#### KENTUCKY COUNCIL ON POSTSECONDARY EDUCATION HEATLHCARE WORKFORCE INVESTMENT FUND STEERING COMMITTEE



May 22, 2024 – 1:00 p.m. ET Location: CPE Office, 100 Airport Rd., Frankfort, KY 40601

I.	Call or Order LaDonna Rogers, HWIF Steering Committee Chair			
II.	Roll Call Michaela Mineer, CPE Senior Associate			
III.	Approval of the Minutes			
IV.	Introductory Remarks Leslie Sizemore, PhD, EdS, OTR/L, CPE Associate Vice President			
V.	<ul> <li>Advisor Presentations</li> <li>A. Kentucky Society of Radiologic Technologists</li></ul>			
VI.	<b>OnBoard Training</b> Heather Faesy, CPE Board Liaison & Chief Events Planner			
VII.	Final HWIF Tableau Dashboard Blake Nantz & Adam Blevins, CPE Senior Associates			
VIII.	<b>Discussion – HWIF Scoring Criteria</b>			
IX.	Discussion – HWIF Proposal Forms			
X.	Future Work & Closing Remarks Michaela Mineer, CPE Senior Associate			
XI.	Adjournment			

LaDonna Rogers, HWIF Steering Committee Chair

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#### **MEETING MINUTES**

Draft for Approval by the Committee on May 22, 2024

Who: Kentucky Council on Postsecondary Education
Type: Healthcare Workforce Investment Fund (HWIF) Steering Committee Meeting
Date: March 20, 2024
Time: 1 p.m. EST
Location: Virtual meeting via ZOOM webinar

#### CALL TO ORDER

The Healthcare Workforce Investment Fund Steering Committee met March 20, 2024 at 1:00 p.m. ET. The meeting occurred virtually via ZOOM webinar. Chair LaDonna Rogers presided.

#### ATTENDANCE

- Attended: Beth Brinly, Amy Mitchell Cowley, Mason Dyer, JP Hamm, Michael Muscarella, Ladonna Rogers, Kelli Selvage, and Beth Shafer.
- Did not attend: Cliff Maesaka and Vestena Robbins.

#### INTRODUCTORY REMARKS

Dr. Leslie Sizemore, CPE's Associate Vice President of Workforce and Economic Initiatives, welcomed members to the first meeting of the HWIF Steering Committee.

#### **PURPOSE OF HWIF**

Ms. Michaela Mineer, CPE's Senior Associate for Healthcare Workforce Initiatives, provided a brief overview of the purpose of HWIF. Created in the 2023 Regular Session of the Kentucky General Assembly through HB 200, the Healthcare Workforce Investment Fund (HWIF) is a groundbreaking framework for public/private partnership. The legislation shares responsibility between industry and government to carry out a dedicated mission - to cultivate a robust healthcare workforce in Kentucky. The core objectives are twofold: providing educational scholarships to students pursuing programs targeting critical workforce needs in healthcare professions (65% of funds) and recognizing and rewarding excellence among Kentucky healthcare professional education and training programs (35% of funds).

#### **OVERVIEW OF REGULATIONS**

Mr. Travis Powell, CPE's Vice President and General Counsel, reviewed the two administrative regulations established to guide CPE's work to administer the fund:

- <u>13 KAR 5:010. Healthcare training scholarships.</u>
- <u>13 KAR 5:020. Healthcare program incentives.</u>

#### **REVIEW OF THE IMPLEMENTATION PLAN**

Ms. Mineer reviewed CPE's responsibility for administering the funds with the guidance from the HWIF Steering Committee. In order for the committee to be informed and guide decision making, stakeholder groups will be invited to attend meetings to testify about their workforce needs. CPE staff asked the committee members to email their recommendations so invitations can be extended to the requested stakeholder groups.

Ms. Mineer also stated that the next meeting of the committee will focus on finalizing the proposal questions and evaluation forms. All funding opportunities and an application template will be shared on June 3, 2024. Applications will be accepted July 1 – August 15, 2024. Award notices will go out to selected entities on September 13, 2024.

#### INTRODUCTION TO THE HWIF DASHBOARD

Mr. Blake Nantz, CPE's Senior Associate for Data and Advanced Analytics, introduced the committee to the HWIF Tableau Dashboard that will be used during the proposal evaluation process. Data from KYStats, HRSA, and CPE were pulled together to create a single, comprehensive data base that houses key student success and workforce metrics that were identified as priorities in the statutes. The final dashboard will be ready for the committee to view during the May meeting.

#### **DISCUSSION – HWIF SCORING CRITERIA**

Ms. Mineer shared a draft of the scoring rubrics being developed. As shown, the rubrics only included the priorities set forth in statute, and the committee has the authority to add additional criteria if they wish. The committee briefly discussed the ideas of looking closely at specific student success metrics when reviewing the healthcare training scholarship partnership proposals. Additionally, committee members brought up the ideas of looking at the labor market participation rate of geographic areas, considering the health outcomes of geographic areas, and considering Pell recipients and first-generation students in a program. The conversation was tabled and will resume during the May meeting.

#### LEGISLATIVE UPDATES

Dr. Sizemore discussed the status of 2024-26 budget development process and stated that it is anticipated that CPE will receive \$10 million across the biennium for HWIF. If approved

as currently proposed, \$7 million of this funding would become available for in July of 2024, with the additional \$3 million becoming available in July 2025. Any funds that are not used from the first \$7 million can be rolled into year two. Sine die of the 2024 Legislative Session is scheduled for April 15, 2024, and the final budget will be discussed further at the May meeting.

#### **FUTURE MEETINGS & CLOSING REMARKS**

Ms. Mineer provided closing remarks and reminded the committee that the next meeting will on May 22, 2024, at 1:00 p.m. EST, at the CPE office in Frankfort, Kentucky.

#### ADJOURNMENT

The meeting adjourned at 2:50 p.m. EST.



## RADIOGRAPHY

Dr. Joy Menser Madisonville Community College Madisonville, KY



# What is Radiology and what role does it play in the medical field?

Radiology represents a branch of medicine that deals with radiant energy in the diagnosis and treatment of diseases by using imaging technologies (modalities).



