

VA TRAINING PROGRAM CONTRIBUTIONS: EVALUATION OF INDIANAPOLIS VETERANS' AFFAIRS  
MEDICAL CENTER TRAINING CONTRIBUTIONS TO THE STATE OF INDIANA



# PARTNERS IN TRAINING + HEALTH PROFESSIONS : BRIEF

**VA**



U.S. Department  
of Veterans Affairs

## ACKNOWLEDGEMENTS

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Please note that this is an abbreviated version of the in depth report prepared for the Indianapolis Veterans' Affairs Medical Center. Please visit <https://scholarworks.iupui.edu/bitstream/handle/1805/30933/VA-Full%20Report%2011.9.22.pdf> for the full report.

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CONTEXT

The demand for health professionals is outpacing supply in health care markets in Indiana and across the nation. The COVID-19 pandemic exacerbated workforce shortages, though many professions were already projected to worsen as demand for health care increases alongside population aging. Now more than ever before, the health professions training pipeline is critical to securing the health workforce and the health of our population and economy.

NATIONAL VETERANS’ AFFAIRS (VA) TRAINING INITIATIVES

VA training initiatives makes significant contributions to prepare trainees for numerous high demand health care professions. In fact, the VA Office of Academic Affiliations reported more than 113,000 trainees participated in VA training initiatives during the 2020-2021 academic year. While the trends observed in Figure 1 display a decrease in the number of trainees hosted by the VA, they are not surprising given the ubiquitous impact the COVID-19 pandemic has had on the health care and education systems. Securing and expanding VA health professions training initiatives has never been more important. Therefore, an examination of the impact of local VA training initiatives is necessary to inform initiatives and strengthen this critical pipeline and secure the future health workforce.

INDIANAPOLIS VAMC TRAINING INITIATIVES

For over 50 years, the Richard L. Roudebush Veterans Affairs Medical Center (Indianapolis VAMC) has been an active and significant figure in Indiana’s health professional training landscape. Indianapolis VAMC training initiatives have supported the clinical training needs of numerous academic affiliates (Table 1) and reached many thousands of students in health professions programs (Table 2). Between the 2015 and 2021 academic years, the number of trainees hosted by the Indianapolis VAMC has generally increased (Figure 2).

Figure 1: Trends in National VA Health Professions Trainees by Year

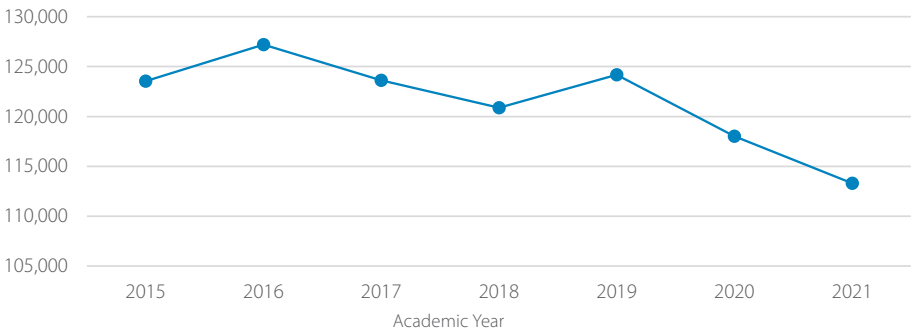
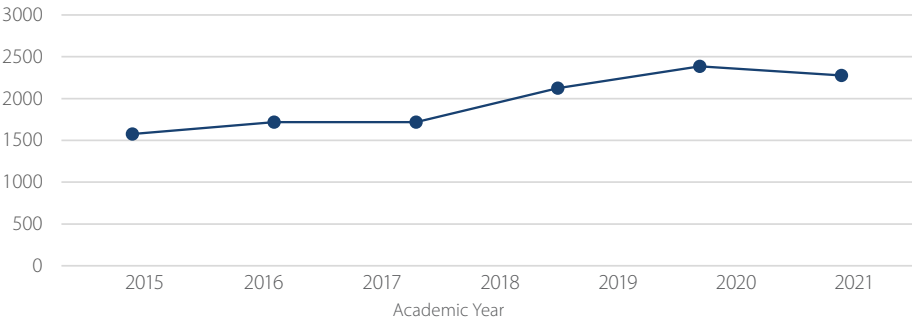


Figure 2: Trends in Indianapolis VAMC Health Professions Trainees by Year



Even as national VA Health Professions Trainees has decreased over time, Indianapolis VAMC has increased the number of Health Professional Trainees.

Table 1: Indianapolis VAMC Academic Affiliates with 50+ HPTs

- Indiana University
- Purdue University Lafayette
- Butler University
- University of Indianapolis
- Ivy Tech Community College-Indianapolis
- Marian University Indianapolis
- Western Governors University
- Chamberlain University College of Nursing
- Indiana Wesleyan University-Marion
- Ball State University
- Indiana State University

Table 2: Health Profession Program Types

- Physician Resident
- Medical Student
- Registered Nurse
- Physician Fellow
- Radiology/CT
- Pharmacy Student
- Physician Assistant Student
- Pharmacy Resident
- Behavioral Health
- Other
- Licensed Practical Nurse

## EVALUATING THE IMPACT OF INDIANAPOLIS VAMC ON INDIANA'S HEALTH WORKFORCE

Beginning in late 2021, the Indianapolis VAMC collaborated with the Indiana University Bowen Center for Health Workforce Research & Policy (Bowen Center) on an evaluation project designed to provide information to inform policy and planning related to future clinical training initiatives. The evaluation had three objectives:



**Quantify Indianapolis VAMC financial investments in training future health professionals.**



**Assess Indianapolis VAMC impact on Indiana's health workforce by tracking trainees into the workforce.**



**Consider the "Gap" in Indiana's health professional training capacity that would occur in the absence of the Indianapolis VAMC.**

The [full report](#) for this project containing the methods, data, and more can be found on [Scholarworks](#)<sup>1</sup>. Questions regarding this project can be directed to [Bowenctr@iu.edu](mailto:Bowenctr@iu.edu).

