific EBP

	Mean	
	As-Is	Conditional
Parent Management Training	12.5	.
PCIT	4	.
MI	26.9	19.9
DBT	31.6	35.3
tfCBT	22.5	22

Psychiatric Nurse Practitioners

Methodology

Indiana currently has 10 psychiatric nurse practitioner (NP) training programs, including master's degrees, post-master's certificates, and doctoral programs, according to data obtained from the Indiana Commission for Higher Education. These programs do not have a qualifying status because there is no license for psychiatric NPs. These programs are listed in the Playbook Project [inventory](#). The engagement strategy for psychiatric NP programs was two-fold and included the administration of a pulse check survey and several key informant interviews held in November-December 2023.

Survey Methodology

The same survey was administered to psychiatric NP training programs. More detail on survey methodology is found in Section 1 above and the survey questions are included in the Appendix.

Focus Group Methodology

All 10 psychiatric NP programs were invited by email to attend a series of virtual focus group meetings. These meetings were held on November 14 and December 1, 2023. Agendas with questions were sent out in advance to meeting invitees and are attached in the Appendix.

Results

The Sample

The survey responses were requested by November 1, and a total of three responses were received, which were all complete and available for analysis. While only three programs responded to this survey, this represents a 30% response rate given that there are [10 psychiatric NP programs in Indiana](#). Nearly all (90%) programs had at least one representative present at the focus group meetings. The results from the survey and focus group provide insights into the psychiatric NP training pipeline.

Matriculation and Graduation Trends

About 67% of the psychiatric NP survey respondents reported decreases in the number of students matriculating, while 33% reported no change in the number of students matriculating. When asked what may be driving the decreases in the number of matriculating students (Table 13), programs most often reported program cost and availability of financial aid, along with the availability of clinical placements.

Table 13: Psychiatric NP matriculation trends

	Count	Percent
Cost and financial aid	2	25.0
Clinical placement availability	2	25.0
Competition	1	12.5
Program reputation	1	12.5
Accreditation	1	12.5

Table 13: Psychiatric NP matriculation trends

	Count	Percent
Student interest	1	12.5
Total	8	100.0

Regarding graduations, all survey respondents reported no changes in the number of students graduating from their programs. Table 14 shows reported drivers of graduation trends. Programs most often reported that program quality, retention strategies, academic supports, and student interest were driving the maintenance of graduation trends.

Table 14: Psychiatric NP graduation trends

	Count	Percent
Academic support	3	16.7
Program quality	3	16.7
Retention strategies	3	16.7
Student interest	3	16.7
Cultural competency	2	11.1
Licensure and certification exam preparation	2	11.1
Prioritization of student mental health and well-being	2	11.1
Total	18	100.0

During focus group meetings, all programs were asked what trends they were seeing in matriculation. Some programs reported seeing increases in applicants, specifically around the post-master's certificate programs as family nurse practitioners (FNPs) look to expand their skillset into psychiatric care. Other programs stated that enrollment has been maintained with robust numbers of students interested in enrolling. When asked to elaborate on any factors influencing student enrollment, several programs reported that getting preceptors/clinical placements is a challenge that hinders increases in class size.

Challenges to Continuity

The focus group participants agreed that data on graduate retention into the licensed Indiana workforce actively providing services is currently lacking. They also reported that Indiana is not able to monitor psychiatric NP workforce data regarding open positions due to a lack of data granularity. Most programs also reported a high employer demand for their graduates.

Survey respondents were asked to report any program challenges that may have acted as threats to continuity. Availability of clinical instructors/preceptors was listed by all surveyed programs. Several programs expanded upon this during the

focus group meeting. Programs reported that they took on the responsibility of finding clinical placements for their students and that clinical preceptors were not paid for their supervision by the program or the student. While this is the case for Indiana-based programs, there are out of state programs that provide payment for supervision. This may impact competition for high-quality supervision and place Hoosier students at a disadvantage.

Many of the focus group participants agreed that they had difficulty creating new partnerships with employers in the community and that strengthening the relationship between employers and training programs would be beneficial for both sectors and reduce the issues with clinical preceptor availability, opening potential for increases in class size. Another solution presented by focus group participants was financial incentives (i.e. capped tax credits) for clinical preceptors.