## How Are Radiologic Technologists Credentialed?

• Registered radiologic technologists must earn an associate or more advanced degree from an accredited hospital-based program or academic institution and pass a *national* certification examination. To remain registered, they must also earn appropriate continuing education credits every two years. The largest certification agency, the American Registry of Radiologic Technologists, has more than 300,000 registrants

## Modalities Include

- Diagnostic Radiology
- Fluoroscopy Radiology
- Computed Tomography (CT)
- Nuclear Medicine
- Mammography
- Magnetic Resonance Imaging (MRI)
- Positron emission tomography
- Interventional
- Heart catheterization
- Lithotripsy
- Sonography
- Bone Density



## This field of study encompasses:

- Neuroradiology
- Pediatric radiology
- Cardiovascular radiology
- Chest radiology
- Gastrointestinal radiology
- Genitourinary radiology
- Musculoskeletal; radiology
- Emergency radiology
- Nuclear radiology





#### BD CI VI C٧ RA СТ SON MAM BS NMT THR MRI QM VS State/Country RAD Certs Techs 121 6 Kentucky 6,577 322 789 1,839 17 62 76 58 49 10,820 61 30 804 9 6,753

Kentucky Stats

# Kentucky is:

- 1 of 44 states who regulate Radiography
- 1 of 20 states who regulate Computed Tomography
- 1 of 40 states who regulate Nuclear Medicine
- 1 of 40 states who regulate Radiation Therapy
- 1 of 31 states who regulate Limited x-ray machine operators
- 1 of 34 states who regulate Radiologist Assistants
- 1 of 22 states who regulate Fusion Imaging

## Need by Modality

Estimated Percent Vacancy Rate by Region <sup>a</sup>										
		East-	West-	West-			East-			
		South	North	South			North	Mid-	New	South
Discipline	Statistic	Central	Central	Central	Pacific	Mountain	Central	Atlantic	England	Atlantic
D	%	26.9%	29.4%	20.1%	15.2%	19.5%	18.9%	14.0%	18.4%	14.7%
ĸ	N	19	35	37	44	30	35	30	16	68
CT	%	<mark>20.7%</mark>	16.6%	18.4%	19.3%	17.5%	16.1%	21.7%	14.4%	14.5%
CI	N	15	23	28	36	21	24	23	9	56
MAD	%	21.8%	21.0%	19.7%	18.1%	19.2%	16.8%	11.1%	11.4%	13.4%
IVIN	N	14	19	21	33	19	27	21	10	50
c	%	7.9%	15.9%	14.9%	18.0%	27.7%	20.9%	16.4%	17.8%	12.8%
3	N	12	17	20	35	20	24	19	10	52
M	%	7.7%	14.3%	13.3%	16.6%	10.8%	14.0%	16.3%	12.9%	11.8%
	N	8	17	11	30	16	26	19	9	38
NINAT	%	10.2%	7.9%	17.1%	20.9%	13.2%	16.3%	19.8%	15.0%	9.8%
INIVIT	N	10	7	18	19	13	12	12	6	33
RD	%	40.0%	8.8%	3.3%	4.0%	0.0%	11.8%	5.6%	10.0%	3.7%
ы	N	3	7	10	17	7	19	10	5	25
CVIT	%	31.4%	7.2%	20.3%	24.0%	0.0%	12.7%	20.7%	5.2%	19.8%
CVII	N	6	5	10	10	6	8	8	2	18
Overall		19.5%	19.0%	17.2%	16.9%	16.8%	16.5%	15.7%	14.7%	12.9%

Note. Table is sorted by Overall.

<sup>a</sup> East-South Central: Kentucky, Tennessee, Mississippi and Alabama.

West-North Central: Missouri, North Dakota, South Dakota, Nebraska, Kansas, Minnesota and Iowa.

West-South Central: Oklahoma, Texas, Arkansas and Louisiana.

Pacific: Alaska, Washington, Oregon, California and Hawaii.

Mountain: Idaho, Montana, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico.

East-North Central: Wisconsin, Michigan, Illinois, Indiana and Ohio.

Mid-Atlantic: New York, Pennsylvania and New Jersey.

New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut.

South Atlantic: Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Caroline, Georgia and Florida.

## Radiologic Science Workplace and Staffing Survey 2023



## Compensation

#### **Compensation of Full- and Part-time R.T.s**

Compensation	Sample Percent Part-time (Less than 32 hours per week)	Sample Percent Full-time (32 or more hours per week)	Overall
\$40,000 or less.	2.3%	0.9%	1.1%
\$40,001 to \$50,000	7.1%	8.4%	8.2%
\$50,001 to \$60,000	16.0%	16.0%	16.0%
\$60,001 to \$70,000	20.5%	19.8%	19.8%
\$70,001 to \$80,000	23.1%	18.2%	18.8%
\$80,001 to \$90,000	13.0%	14.1%	14.0%
\$90,001 to \$100,000	8.0%	8.6%	8.5%
\$100,001 to \$110,000	3.8%	4.9%	4.8%
\$110,001 to \$120,000	3.1%	3.3%	3.2%
Over \$120,000	3.2%	5.9%	5.6%
Ν	1,256	9,033	10,289
Mean	\$73,900	\$77,027	\$76,645
Standard Deviation	\$21,497	\$24,599	\$24,262
Grouped Median	\$71,588	\$72,796	\$72,787



## Enrollment

#### What is the terminal degree earned by the graduates in your program?

	N	Valid Percent
Associate degree	239	79.7%
Bachelor's degree	61	20.3%
Total	300	100.0%

## What is the terminal degree earned by the graduates in your program?





#### Is your program currently at full enrollment?

	N	Valid Percent
Yes	167	55.5%
No	134	44.5%
Total	301	100.0%

#### Is your program currently at full enrollment?



## Sources

- Enrollment Snapshot 2023. (n.d.). Retrieved May 22, 2024, from https://www.asrt.org/docs/default-source/research/enrollmentsnapshot/enrollment-snapshot-2023.pdf?sfvrsn=116b77d3 4
- 2. 2023 Radiologic Sciences Workplace and Staffing Survey. (n.d.). https://www.asrt.org/docs/default-source/research/staffing-surveys/radiologicsciences-workplace-and-staffing-survey-2023.pdf?sfvrsn=7f99bd0 4
- 3. Radiologic Technologist Wage and Salary Survey 2022. (n.d.). https://www.asrt.org/docs/default-source/research/radiologic-technologistwage-and-salary-survey-2022.pdf?sfvrsn=e028b0d0\_4

Thank you very much for your time and attention during this short presentation. If you have any questions after this presentation, please feel free to reach out to me at:

joy.menser@kctcs.edu

## Kentucky Behavioral Health Workforce Issues

### HWIF Steering Committee May 22, 2024

Sheila A. Schuster, Ph.D. Advocacy Action Network kyadvocacy@gmail.com

## Deloitte Study of KY Health Care Workforce (2013)

- Ten-week study was conducted by Deloitte Consulting for Kentucky's Health Exchange; report was released May 2013.
- Analyzed current (2012) and future capacity (2017).
- Studied Kentucky's professional licensing boards' databases and found significant variability and deficits in information among the boards in the data they gather.
- Utilized Health and Human Services data for benchmarking and predicting needs and gaps.
- Identified a number of professional shortages and made eleven recommendations to help address the workforce adequacy concerns in Kentucky.