## TRAINING INVESTMENTS

Clinical training initiatives require resources and those resources have associated costs. Quantifying and clarifying the costs associated with Indianapolis VAMC training initiatives is needed to understand the extent of the investments within the State of Indiana.

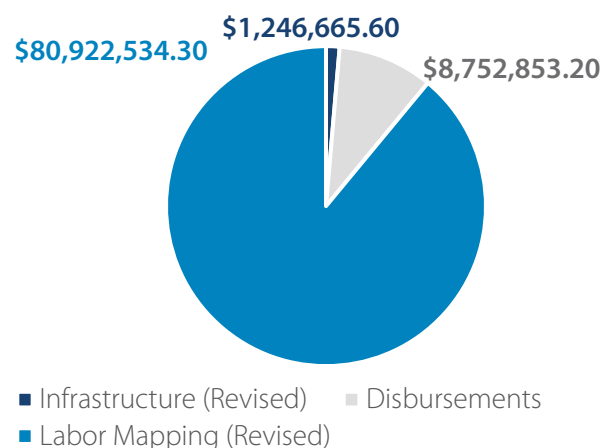
Initial exploration of Indianapolis VAMC training investments identified that using standard fiscal reporting to quantify training investments would only capture labor costs associated with "Education," resulting in an incomplete financial picture of resources dedicated to training initiatives. Initial estimates of costs associated with health professions training (HPT) resulted in approximately \$10.7 million on average that could be quantified as annual training costs. As a part of the evaluation, key informant interviews were conducted with service chiefs to identify any additional infrastructure or labor costs that are dedicated to supporting health professions training. These revised estimates resulted in identification of an additional \$80.1 million, **for a total of \$90.9 million in annual costs dedicated to health professions training**. These significant investments are critical to preparing Indiana's health workforce and are an important recognition of the contributions the Indianapolis VAMC makes to support health professions training. (Note: All initial and revised cost estimates, including disbursements, infrastructure, and labor costs, were assessed by service line and are recorded in the [full report](#).)

## COST CATEGORIES

Clinical training costs can be grouped into three primary areas:

- **Infrastructure:** This category represents costs associated with the physical space, supplies, and equipment required to support training activities.
- **Disbursements:** This category includes costs provided directly to appointed health professions trainees (HPTs) in the form of stipends or disbursements.
- **Labor:** This category includes the largest costs associated with training learners. It represents the translation of staff time into wage/benefits costs from VA staff who spend time teaching learners in any capacity (didactic/classroom teaching, teaching-related research, related administrative activities, and clinical teaching in direct patient care). Labor costs were primarily quantified through key informant interviews conducted with service chiefs to approximate staff time dedicated to learners which was then translated to approximate labor costs.

**Figure 3: Average Annual Revised Costs**



Indianapolis VAMC commits approximately  
★ **\$90.9 million annually** ★  
to support Indiana health professions training

1. <https://scholarworks.iupui.edu/bitstream/handle/1805/30933/VA-Full%20Report%2011.9.22.pdf>

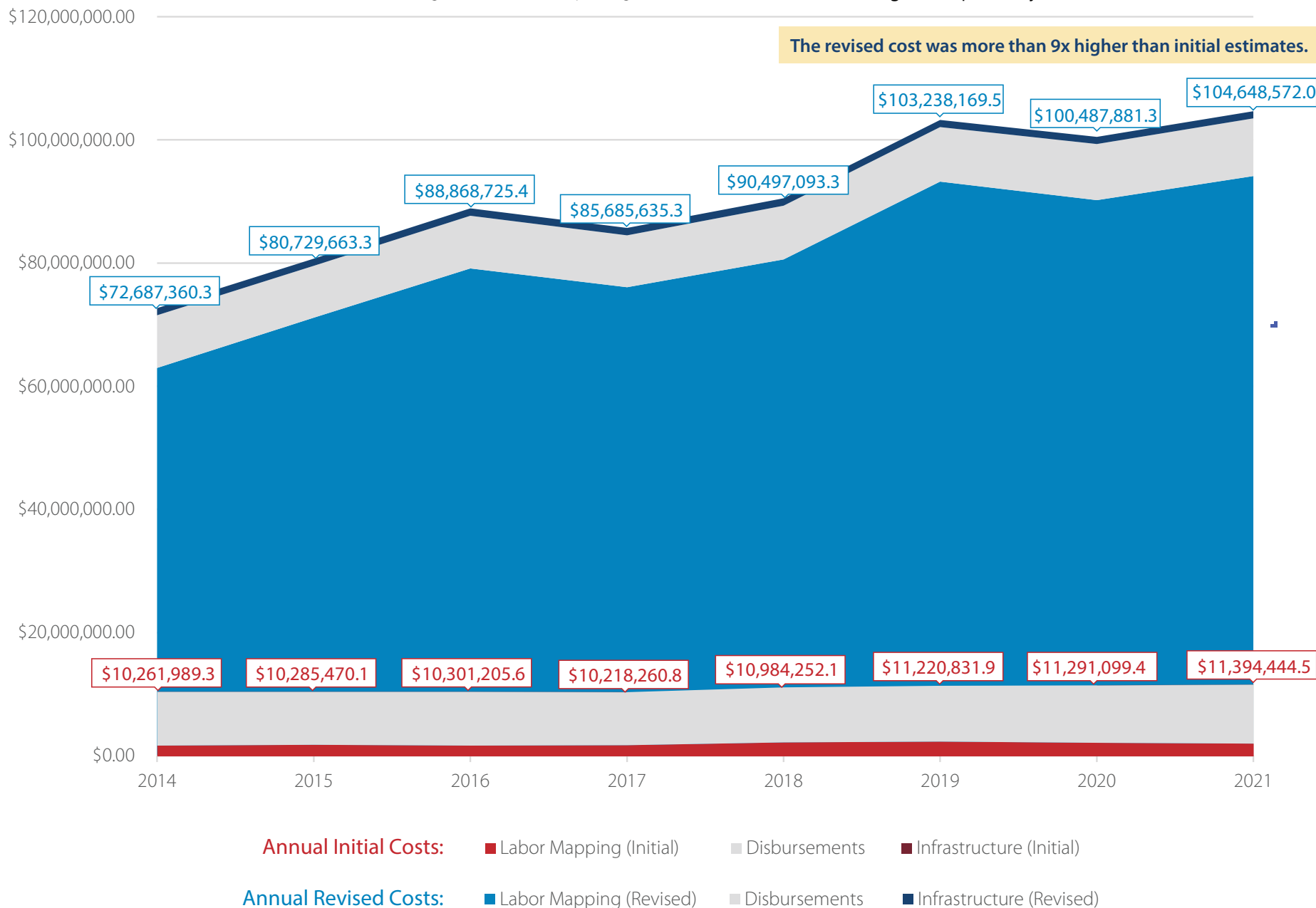
Figure 4: Annual Initial Costs vs. Annual Revised Costs