Career Pathways

All psychiatric NP training program survey respondents reported that fewer than half of their enrolled students planned to pursue a career in clinical counseling. When asked about other career pathways/settings (Table 15), clinical practice was most often reported followed by military and veteran support settings. During focus groups, the programs shared that their graduates follow a variety of settings and pathways, including going into private practice, working in hospitals, community mental health centers, or nursing homes.

Table 15: Psychiatric NP program reported career pathways

Common career pathways	Count	Percent
Clinical practice	3	33.3
Military and veteran support	3	33.3
Community health	2	22.2
Private practice	1	11.1
Total	9	100.0

Training programs that responded to the survey were asked about resources in place to support new graduates and field supervisors (see Table 16). Most often, programs reported sharing information on their network of organizations with new graduates. For supervisors, programs reported providing education on the importance of field experience and a formal connection with the university/college.

Table 16: Psychiatric NP resources for supervisors and new graduates

Resources for new graduates	Count	Percent
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We have a network of organizations and share their information with graduates	3	50.0
Certification prep	2	16.7
Hosting career fairs	1	33.3
Resources for supervisors	Count	Percent
Education on the role and importance of field experience	2	33.3
Formal connection with university/college	2	33.3
Professional development opportunities	1	16.7
Non-financial incentives	1	16.7

Evidence-Based Practice

All psychiatric NP survey respondents reported providing training on Motivational Interviewing, with an average time of 50 hours across the program. One program reported providing about 30 hours of training on tfCBT. No other EBPs included in the project (Parent Management Training, PCIT, or DBT) were reported by any psychiatric NP programs in the survey or focus group meetings.

Pipeline Opportunities

When asked about factors influencing the pipeline of psychiatric NP providers, training programs reported that FNPs provide behavioral health services but do not have the same level of specialized training as psychiatric NPs. It is important to emphasize the value of psychiatric nursing, as programs report the possibility of stigma surrounding psychiatric nursing, causing individuals to choose primary care nursing instead. Additionally, employers may benefit from increased awareness.

Programs reported that they use a blended approach to prepare students in medication management and basic psychotherapeutic intervention. Although not required, program leadership recommend that program graduates obtain specialized certifications after graduation if clinical counseling is the intended primary focus of their practice. A program in the focus group suggested that one solution to increasing the amount of EBP training while in the program could be to require a student to have a specific therapeutic certification as an enrollment requirement. With this requirement in place, the psychiatric NP training program could then dive more deeply into that specific therapy.

When asked about ideas for enhancing the psychiatric NP pipeline, survey respondents reported that financial assistance for students, supporting psychiatric NP program faculty in obtaining higher levels of education, and more mentorship opportunities for students may be beneficial.

Psychology (Doctoral-Level Programs)

Methodology

The engagement of doctoral-level psychology programs was two-fold through the administration of a pulse check sent to all doctoral programs and key informant interviews held for selected doctoral programs. Please see [Section 1](#) for more details on survey methodology.

Key informant interviews were held with program contacts identified through the snowball method. These interviews included conversations with program leadership from the Indiana University Bloomington PhD program, Indiana University Indianapolis PhD program, Indiana State University PsyD program, and Purdue University PhD program. Agendas with questions were sent out before each meeting. Clinical training directors and professors were among the interviewees.