## Deloitte Study of KY Health Care Workforce (2013)

The Deloitte report consistently noted the shortcomings of licensure board data which included the absence of questions: -locations of all practice sites;

-whether the individual was practicing full- or part-time or not; -graduation date with professional degree (estimate retirement).

Other problems with the data included duplicative or missing data and failure to be able to note individuals with multiple licenses (not uncommon among MHPs). The most common missing data point was the county of the individual's practice.

The KY Board of Nursing was noted to have the most accurate data; it consistently included the county/counties of practice and other information not asked by other boards.

### Workforce Study Results from Deloitte (2013): KY Mental Health Provider (MHP) Needs

- Overall need for MHPs is 1,638 FTEs (19% of current supply) to meet demand across Kentucky.
- Over 80% of the counties in Kentucky have a workforce supply gap for MHPs, with 10% of the counties needing at least 25 FTEs.
- 70% of the current need for MHPs (1,154 FTEs) is located in rural counties.
- MPH numbers did not include APRNs, professionals under supervision, nor any providers of Substance Use Disorder treatment (DMS had not been paying).

## A New KY Workforce Study was commissioned by DMS – Sept 2023

- Conducted by the CHFS Office of Data Analytics; requested by the Medicaid Advisory Council
- Once again, licensure board data was used as the primary source in the report
- Included more categories of Mental Health providers than the 2013 report, adding Applied Behavioral Analysts, Marriage & Family Therapists, Alcohol & Drug Counselors
- Does not lump into a single category of Mental Health Providers, but lists data for each separate kind of professional

### KY Workforce Study – Sept 2023

- Data is presented for each of these professional groups and compared across each ADD to the national standard for that profession's ratio to patients –
- Applied Behavior Analysts

   Licensed Clinical Social Workers
   Licensed Psychologists
   Marriage & Family Therapists
   Mental Health Counselors
- Data is also given for APRNs, Physicians and Physician Assistants, but no differentiation is made for the subset who practice in the behavioral health field.

### KY Workforce Study – Sept 2023

- Data for ABA providers could not be done across ADDs, but the comparison in sheer numbers shows a significant deficit in capacity; this is problematic for autism treatment.
- LCSWs met or exceeded recommended ratios in 11 of 15 ADDs. Licensed psychologists met or exceeded ratios in only 3 of 15 ADDs. MFTs met or exceeded the ratio in only 1 of the ADDs. Mental Health counselors met or exceeded the ratio in only 3 of the ADDs. The comparisons for SUD counselors were not included in the report.
- There is a long-standing shortage of psychiatrists in Kentucky, particularly child psychiatrists, but they were not broken out from the physician data. And while APRNs met or exceeded the ratio in all 15 ADDs, there was no breakout of those trained in the psych/MH specialty.

## What is the BH Need in Kentucky?

- Provider agencies of behavioral health services regardless of where they are located – will attest to the extreme difficulty in finding & hiring behavioral health professionals.
- There is more competition for behavioral health providers. Particularly since the pandemic, the demand for schoolbased BH providers has significantly increased.
- With the upsurge of addictive disorders, increased reimbursement for treatment and the recognition that addiction and mental health issues goes hand-in-hand, there is more demand for both SUD and MH providers.
- The needs of special populations BIPOC, LGBTQ+, the growing number of elderly Kyians, farmers and veterans – are increasingly recognized and demanding BH services.

### What Are Some Steps Forward?

- HB 200 (2023 GA) is certainly a big step forward to bolster BH educational programs and to help recruit students for Behavioral Health fields and to keep them in Kentucky.
- Behavioral Health Professionals should include:
  - Prescribers = Psychiatrists & Psych/MH APRNs
  - Psychological Testing = Psychologists Doctoral & Master's (shortages)
  - Therapy or Counseling = All Behavioral Health Professions
  - Alcohol & Drug Counselors for Substance Use Disorder treatment
- Important to make the case for behavioral health as <u>health</u> care and to emphasize the impact of BH interventions on physical health, quality of life and suicide prevention

### What Are Some Steps Forward?

- We need to develop a better pipeline to contact and educate students – particularly students of color – in elementary, middle and high school about the careers available in behavioral health. It is not as easy to show them "talk therapy" as it is to show heart surgery, so we'll need to be creative and persistent!
- Get them started as a Community Health Worker out of high school and create a career pathway to move on from there to a licensed professional role.
- We need to have better data about all healthcare professions and support service providers than we currently have. The Supplement to the 2023 Workforce report has suggestions. HB 780 was introduced in the most recent General Assembly session and will be back for action in 2025 to require licensure boards to ask all of the questions of licensees to give us that needed data.

## Questions???

Sheila A. Schuster, Ph.D. kyadvocacy@gmail.com



2023 Healthcare Workforce Capacity Report



CABINET FOR HEALTH AND FAMILY SERVICES OFFICE OF DATA ANALYTICS

#### I. EXECUTIVE SUMMARY

- Approximately 184,000 licensed or certified healthcare providers were identified in Kentucky's licensure boards' data.
- There were 318 M.D. and 126 D.O. graduates from Kentucky higher education institutions in the class of 2022. The number of physician graduates has trended upwards over the last ten years, but the number of those graduates who are retained to become licensed in Kentucky has trended downwards.
- Applied behavior analysts, audiologists, diabetes educators, marriage and family therapists, mental health counselors, physicians, physician assistants, and radiation therapists and nuclear medicine technologists had people per provider ratios worse than the national rate.
- Advanced practice registered nurses, registered nurses, and state registered nurse aides had people per provider ratios both statewide and within each area development districts better than the national rate. Licensed practical nurses also had better statewide rate than the national rate, though worse rates in the Green River and Northern Kentucky area development districts.
- Improvements to data collection by licensing boards could contribute to a more accurate assessment of the healthcare workforce capacity in Kentucky.
- Kentucky should target interventions to attract additional healthcare workforce capacity to areas of the state with relatively lower population to provider ratios.

#### **II.** INTRODUCTION

This report is dedicated to Kentucky's healthcare professionals, past, present and future. Their poise and sacrifice in recent years serves as a testament to some of the very best things about our nature as human beings. May they continue to care for us, to alleviate our suffering, and to walk with us through life's poignant moments.