## Total Annual Initial Costs vs. Total Annual Revised Costs

(available through standard cost reporting)

(available through in-depth analysis)

The revised cost was more than 9x higher than initial estimates.





## IMPACT ON HEALTH WORKFORCE

A primary objective of this project was to evaluate the impact of the Indianapolis VAMC training contributions on Indiana's health workforce by estimating the number of VAMC HPTs retained and currently practicing in the State of Indiana. This evaluation was accomplished by matching trainee records to Indiana health professions license records to identify those currently licensed and actively practicing in the state. Further connection of matching records to supplemental information on Indiana health professional demographic and practice characteristics enables a deeper assessment of VAMC HPTs in Indiana's workforce.

### STEPS TO VERIFY DATA AND EVALUATE IMPACT

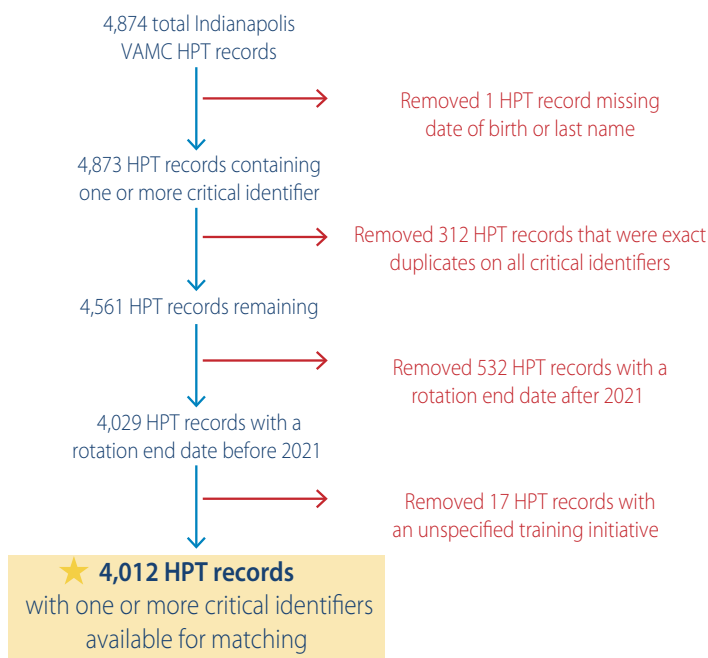
1. Obtain Data: VAMC HPT Data & Indiana State Health Professions Data
2. Data Verification of VAMC HPT Data
3. Matching verified VAMC HPT records to Indiana State Health Professions Data
4. Reviewed and Reported on Matched VAMC HPTs and impact they have on Indiana State Health workforce.

For a more in-depth view of this process, please view the [full report](#).