Results

The Sample

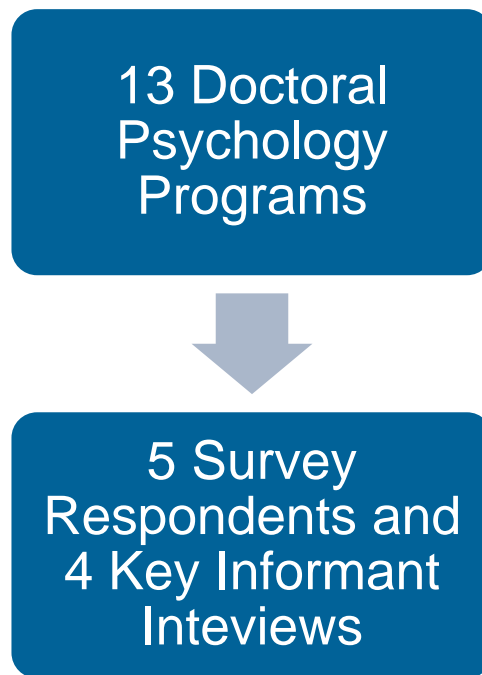


Figure 2: Psychologist doctoral program survey respondents

There are currently 13 doctoral psychology programs that potentially qualify an individual for licensure and endorsement as a Health Service Provider in Psychology (HSPP) psychologist in the state of Indiana. All 13 of these programs were asked to participate, either through a survey request or an individual key informant interview. Additionally, one program is currently in the process of obtaining accreditation was included in the survey request. Five programs responded to the survey for a response rate of 35.7%, Figure 2. Including key informant interviews, 65% of doctoral psychology programs in Indiana are represented in the results below.

One unique aspect of the doctoral psychology pipeline is a doctoral internship. All APA-accredited doctoral psychology students must complete a one-year clinical internship experience before graduation. All Indiana doctoral psychology programs are APA-accredited, excluding the one program attempting to obtain this accreditation. This internship is traditionally held in year 5 or year 6. The process of applying for this doctoral internship is like the residency match

process for physicians. Doctoral psychology students rank APA clinical internships across the country while the clinical internships rank all students they are interested in, and then in late winter, students are notified whether they have been matched to an internship site. Further study into match rate was recommended by several programs. National data indicate there are students who do not match anywhere, but data specific to Indiana are lacking. There are currently 15 APA-accredited internships in Indiana and two non-APA-accredited internship sites.

Matriculation and Graduation

Forty percent of the doctoral psychology survey respondents reported experiencing no changes in matriculations, while 20% reported either decreases or increases. The program that reported decreases in enrollment specified that it was required to decrease cohort sizes to continue providing quality education and clinical experiences due to difficulties filling faculty positions. Nearly all (80%) of the responding programs felt that graduations had stayed consistent. Table 17 provides more information, but most of the programs attributed this consistency to either program quality or retention strategies.

Table 17: Doctoral psychology drivers of graduation trends

	Count	Percent
Program quality	3	20%
Retention strategies	3	20%
Academic support	2	13.3%
Admission standards	2	13.3%
Financial aid and scholarships	2	13.3%
Cultural competency	1	6.7%
Student interest	1	6.7%
Internship opportunities and career services	1	6.7%
Total	15	100

During key informant interviews, most of the doctoral programs agreed that they have in the past and continue to receive a higher volume of applications and interested students than they have capacity to take. The theme of faculty impacting class size was also repeated throughout interviews, with one program mentioning this was the limiting factor for acceptances.

Challenges to Continuity

Of the surveyed programs, 80% reported that the recruitment and retention of faculty is a current challenge facing their program. One program mentioned that the number of faculty even applying for clinical positions has reduced, while another program mentioned that faculty are spread thin due to service roles/requirements.

During key informant interviews, several programs brought up the competitiveness of faculty positions today. Many institutions have open positions they are looking to fill, which increases competition, and some programs have issues acquiring enough funding to provide competitive pay, which may impact class sizes.

Career Pathways

Two-thirds (60%) of survey respondents reported that most of their enrolled students planned on pursuing clinical psychology/direct patient care after graduation (Table 18). Table 19 includes reported commonly pursued student pathways or practice settings with clinical practice being the most often reported.

Table 18: Doctoral psychology students intending to pursue clinical practice

	Count	Percent
Most of them	3	60%
About half of them	0	0
Fewer than half	1	20%
Very few	1	20%
Unsure	0	0
Total	14	100

Table 19: Doctoral psychology common career pathways

	Count	Percent
Clinical practice	4	26.7%
Private practice	3	20.0%
Clinical supervision	2	13.3%
Community health	1	6.7%
Military and veteran support	1	6.7%
Pursue a career in higher education	1	6.7%
Administration and leadership	1	6.7%
Academic and research careers	1	6.7%
School psychology	1	6.7%
Total	15	100

More detail was provided during the key informant interviews. Three-quarters of the interviewed programs reported that their students planned to pursue academic medical center or federal VA positions where they could do clinical practice along with conducting research and clinically supervising psychology students or recent psychology graduates.