A vibrant healthcare workforce is a critical component of a healthy society. Populations that have access to professionals who can prevent, diagnose, treat, and manage their illnesses and injuries are populations that can more meaningfully engage with their work, enjoy their leisure, and support their families.

#### HEALTHCARE WORKFORCE SHORTAGES

The rise in the capabilities of healthcare professionals has coincided with what many media outlets report as a healthcare workforce shortage.<sup>1</sup> When workforce shortages emerge, they can reveal themselves in many ways, such as difficulty filling open positions for nurses, physicians, mental healthcare providers, and other practitioners or patients experiencing concerningly long wait times to see a doctor or dentist. Personnel shortages can lead to increased workloads among providers, increasing their risk for burnout or clinical errors. Research suggests this shortage is expected to worsen due to provider burnout and an aging workforce nearing retirement.<sup>2</sup>

While healthcare administrators and journalists note the presence of this phenomenon broadly in Kentucky and across the nation, there is evidence that this shortage of healthcare professionals may be more significant in certain regions of Kentucky.<sup>3</sup> Moreover, the COVID-19 pandemic has exposed the degree that Kentucky relies on its healthcare workers to respond to the needs of its population.

Kentucky's healthcare workforce must contend with notable population health concerns. According to the most recent America's Health Rankings Annual Report (AHR), Kentucky's overall health outcomes ranked 45<sup>th</sup> in the nation. Within that broader measure of health outcomes, Kentucky ranks 45th in terms of people experiencing frequent mental distress, 48<sup>th</sup> in terms of frequent physical distress, and 48<sup>th</sup> in people with multiple chronic health conditions. Unfortunately, Kentucky's years-long substance use crisis also persists, as the state ranks 49<sup>th</sup> in drug deaths with a reported rate of 47.3 drug-related deaths per 100,000 Kentuckians in 2022.<sup>4</sup> High smoking rates, high e-cigarette rates, high obesity rates, frequent multiple chronic conditions, and low exercise rates relative to other states also contribute to the complexity of patient care that providers encounter in their work.<sup>4</sup> Kentucky's overall ranking for measures of clinical care stood at 31<sup>st</sup> in the nation.<sup>4</sup>

#### The 2013 Healthcare Workforce Report Authored by Deloitte

In 2013, at the direction of the Cabinet for Health and Family Services, consultants from Deloitte conducted a healthcare workforce capacity review (hereafter referred to as the '2013 report'). The 2013 report found that Kentucky's supply of physicians, dentists, and optometrists was below a set of recommended thresholds to meet the state's need. The 2013 report also found that, based on metrics devised by the Deloitte team, Kentucky had a statewide surplus of mental health providers, nursing professionals, and physician assistants. Importantly, the 2013 report notes that, despite these surpluses, significant regions of Kentucky were still underserved by these healthcare professionals. Kentucky's healthcare professional shortages tended to be more significant in the state's rural areas when compared to its larger metropolitan areas such as Fayette, Jefferson, and Kenton counties. The Kentucky Hospital Association (KHA) also released a 2022 hospital workforce report that highlighted the shortages of various providers whose primary practice occurs within a hospital setting, finding that hospital job vacancies for registered nurses and licensed practical nurses were both over 20%.<sup>3</sup>

#### THE NEED FOR UPDATED KNOWLEDGE SINCE THE RELEASE OF THE 2013 REPORT

The Office of Data Analytics (ODA) was commissioned to compose this document to examine how Kentucky's workforce has changed in the intervening years since the 2013 report. Beyond the typical changes in Kentucky's workforce that would be expected due to demographics and technology advancements, critical healthcare milestones have occurred in the decade since the previous report's findings and recommendations. First among these would be Kentucky's expansion of Medicaid under the Affordable Care Act (ACA) in 2014. When the 2013 report was published, roughly 14.5% of Kentucky's population was without health insurance (617,200 people). Eight years later, largely as a result of the ACA, that number had fallen to 5.6% by 2021 (244,400 people).<sup>5</sup> This increase in the number of people with access to healthcare consequently increased the demand for healthcare providers in the state.

Second, the COVID-19 pandemic was an extreme shock to the healthcare system. Professionals who practice in hospitals were particularly impacted by the consequences of the pandemic.<sup>6,7</sup> This situation created extreme fatigue and burnout among healthcare providers. A 2021 survey by the Kentucky Nursing Association (KNA) found that one in four nurses reported being very likely or extremely likely to leave their current job as a nurse in the next three months.<sup>8</sup>

This report will focus on individual groups of healthcare providers and the regions where they are located throughout the Commonwealth. It will also expand upon the list of provider types in the 2013 report. For example, the 2013 report did not include physical therapists, occupational therapists, or speech/language pathologists. This report includes those three provider types and several more that were not featured in the 2013 report.

#### **III. METHODS**

#### Methods

This report's methodology is based on the methodology described in the 2013 report with some key additions. This report incorporated healthcare licensure board data to produce counts of healthcare professionals across Kentucky. Additionally, the present report incorporates data from the Centers for Medicare and Medicaid Services (CMS) to link with Kentucky licensure board data to fill in missing data, such as the providers' practice locations. The result is an extension of Deloitte's findings with current data and comparisons of Kentucky's counts of healthcare professionals with national rates.

Records from 18 of Kentucky's healthcare licensure boards and 2 credentialing departments within the Kentucky Cabinet for Health and Family Services were used as the primary data sources to determine the distribution of providers across the state. These 20 organizational entities include 26 distinct healthcare provider categories outlined in Table III-1. Files containing these records are publicly available and were obtained by issuing data requests to each organization described in Table III-1. Once the licensure data files were obtained, ODA reviewed and compiled them into a common data model to begin the process of analysis.

Healthcare Licensure Board	Healthcare Provider Type
Kentucky Applied Behavior Analysis Licensing Board	Applied Behavior Analysts
Kentucky Board of Alcohol and Drug Counselors	Licensed Clinical Alcohol and Drug
	Counselors
Kentucky Board of Chiropractic Examiners	Chiropractors
Kentucky Board of Dentistry	Dentists
Kentucky Board of Examiners of Psychology	Licensed Clinical/Counseling
	Psychologists
Kentucky Board of Licensure and Certification for	Dieticians And Nutritionists
Dieticians and Nutritionists	
Kentucky Board of Licensed Diabetes Educators	Diabetes Educators
Kentucky Board of Licensure for Marriage and Family	Marriage And Family Therapists
Therapists	
Kentucky Board of Licensed Professional Counselors	Licensed Professional Counselors
Kentucky Board of Medical Imaging and Radiation	Limited X-Ray Machine Operators
Therapy	Nuclear Medicine Professionals
	Radiation Therapy Professionals
	Radiographers
	Radiologist Assistants
Kentucky Board of Medical Licensure	Physicians
	Physician Assistants

 Table III-1. Provider Types included in this Report and their Associated Licensure Board.