### THE RESULTS

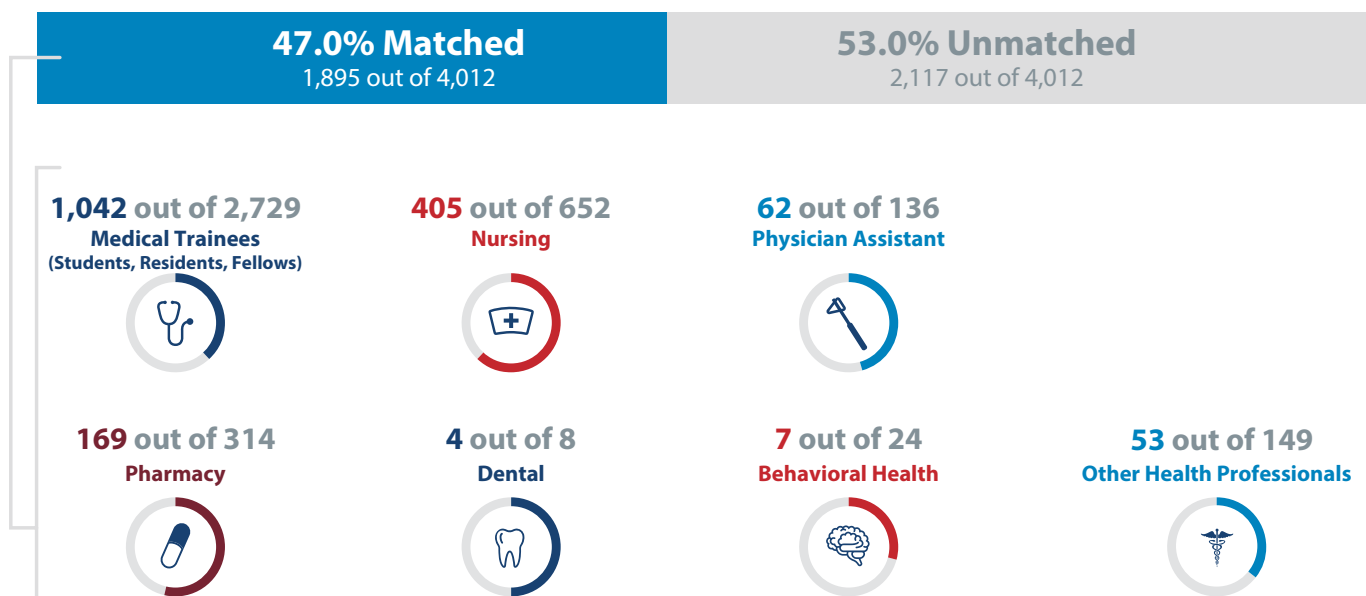
Overall, 1,895 (47%) of the 4,012 VAMC HPTs records were matched to an active Indiana State license. After accounting for duplicate HPT records, 1,742 unique licensed professional that received training at the Indianapolis VAMC were identified.

**Figure 5: Flow chart of HPT Records Review Results**



**Figure 6: Breakdown of total HPTs by health profession training initiative.**

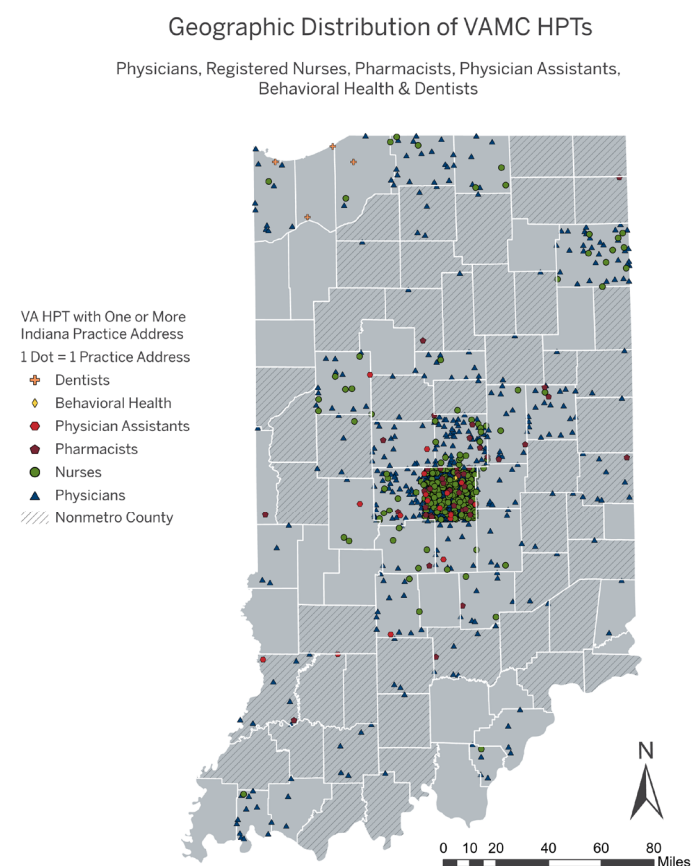
### 4,012 VAMC HPTs records



Because Indiana collects supplemental information (demographic and professional characteristics) from licensed health professionals when they renew their Indiana State licenses each biennium, supplemental information is available for VAMC HPTs that matched to an Indiana State license.<sup>1</sup>

As demonstrated in Figure 7 and 8, the Indianapolis VAMC is making significant contributions to Indiana’s health workforce. Nearly half of Indianapolis VAMC health professions training records matched to a health professional license in the State of Indiana. These licenses are held by many professionals serving in communities across the state, including in rural counties that have historically struggled with workforce shortages.

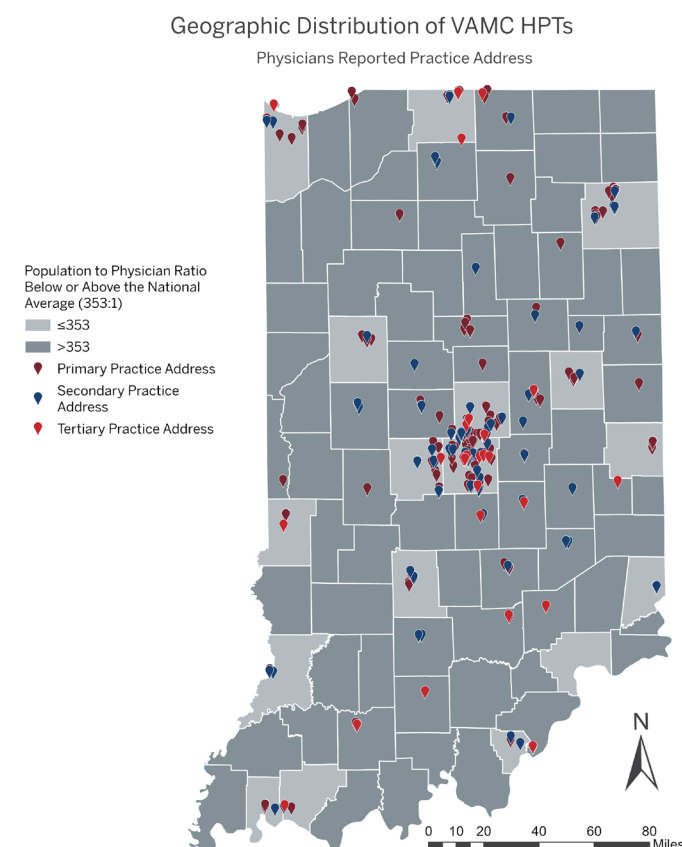
**Figure 7: VAMC HPT Licensed Health Professionals with a Reported Practice Address in Indiana**