Psychologists must obtain licensure to practice. The licensure rate can be used to estimate the number of students moving into patient care, although this estimate is rough as some psychologists holding licenses may not actively practice. APA requires all accredited programs to publish program outcome data, including the percentage of students who go on to obtain licensure. During interviews, the range for licensure rate was from 20% to 100%. Further study of by-program licensure rates may inform workforce retention strategies.

When asked about resources they provide to recent graduates and field supervisors, doctoral psychology programs most often reported providing information sharing from their network for graduates and professional development opportunities for field supervisors. Further detail is included in Table 20 below.

Table 20: Doctoral psychology resources for new graduates and field supervisors

Resources for new graduates	Count	Percent
We have a network of organizations and share their information with graduates	3	37.5%
Career counseling to understand licensure requirements	2	25.0%
Hosting career fairs for graduates	1	12.5%
Licensure preparation workshops	1	12.5%
Mentoring	1	12.5%
Resources for field supervisors	Count	Percent
Professional development opportunities	3	27.3%
Education on the role and importance of field experience	2	18.2%
Financial incentives	2	18.2%
Formal connection with university/college	2	18.2%

Evidence-Based Practice

Table 21 provides information on doctoral psychology EBP training. Doctoral psychology programs reported providing instruction on all the EBPs included in this project, with the fewest providing Parent Management Training and the most providing DBT. Excluding the one program that reported on Parent Management Training, DBT had the highest mean number of program hours at 43, followed by tfCBT with 36.7 hours.

During interviews, one program discussed the gap in evidence-based care in psychology as a huge issue and emphasized the need to evaluate the competency of these interventions rather than the number of hours. Further research is necessary to understand the true gap in evidence-based training at postsecondary institutions.

Table 21: Doctoral psychology total program hours spent on specific EBP

Intervention	Programs Providing Training	Hours		
		Mean	Min	Max
Parent Management Training	1	50	50	50
PCIT	3	22	6	50
MI	3	13.7	8	25
DBT	4	43	24	80
tfCBT	3	36.7	10	80

Pipeline Opportunities

Survey respondents were given the opportunity to share their ideas for improving the doctoral psychology pipeline. Three of the five programs indicated that financial support for students or faculty would help enhance the pipeline. Another program mentioned that more interdepartmental collaboration and accelerated master's programs may have an impact. The final program suggested that Indiana's internship requirements are more stringent than national and addressing these issues would help with students attaining HSPP endorsement. This program also recommended that initiatives actively recruiting students into clinical track programs would be beneficial.

The following opportunities arose during the key informant interviews.

1. *Changing nomenclature of HSPP and psychology license:* Indiana allows graduates from doctoral psychology programs to apply for the psychology license. Individuals with a psychology license then obtain a year of clinical experience before applying for the HSPP endorsement. The HSPP endorsement allows them to provide clinical psychology/direct patient care. All the interviewed programs discussed that this is unique to Indiana and has caused confusion with students from out of state or individuals looking to get licensed under reciprocity. Opportunities exist to mimic our contiguous states by changing the nomenclature from HSPP and psychology to limited psychology license and clinical/full practice psychology license. This may also reduce the administrative burden associated with renewing two licenses cited by one of the programs.
2. *More clinical internships:* All of the programs discussed the necessity for more Indiana APA-accredited clinical internship sites. Increasing the number of high-quality, well-organized, and supported clinical internship sites may increase the retention of Hoosier doctoral psychology students. Many students prefer academic medical centers but an increase in high-quality community clinical internship sites that involve some formalized relationship with an institution/university may be just as attractive. This will not only increase the retention of students in the state but may also draw out-of-state candidates. One program raised the caveat that clinical internships would require support from community partners.
3. *Retention strategies aimed toward keeping new graduates in the state:* Again, almost all of the programs mentioned that few students choose to stay in Indiana, and solutions such as repayment programs, hiring

incentives, or more young professional groups through the Indiana Psychological Association may increase their desire to remain in the state.