Kentucky Board of Nursing	Advanced Practice Registered
	Nurses
	Licensed Practical Nurses
	Registered Nurses
	State Registered Nurse Aides
Kentucky Board of Occupational Therapy	Occupational Therapists
Kentucky Board of Optometric Examiners	Optometrists
Kentucky Board of Pharmacy	Pharmacists
Kentucky Board of Physical Therapy	Physical Therapists
Kentucky Board of Podiatry	Podiatrists
Kentucky Board of Social Work	Licensed Clinical Social Workers
Kentucky Board of Speech-Language Pathology &	Audiologists
Audiology	Speech Pathologists
Community Health Workers	Community Health Workers
	Peer Support Specialists

#### THE NECESSITY TO ADDRESS MISSING DATA IN THE LICENSURE BOARD FILES

The 2013 report noted many limitations of Kentucky's licensure board data to estimate the size of Kentucky's healthcare workforce. Many of the same inconsistencies in reporting practices and errors in data entry across license boards are still present. This was particularly problematic with respect to missing practice locations of providers making it difficult to accurately determine the geographic distribution of Kentucky's healthcare workforce. This is important because Kentucky's healthcare providers are often concentrated around the state's larger metropolitan areas and sparser in the less populated counties, creating important implications regarding access to healthcare services around the state. To mitigate this missing data phenomenon, a second source of data was used to supplement the licensure board data. The National Plan and Provider Enumeration System (NPPES)<sup>9</sup>, a publicly available dataset published by CMS, was used to verify, correct, or add practice locations among licensure records where possible.

In cases where a licensed provider could not be found in the NPPES file, location information from their respective licensure board file was utilized to the greatest extent possible. Data quality issues were more common in these instances. For example, licensure boards often reported provider addresses that appeared to be residential rather than sites of patient care. In some cases, addresses were mistyped or did not exist at all. Because of this, a degree of variation in confidence exists between providers of different license boards in terms of the distribution of their workforce across Kentucky (e.g., because of data quality matters, there is a higher degree of confidence in the accuracy of physician data than audiologist data). As such, best efforts were taken to report and highlight these discrepancies throughout the results of this report. Notably, licensure boards for which less than 50% of provider addresses could be derived were not reported on the level of county or area development district (ADD), and instead, reported as a total count within the state.
# QUALITY CONTROL AND ESTIMATING PROVIDERS THAT ARE ACTIVELY TREATING PATIENTS IN KENTUCKY

Licensed healthcare providers perform many functions in Kentucky's economy and society, from direct patient care in clinical settings to serving as business leaders, professors, researchers, and administrators. While these are all important features of the state's healthcare ecosystem, the purpose of this report is to gauge the capacity of Kentucky's healthcare workforce to deliver direct patient care services.

Therefore, further data cleaning involved excluding providers from the analysis deemed not actively delivering patient care, such as those noted in the data as retired, deceased, or otherwise not actively treating patients. "Active" providers were determined by the relevant fields available in the data files from their respective licensure boards. It should be noted, however, that not all license boards reported this information, which may result in overestimates of workforce figures in these cases.

Furthermore, because providers were not explicitly reported as practicing within a particular ADD, this information had to be manually derived from available address data – in most cases, zip codes were used for this purpose. While provider names and practice addresses were used for the purposes of linking across data sources, this information was analyzed inside a secure information technology environment, and no personally identifiable information for any provider appears in this report.

# **IV. RESULTS & DISCUSSION**

The healthcare workforce is the primary medium in which health services are delivered to communities, making it a critical component in supporting the health and well-being of the Commonwealth of Kentucky. The results of this report indicate that a significant portion of the population devotes their professional lives to caring for their fellow Kentuckians. These providers have persevered through years of education, rigorous testing, and a public health emergency to provide an important service to the Commonwealth. Because of the crucial role that our healthcare professionals play in our lives, it is a high priority to have a healthcare workforce that can adequately meet the needs of Kentucky's people.

Between the 2013 report by Deloitte and this current report, several changes were seen in the overall healthcare workforce in Kentucky. First, the current iteration of the report contains information on 14 additional provider types not included in the 2013 report. Second, despite some areas where Kentucky's workforce appears deficient, an overall growth among healthcare workers, particularly physicians, was demonstrated nationwide between 2010 and 2021.<sup>10</sup> These numbers are expected to continue to rise in the coming years.<sup>11</sup> However, with a growing and increasingly aging population, the need for additional workforce capacity will continue to increase in Kentucky and throughout the United States.

In 2013, Deloitte identified 10,475 physicians licensed within the state of Kentucky; this report, in 2022, identified 12,470 using a similar methodology, a 19% increase. During this same period, the number of dentists grew 49% (from 1,711 to 2,541), advanced practice registered nurses (APRNs) grew 191% (from 3,057 to 8,883), and the number of physician assistants grew 65% (from 985 to 1,622). According to the US Census, the population of Kentucky has grown 10.5%, or over 105 thousand, in that time (from 4.407 million in 2013 to 4.512 million in 2022). This suggests a growing healthcare workforce in Kentucky, adapting to meet the changing needs of the population within the state. However, several areas for improvement remain.

#### **OVERALL WORKFORCE DISPARITIES**

There is no widely agreed upon rate for what states should aim for when they evaluate their healthcare workforces. Therefore, in the absence of such benchmarks, this report chose to highlight the difference between Kentucky and the national rate of people per provider, a key difference between this report and the 2013 report.

Overall, rates of APRNs, occupational therapists, physical therapists, radiologic technologists and technicians, registered nurses, and state registered nurse aides are better than the national rate, statewide and within every ADD in the Commonwealth. The data indicates that nurses in Kentucky may be performing a vital role within the Kentucky workforce to relieve a significant amount of the healthcare labor burden.<sup>12</sup> This also suggests a need for a larger licensed practical nurse (LPN) workforce in the Northern Kentucky and Green River ADD to improve the people per provider rate in those areas.