Source: 2014 - 2021 Veterans Affairs Health Professions Trainee Data, Indiana License Supplemental Survey Data (Physicians, Registered Nurses, Physician Assistants, Pharmacists, Behavioral Health Professionals and Dentists).

This map displays the dispersion of Indianapolis VAMC trainees’ practice locations across the state of Indiana, demonstrating the statewide impact of Indianapolis VAMC training initiatives.

**Figure 8: Indiana population to physician ratio compared to the National population to physician ratio with the locations of VA community-based outpatient clinics, outpatient clinics, vet centers and VAMC highlighted.**



Source: 2014 - 2021 Veterans Affairs Health Professions Trainee Data, 2021 Indiana Physicians License Supplemental Survey Data  
Note: County-level population to provider ratios were calculated based on the 2021 physician license-renewal survey data.

This map displays whether Indiana counties fair better (lighter) or worse (darker) than the national average of population to physician ratio, along with a pinpoint distribution of Indiana physicians who have been trained at the Indianapolis VAMC.

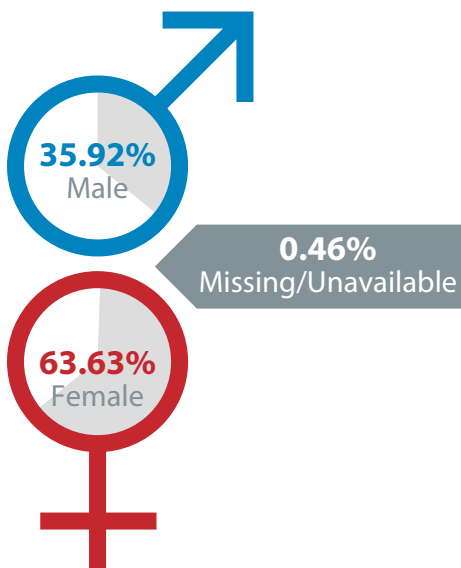
<sup>1</sup> Supplemental data were not available for all matching HPTs. Supplemental data is collected at license renewal only; therefore, HPTs that obtained their initial license within the last two years and have not gone through the license renewal cycle would not have supplemental data.

## SPOTLIGHT ON VAMC PHYSICIAN TRAINEES

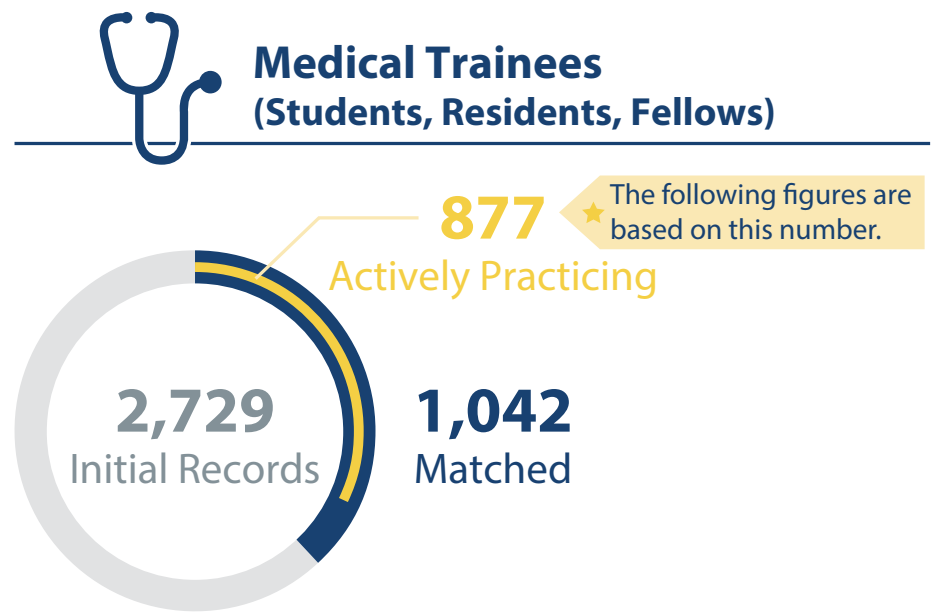
Summary information was prepared for all HPT types; however, medical trainees represented the largest group of VAMC HPTs overall and that are currently licensed and practicing in the state. For this reason, information on physicians is presented herein. Similar information for other HPT/profession types can be found in Appendix B of the [full report](#).

A deeper dive into VAMC trained physicians identified they represent nearly one-third of all physicians trained in Indiana and newly licensed during the years of the evaluation. VAMC training initiatives are contributing to health profession capacity overall, but most profound are those contributions for workforce development for critical shortages, such as those in mental health. More than two thirds of Indiana psychiatrists newly licensed during the evaluation period matched to a VAMC training record. The training of these physicians is having a direct impact on improving access to mental health services in Indiana.