Appendix

Survey Questions

1. What trends are you seeing in your program's matriculation rates?

SINGLE SELECT

- a. Increases
- b. Decreases
- c. About the same
- d. Unsure

2. What do you feel is driving these trends?

MULTI SELECT

- a. Program reputation
- b. Graduation rates and placements
- c. Flexibility in Admission Requirements
- d. Cost and financial aid
- e. Faculty and Resources
- f. Accreditation
- g. Clinical Placement Availability
- h. Location
- i. Students support services/Networking opportunities (helping students seek practical experience)
- j. Student interest
- k. Competition
- l. Enrollment cliff (fewer students entering college)
- m. Other TEXT BOX

3. What trends are you seeing in your program's graduation rates?

SINGLE SELECT

- a. Increases
- b. Decreases
- c. About the same
- d. Unsure

4. What do you feel is driving these trends?

MULTI SELECT

- a. Program quality
- b. Admission standards
- c. Academic Support
- d. Financial Aid and Scholarships
- e. Internship opportunities and career services
- f. Licensure and certification exam preparation
- g. Cultural competency
- h. Prioritization of student mental health and well-being
- i. Retention strategies

- j. Students unsatisfied with career choice after direct patient experience and switched programs
- k. Student interest
- l. Other TEXT

5. What proportion of your students plan to pursue a career in clinical counseling?

SINGLE SELECT

- a. Most of them
- b. About half of them
- c. Fewer than half
- d. Very few
- e. Unsure

6. Based on follow up (I.e. exit-surveys, etc.), what career pathway do students enrolled in this training program most often pursue? Select the top 3.

MULTI SELECT

- a. Clinical practice
- b. Clinical Supervision
- c. Pursue a career in higher education
- d. Case management
- e. Law
- f. Medicine
- g. Academic and Research Careers
- h. Administration and Leadership
- i. Military and Veteran Support
- j. Private Practice
- k. Community Health
- l. Non-profit and Advocacy Organization (Mental health advocacy, policy development, and community outreach)
- m. Consultation and Training
- n. Pursue further education
- o. School counseling
- p. Other [TEXT BOX]

7. What resources do you provide to graduates to support them as they transition after graduation into an associate-level professional?

MULTI SELECT

- a. Career counseling to understand the requirements
- b. Hosting career fairs for graduates
- c. We find training for the associate-level time for the individual
- d. We have a network of organizations and share their information with graduates
- e. Licensure preparation workshops
- f. Other TEXT

8. What resources do you provide to field instructors/supervisors to support them?

MULTI SELECT

- a. Education on the role and importance of field experience
- b. Financial incentives
- c. Non-financial incentives
- d. Professional development opportunities
- e. Formal connection with university/college
- f. Other TEXT BOX

9. What challenges have your program experienced that have been threats to continuity or quality? Please type N/A if this does not apply or you have no thoughts.

TEXT BOX

10. Do you have any ideas on what policies or resources could be implemented to support the mental and behavioral health training pipeline? Please type N/A if this does not apply or you have no thoughts.

TEXT BOX

11. There are ongoing state-level discussions regarding evidence-based practices helping to meet the dire needs of Hoosier families. Does your program include training on the following intervention?

- a. Parent Management Training (STAND, Defiant Children, Defiant Teens) (Yes/No)
- b. Parent Child Interaction Training (PCIT) (Yes/No)
- c. Motivational Interviewing (MI) for substance use disorders (Yes/No)
- d. Dialectical Behavioral Therapy (DBT) (Yes/No)
- e. Trauma Focused Cognitive Behavior Therapy (tfCBT) (Yes/No)

12. *Only shown if Yes selected above* Please help us capture information on the number of hours your students are trained in these interventions. Please include classroom hours, clinical supervision hours, patient hours and independent study in your estimate.

Name of Intervention	Estimated Program Hours
Parent Management Training (STAND, Defiant Children, Defiant Teens)	
Parent Child Interaction Training (PCIT)	
Motivational Interviewing (MI) for substance use disorders	
Dialectical Behavioral Therapy (DBT)	
Trauma Focused Cognitive Behavior Therapy (tfCBT)	

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