Similarly, Kentucky is licensing occupational and physical therapists at a better rate than the national average. With a population that is rapidly aging, these services will continue to become more vital to patients in the Commonwealth.<sup>13</sup>

Physicians are a notable example of a statewide rate that is worse than the national average. While Kentucky meets the national rates for physicians in the Bluegrass and KIPDA ADDs, every other ADD in Kentucky is worse the national rate; with physicians in Lincoln Trail and Buffalo Trace needing to serve 2.4 times the number of patients compared to the national rate. This implies a pressing need for physicians in Kentucky outside the Louisville and Lexington metropolitan areas.

The rate of diabetes educators licensed in Kentucky is worse than the national average both statewide and within each ADD in Kentucky. With approximately 14% of people in Kentucky diagnosed with diabetes, this represents a critical disparity in the healthcare workforce of Kentucky. Similarly, statewide, the rate of applied behavior analysts is also worse than the national average, though more detailed information on individual ADD geographic level disparities are unavailable. As the mental health needs of the state become more apparent, especially children with autism spectrum disorders, these individuals also represent a growing need to ensure that every Kentuckian has the opportunity for improved health and wellbeing.<sup>14</sup>

Audiologists, marriage & family therapists (MFTs), mental health counselors, physician assistants, and radiation therapists & nuclear medicine technologists (RTNMTs) are all worse than the national rate, though some ADDs surpass the national rates. This suggests that, overall, there is a need for more these providers, but the geographic disparities within provider types may present meaningful information on the overall capacity of certain regions of the state.

#### WORKFORCE GEOGRAPHIC DISPARITIES

Workforce rates are below the national rate in the northern portion of the Commonwealth (i.e., the Northern Kentucky ADD) for audiologists, LPNs, licensed psychologists, physician assistants, and respiratory therapists. Some of this difference may be alleviated by the healthcare infrastructure in nearby Cincinnati.

In the eastern portion of the state (i.e., the Buffalo Trace, FIVCO, Gateway, Big Sandy, Kentucky River, Cumberland Valley, and Lake Cumberland ADDs), audiologists, chiropractors, dentists, LCSWs, licensed psychologists, mental health counselors, optometrists, pharmacists, physician assistants, and podiatrists have rates worse than the national rate in at least one ADD within this region. The Buffalo Trace, Kentucky River, and Cumberland Valley ADDs show workforce rates worse than the national average for a significant number of the listed providers, indicating a significant need for additional providers along the West Virginia border and along the southeastern portion of the state. While some of the shortfall along the West Virginia border may be relieved by nearby Huntington, like Cincinnati relieving Northern Kentucky.

In the western portion of the state (i.e., the Purchase, Pennyrile, Green River, Barren River, and Lincoln Trail ADDs), audiologists, dentists, LCSWs, LPNs, licensed psychologists, mental health counselors, optometrists, pharmacists, physicians, physician assistants, and podiatrists

have rates worse than the national rate in at least one ADD within this region. The Purchase, Pennyrile, and Green River ADDs consistently show rates worse than the national average for many of these professions.

The Bluegrass ADD, containing the Lexington metropolitan area, is below the national rate of diabetes educators, MFTs, and mental health counselors. KIPDA, which contains the Louisville metropolitan area, only demonstrates rates below the national rate among diabetes educators, mental health counselors, and physician assistants. This suggests that a need for these professions may exist within these larger metropolitan areas and may be being relieved by other professions.

For community health workers and peer support specialists, dieticians and nutritionists, and speech-language pathologists, statewide, the rate of these professions is better than the national rate of these professions. However, for these professions, less granular data for ADDs was available, and were therefore only calculated at the state level. This implies that, while Kentucky performs above the national rate in licensing these individual, geographic disparities unobserved in our data may exist and may be therefore unaccounted for in this report.

#### **GROWING THE WORKFORCE**

The report shows that, while total graduates from medical colleges within Kentucky have remained somewhat consistent over the years, the retention rate of those graduates that go on to obtain licensure in Kentucky is trending downward. This indicates that while Kentucky has a steady flow of graduates from its medical colleges, less graduates are becoming licensed within the Commonwealth. Interventions to improve the overall healthcare workforce may help to ensure that the healthcare capacity needs of Kentucky are being met.

Data from the Association of American Medical Colleges (AAMC) suggests that approximately 55% of medical residents, nationwide, will stay in the state in which they completed residency training.<sup>15</sup> According to the most recent data available, Kentucky only retained 48% of its graduates. A key piece of improving the healthcare workforce in Kentucky is advocating for additional residency slots at medical training locations within the state of Kentucky.

Additionally, international medical school graduates (IMGs) may also play a role in improving Kentucky', with visa programs offering pathways to residency and citizenship within the United States for trained citizens of other countries.<sup>16</sup> In addition to this, government interventions such as statewide loan forgiveness programs for healthcare workers may also attract medical professionals to Kentucky.

# V. RECOMMENDATIONS

#### RECOMMENDATIONS FOR KENTUCKY LICENSING BOARDS

As previously noted in the Methods section, while preparing this report, many of the same data quality concerns that were noted in the 2013 report by Deloitte were observed. Principally, there is a high degree of missing data related to where Kentucky's healthcare professionals practice in the state. This problem was largely mitigated in this report by pairing licensure board data with data from CMS, but future efforts to investigate whether Kentucky's healthcare workforce is adequate to meet the demands of its people would benefit enormously from enhancing the quality of data collected by Kentucky's licensure boards. By adding additional information on practice location, demographics, language capacity, practice specialties, education/training backgrounds, utilization of telehealth services, and actively practicing medicine, a more accurate picture of Kentucky's healthcare workforce could be established. A list of suggested fields that would solve many of these data quality problems is supplied in the supplement to this report. These additional fields would enhance the ability to understand how workforce shortages may be arising, where shortages exist, and how patients are experiencing care from their practitioners.

In the 2023 Kentucky legislative session, House Bill 200 (HB 200) was passed and signed into law.<sup>17</sup> HB 200 created the healthcare workforce investment fund as a means of addressing workforce shortages. HB 200 also includes language surrounding improved data collection, particularly among historically underserved counties. This law could assist in bringing about improvements in data quality to better understand the healthcare workforce of Kentucky.