**Figure 10: Indianapolis VAMC-trained Physician Gender**



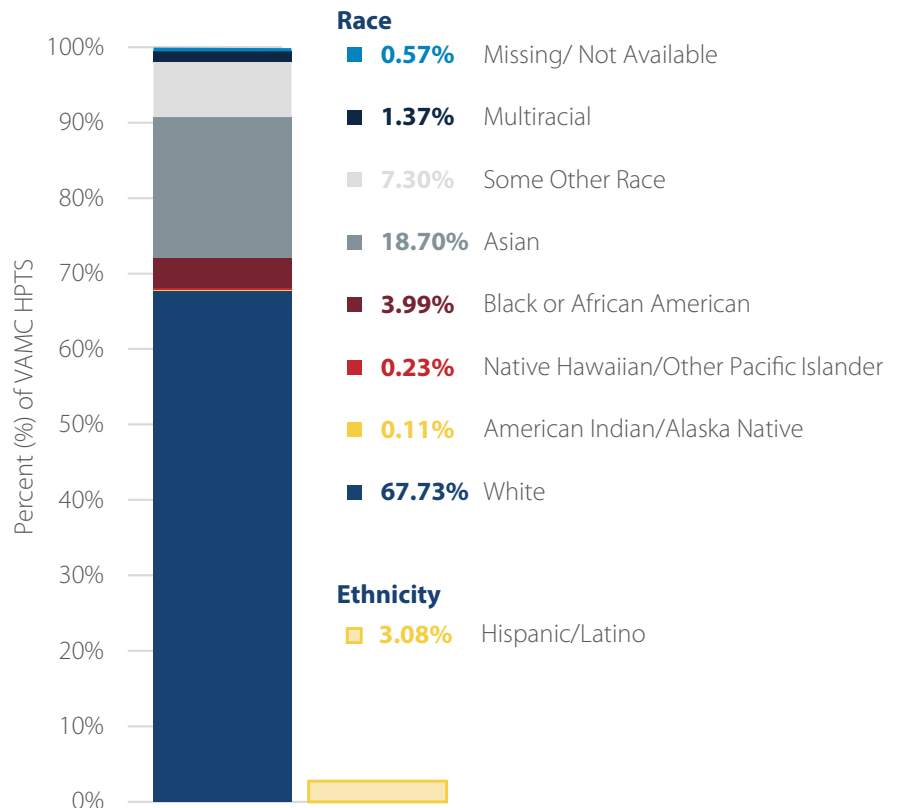
**Figure 9: Medical Trainee Sample Size**



★ **30% OF NEWLY LICENSED INDIANA PHYSICIANS THAT TRAINED IN INDIANA MATCHED TO AN INDIANAPOLIS VAMC HPT RECORD.**

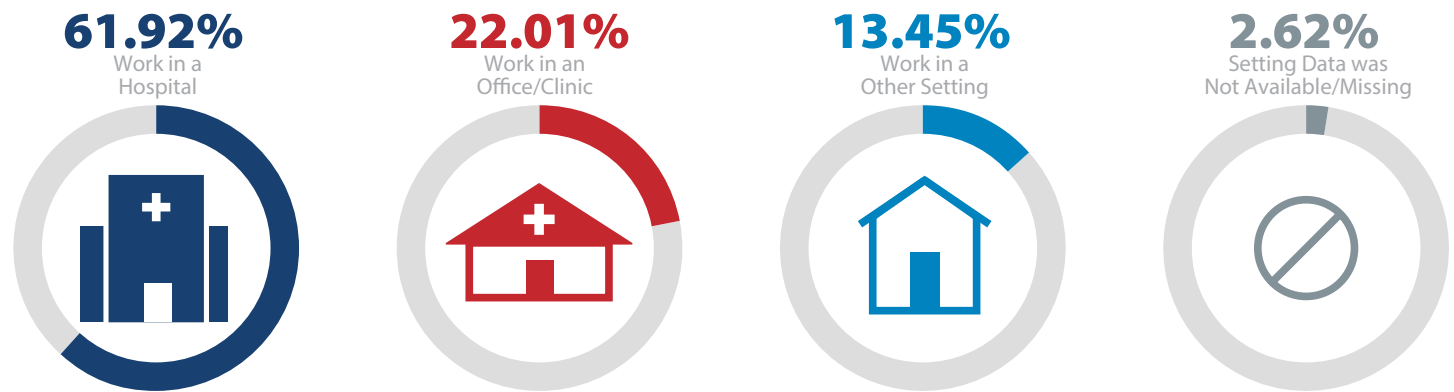
★ **TWO THIRDS OF NEWLY LICENSED PSYCHIATRISTS MATCHED TO A VAMC HPT RECORD.**

**Figure 11: Indianapolis VAMC-trained Physician Race/Ethnicity**

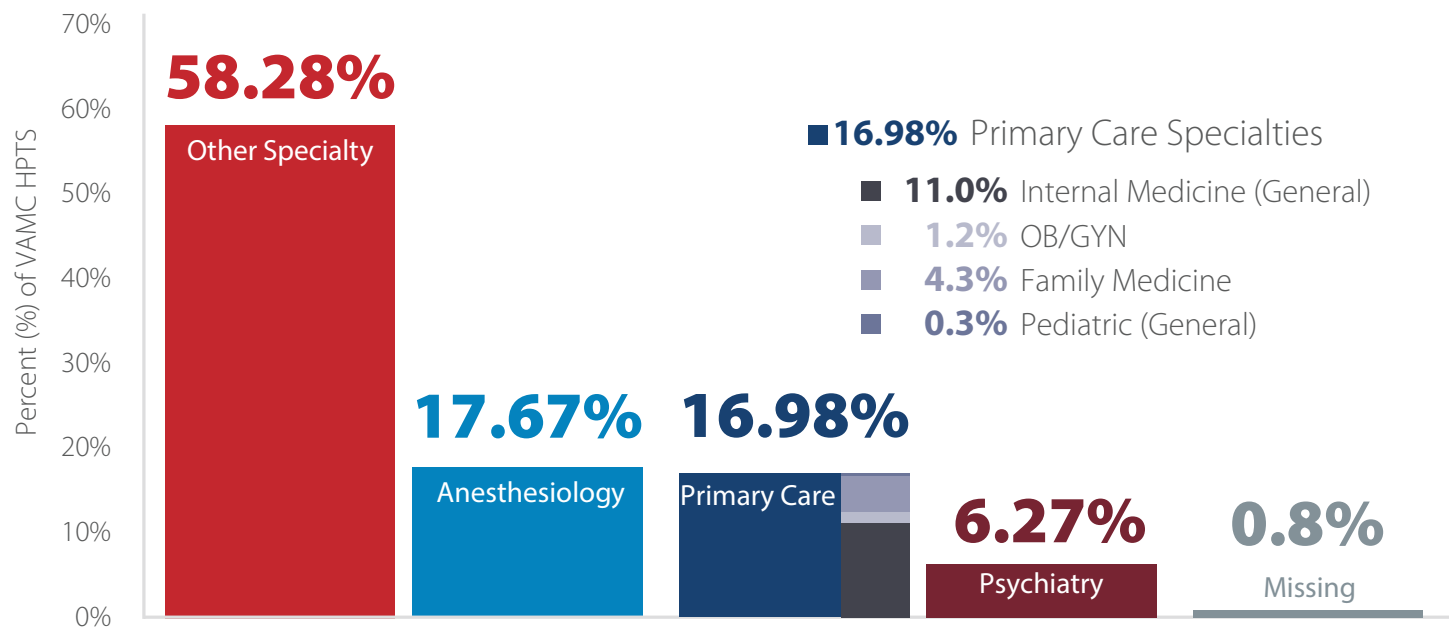




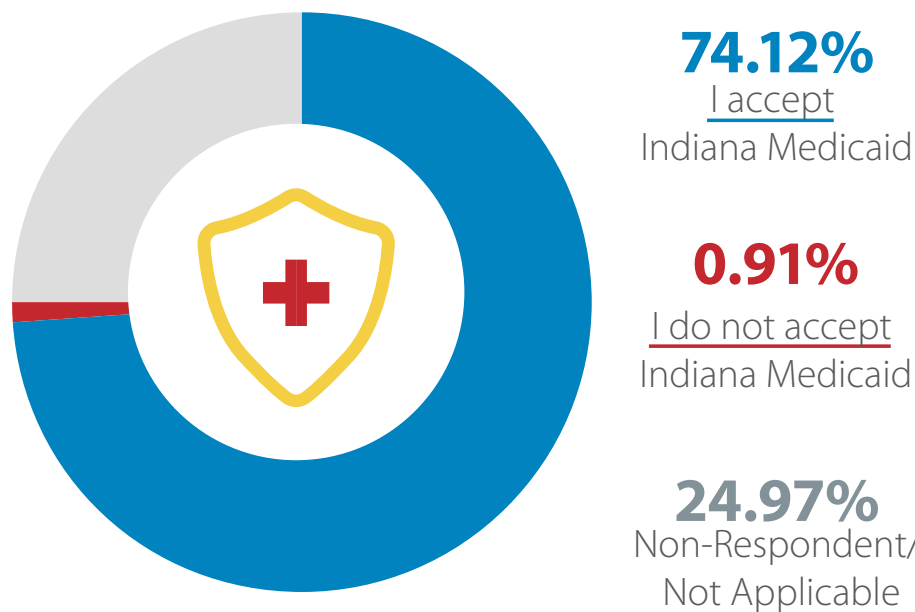
**Figure 12. Indianapolis VAMC-trained Physician Reported Practice Setting**