#### KENTUCKY HEALTHCARE WORKFORCE RECOMMENDATIONS

To create a comprehensive healthcare workforce within the Commonwealth, Kentucky should focus on recruiting and training additional providers for occupations that show rates worse than national provider ratios. This may include reduced tuition for those enrolled in these programs, greater state assistance in expanding academic programs for universities, and collaboration with organizations such as the Kentucky Healthcare Workforce Collaborative to invest in the future of the healthcare workforce.<sup>18</sup>

Retaining healthcare graduates within the state may be another way of building the workforce. Data from KYSTATS has shown that healthcare graduates in Kentucky with more advanced credentials are less likely to seek employment in Kentucky compared to other healthcare graduates.<sup>19</sup> This relationship also corresponds to a graduate's level of education, with only 42% of healthcare graduates with a doctorate from a Kentucky school employed in the state compared to 76% of healthcare graduates with an associate degree from a Kentucky school.<sup>18</sup> Loan forgiveness programs, additional training opportunities, career assistance, childcare assistance, and home-buying benefits for these individuals may attract graduates to remain within the state after completing their degrees.

The report also shows that additional focus should be given to recruiting providers to southeastern Kentucky and western Kentucky. These regions tend to have worse provider rates and are not located near a larger metropolitan area where healthcare providers are more plentiful. Programs like the University of Kentucky's extension medical campuses in Bowling Green may help relieve some of this burden, as well as loan forgiveness programs and additional J-1 Visa opportunities for providers that choose to settle in more nonmetropolitan areas.<sup>19</sup>

Another way to relieve some of the burden of provider shortages may be through the expansion of telehealth services. While providers must be licensed in Kentucky to serve Kentucky citizens, the provider need not be physically located within the geographic region they are servicing or within Kentucky at all. By expanding access to broadband internet and recruiting additional telehealth providers, the healthcare workforce capacity may increase within the Commonwealth.

# **VI. PROVIDER SUMMARIES**

#### A PRACTICAL GUIDE TO THIS CHAPTER

This chapter will present a series of tables and graphics that describe the current state of Kentucky's healthcare workforce. Each of the 30 healthcare provider types will be presented in alphabetical order, with associated counts broken down by ADD. ADDs are defined by Kentucky's Council on Area Development Districts and exist to help coordinate government and civic organizations to improve the quality of life for Kentucky's residents.<sup>20</sup> County-level counts and provider rates are reported in the supplement that accompanies this report. Figure VI-1 displays a map of Kentucky's ADDs and their constituent counties.





#### PEOPLE PER PROVIDER RATES

Kentucky's population is not evenly distributed throughout the Commonwealth. To contextualize the provider count numbers, provider counts are normalized against the total population of each ADD. The primary results of each section are presented as the number of Kentuckians divided by the number of providers in each region; what is going to be referred to as the region's 'rate' or 'ratio'. The number can be roughly interpreted as 'the number of people each provider is responsible for', but that does not consider the prevalence of need for the provider's specialty in their community and assumes that everyone seeks care nearest to their residence. The national rates for each provider category were obtained by dividing the US Census Bureau's reported total US population by the US Bureau of Labor Statistics' (BLS) reported counts of healthcare workers from their Occupational Employment and Wage Statistics.

It is important to note that comparing Kentucky's provider rates to the national rates is not meant to suggest whether Kentucky's workforce is sufficient or insufficient, as healthcare needs can vary significantly from one region to another. Therefore, after a survey of the literature on healthcare workforce development and conversations with the National Center for Health Workforce Analysis (NCHWA), ODA determined that there exists no adequate set of population-level benchmarks that would allow designations of sufficient supply of providers.<sup>21,22</sup> In the absence of a broad consensus on optimal population-level provider ratios, this report presents a method of comparison that best balances accessibility of interpretation with analytical rigor.

The words "better" and "worse" will be used when comparing Kentucky's provider ratios to their national counterparts. In this instance, the rate values that are lower are better, indicating that each provider is responsible for less people; and higher values are reported as worse for similar reasoning. A green arrow pointing down ( $\nabla$ ) will represent rates that are lower/better than the national rates and a red arrow pointing up ( $\blacktriangle$ ) will represent rates that are higher/worse.

### **ADVANCED PRACTICE REGISTERED NURSES (APRN)**

Area Development District	APRNs	People per APRN
Barren River	521	595 🔻
Big Sandy	291	485 🔻
Bluegrass	1,919	432 🔻
Buffalo Trace	66	845 🔻
Cumberland Valley	435	529 🔻
FIVCO	309	437 🔻
Gateway	135	632 🔻
Green River	386	561 🔻
Kentucky River	242	442 🔻
KIPDA	2,315	441 🔻
Lake Cumberland	352	587 🔻
Lincoln Trail	408	685 🔻
Northern Kentucky	729	639 🔻
Pennyrile	331	648 🔻
Purchase	444	443 🔻
Kentucky	8,883	506 🔻

National Rate National Rate of People per APRNs = 1,159

Notes: The counts of advanced practice registered nurses classified as Out of State and Unknown by these analyses were 0. Values below national rate indicated by downward green arrow ( $\checkmark$ ) and above national rate by upward red arrow ( $\blacktriangle$ ).



Kentucky is considered better than the national rate for nurse practitioners both among the area development districts (ADDs) and as a state Kentucky has 506 people per APRN, which is better than the national rate of 1,159 individuals per APRN. The areas with the highest rate of people to nurse practitioners are Bluegrass, at 432 people per nurse practitioner and FIVCO, at 437 people per nurse practitioner. However, both rates are 2.7 times better than the national average of people per nurse practitioner.

#### **APPLIED BEHAVIOR ANALYSTS**



According to the Kentucky Applied Behavior Analyst Licensing Board, 545 applied behavior analysts are licensed in Kentucky. This amounts to a rate of 8,246 Kentuckians per provider, worse than the national rate of 5,536. The Bureau of Labor Statistics does not have publicly available reporting on nationwide counts of applied behavior analysts, so this national rate is based on data from the national Behavior Analyst Certification Board (BACB). Of these 545 Kentucky-licensed individuals, only 13 were associated with address data in the license file, and linkage to the NPPES did not improve data quality. This results in only an aggregated, statewide total being shown. Comparing Kentucky's rate to the national rate, Kentucky has worse access to applied behavior analysts. Better data could alter the reported rates by ADD and shift regions closer to or better than the national average.

#### AUDIOLOGISTS

		23,070
Area Development District	Audiologists	People Per Audiologist
Barren River	8	38,757 🔺
Big Sandy	1	141,047 🔺
Bluegrass	52	15,947 🔻
Buffalo Trace	1	55,792 🔺
Cumberland Valley	4	57,578 🔺
FIVCO	5	26,990
Gateway	1	85,339 🔺
Green River	6	36,077 🔺
Kentucky River	1	107,008
KIPDA	52	19,630 🔻
Lake Cumberland	3	68,864 🔺
Lincoln Trail	6	46,548
Northern Kentucky	13	35,853 🔺
Pennyrile	4	53,605
Purchase	6	32,802
Kentucky	163	27,571

National Rate of People per Audiologist = 25,078

Notes: The counts of audiologists classified as Out of State and Unknown by these analyses are 92 and 28, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has 27,571 people per audiologist, which is slightly worse than the national rate of 25,078 individuals per audiologist. There is a large variance in the workforce capacity between ADD regions. The only ADD regions that are better than the national rate are Bluegrass and KIPDA (containing UofL and UK). Big Sandy, Buffalo Trace, Gateway, and Kentucky River regions have only a single audiologist within our data set.