**Figure 13. Indianapolis VAMC-trained Physician Reported Specialty**

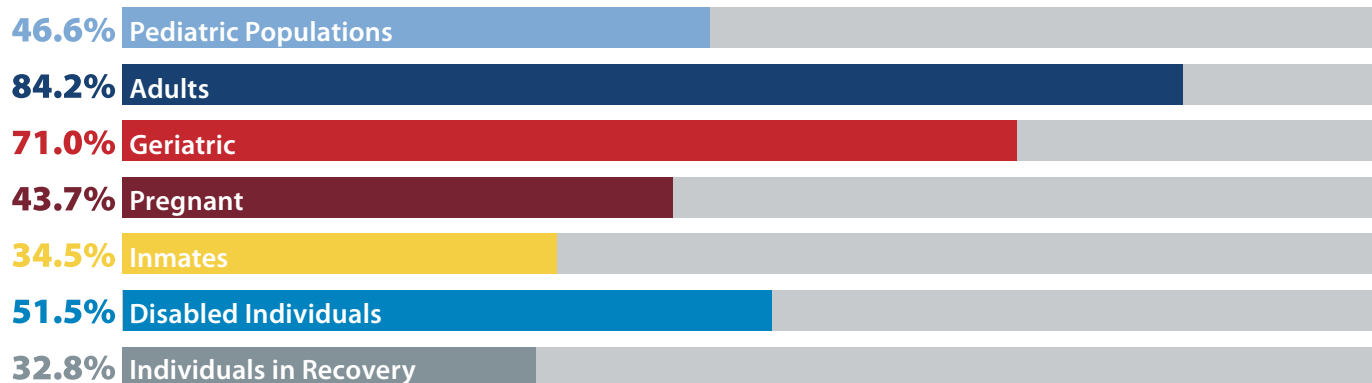


**Figure 14. Indianapolis VAMC-trained Physician Medicaid Service Status**

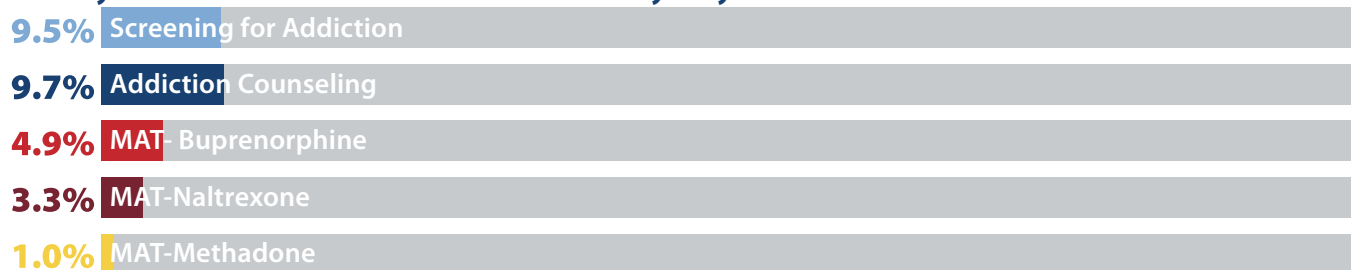


**Figure 15. Populations Served and Services Provided by Indianapolis VAMC-trained Physicians**

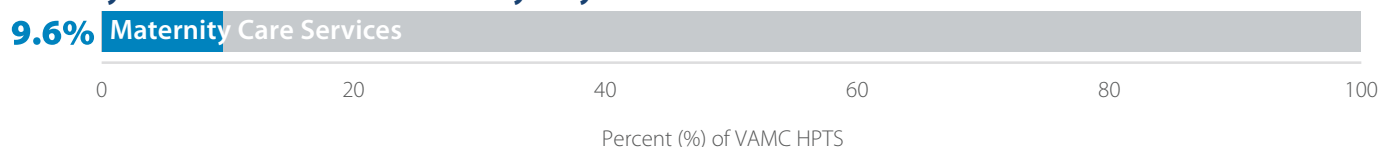
### Adult and Special Populations Served by Physicians



### Specialty and Addiction Services Provided by Physicians



### Maternity Care Services Provided by Physicians



## LIMITATIONS

There are several limitations that need to be considered when examining these findings and the data presented in this report. First, HPT data were limited and inconsistent in the identifiers that were required for matching. Another limitation is the possibility of data entry error during the data collection and review process. Finally, this examination does not evaluate the components of the training program.

## CONCLUSION

### INDIANAPOLIS VAMC TRAINING INVESTMENTS

An accurate account of the full financial contribution made by the Indianapolis VAMC to train health professionals in Indiana has not been previously accomplished, nor has it been previously known. Existing documentation strategies for training-associated costs significantly underestimate the total financial resources invested by the Indianapolis VAMC to train health professionals. The exploration performed as part of this evaluation identified that standard reporting metrics do not account for all training associated costs. In fact, they do not account for one of the largest (and arguably most critical) component of health professional training costs: Staff time spent in direct clinical training. By connecting with the leadership whose staff are involved in health professional training initiatives, a more complete picture of time spent and overall cost emerges.

The revised annual estimate after accounting for previously unidentified resources is \$90.9 million, \$80 million more than was quantifiable through basic reporting. The magnitude of this investment significantly impacts the State of Indiana and is separate from any state appropriations directed toward health professions training. **In the absence of Indianapolis VAMC investments, Indiana would need to identify other resources (around \$100 million per year) to support, sustain, and build health professions training.**

### INDIANAPOLIS VAMC IMPACT ON INDIANA'S HEALTH WORKFORCE

This evaluation sought to determine the number of Indianapolis VAMCs trainees that successfully became licensed in the state and report providing health care services for its residents. To our knowledge, this evaluation is the first to examine state-level workforce outcomes associated with VA training initiatives by matching VA HPT records to state license records. As with many evaluations relying on existing data sources, this process was time consuming, but the findings speak for themselves. Information on those professionals that have held their license through a renewal cycle, demonstrates that many of them are currently practicing in the state and providing health care services for Hoosiers. Highlights from the information on physicians that were former HPTs suggest that these professionals are making significant contributions to the state's vulnerable populations. **Without Indianapolis VAMC training initiatives it is uncertain where these 1,895 professions would have received training and whether they would be currently practicing in the state.**

The findings of this evaluation demonstrate that Indianapolis VAMC training investments are critical to Indiana's health professions pipeline. Undoubtably, the Indianapolis VAMC is and will continue to be a key player in securing and strengthening Indiana's health workforce. As demand for health professionals increases, the training pipeline will need to be expanded. Commitment to health professions training is woven into the fabric of the Indianapolis VAMC but enhancing capacity of existing training initiatives to support pipeline expansion will require additional resources. The results of this evaluation and lessons learned may serve as a resource to informing future expansion and evaluation initiatives.

## LESSONS LEARNED

### Evaluations

- Labor mapping strategies which account for training that occurs in clinical care would support comprehensive reporting of training investments.
- The collection and management of standardized information on HPTs would simplify future evaluations.
- Understanding whether and to what extent Indianapolis VAMC trainees become part of the VAMC workforce post training would provide insight on impact these initiatives have on workforce capacity to serve Hoosier veterans.

### Training Initiatives

- Demand for training is outpacing the resources available for training initiatives
- Enhancing recognition of training contributions may increase morale and participation in training initiatives