#### **CHIROPRACTORS**

Chiropractors	People Per Chiropractor
47	6,597 🔻
14	10,075 🔺
163	5,087 🔻
7	7,970 🔻
23	10,013 🔺
27	4,998 🔻
11	7,758 🔻
38	5,696 🔻
8	13,376 🔺
211	4,838 🔻
33	6,260 🔻
36	7,758 🔻
102	4,570 🔻
24	8,934 🔻
47	4,188 🔻
	Chiropractors   47   14   163   7   23   27   11   38   211   33   36   102   24

National Rate of People per Chiropractor = 9,272

*Notes: The counts of chiropractors classified as Out of State and Unknown by these analyses are 39 and 73, respectively. Values below national rate indicated by downward green arrow* ( $\mathbf{V}$ ) *and above national rate by upward red arrow* ( $\mathbf{A}$ ).



Most of Kentucky's ADD regions have a better rate of individuals per chiropractor compared to the national rate. The three regions that fair worse than the national rate are in the southeastern part of the Commonwealth: Cumberland Valley, Kentucky River, and Big Sandy. Of those, Kentucky River has the worst provider rate, with 13,376 individuals for every chiropractor. Purchase in far western Kentucky performs the best among the different ADD regions, with a rate of 4,188 individuals per chiropractor.

# COMMUNITY HEALTH WORKERS AND PEER SUPPORT SPECIALISTS (CHW AND PSS)



Practice location information could not be identified for most CHWs and PSSs resulting in only an aggregated, statewide total being shown. Statewide, 5,368 CHWs and PSSs are licensed to practice in Kentucky, which is a rate of 837 people per CHW or PSS. Kentucky's rate is better than the national average of 5,442 people per CHW or PSS. However, due to data limitations, this may not account for provider shortages or surpluses that may exist on a regional level.

#### DENTISTS

Area Development District	Dentist	People Per Dentist
Barren River	129	2,404 🔻
Big Sandy	67	2,105 🔻
Bluegrass	648	1,208 🔻
Buffalo Trace	23	2,426 🔻
Cumberland Valley	85	2,710 🔺
FIVCO	43	3,138
Gateway	32	2,667
Green River	96	2,255 🔻
Kentucky River	37	2,892 🔺
KIPDA	80	1,286 🔻
Lake Cumberland	132	2,582 🔻
Lincoln Trail	132	2,116 🔻
Northern Kentucky	217	2,148 🔻
Pennyrile	61	3,515 🔺
Purchase	97	2,029 🔻
Kentuckv	2,541	1.769 🔻

National Rate of People per Dentist= 2,663

*Notes: The counts of dentists classified as Out of State and Unknown by these analyses are 523 and 19, respectively. Values below national rate indicated by downward green arrow* ( $\mathbf{V}$ ) *and above national rate by upward red arrow* ( $\mathbf{A}$ ).



The national average of dentists to people is approximately 2,663 people per dentist. Kentucky has an average of 1,769 people per dentist, with ten ADD regions being better than the national rate and five below. Bluegrass and KIPDA have the lowest average populations per provider and outperform the national average. Pennyrile and FIVCO were worse than the national average.

### **DIABETES EDUCATORS**

Area Development District	<b>Diabetes Educators</b>	People Per Diabetes Educators
Barren River	6	51,676 🔺
Big Sandy	4	35,262
Bluegrass	31	26,750
Buffalo Trace	3	18,597
Cumberland Valley	12	19,193 🔺
FIVCO	1	134,951 🔺
Gateway	3	28,446 🔺
Green River	4	54,116
Kentucky River	4	26,752 🔺
KIPDA	34	30,022 🔺
Lake Cumberland	9	22,955 🔺
Lincoln Trail	7	39,898 🔺
Northern Kentucky	18	25,894 🔺
Pennyrile	3	71,473 🔺
Purchase	13	15,140 🔺
Kentucky	152	29,567

National Rate of People per Diabetes Educator = 5,947

*Notes: The counts of diabetes educators classified as Out of State and Unknown by these analyses are 15 and 134, respectively. Values below national rate indicated by downward green arrow* ( $\mathbf{V}$ ) *and above national rate by upward red arrow* ( $\mathbf{A}$ ).



Kentucky has 29,567 people per diabetes educator, considerably worse than the national rate of 5,947 people per educator. FIVCO is drastically worse relative to the other ADD regions, with a rate of 134,951 people per diabetes educator. All ADD regions are underserved relative to the national rate. This suggests that all regions would benefit from increased diabetes educators in their workforce. However, there are a large amount of Diabetes Educators with unknown address information, which could impact allocation needs.

#### **DIETITIANS AND NUTRITIONISTS**



Because practice location information could not be identified for the majority of dietitians and nutritionists, only aggregated totals will be provided. Statewide, 1,658 dietitians and nutritionists are licensed to practice in Kentucky. Of these, 142 are estimated to be practicing out of state; however, due to the data limitations noted, this number will likely be underreported. Under the assumption that all dietitians and nutritionists that are licensed to practice in Kentucky are doing so (excluding those determined to be out of state), this would place Kentucky at a rate of 2,964 people per dietitian/nutritionist, which is better than the national average. Due to the uncertainty in this estimate, its implications should be interpreted with a degree of caution.

# LICENSED CLINICAL SOCIAL WORKERS (LCSW)

Area Development District	Licensed Clinical Social Workers	People Per Licensed Clinical Social Worker
Barren River	168	1,846 🔻
Big Sandy	48	2,938
Bluegrass	761	1,090 🔻
Buffalo Trace	12	4,649 🔺
Cumberland Valley	63	3,656 🔺
FIVCO	58	2,327 🔻
Gateway	49	1,742 🔻
Green River	114	1,899 🔻
Kentucky River	51	2,098 🔻
KIPDA	984	1,037 🔻
Lake Cumberland	91	2,270 🔻
Lincoln Trail	176	1,587 🔻
Northern Kentucky	231	2,018 🔻
Pennyrile	87	2,465 🔻
Purchase	63	3,124
Kentucky	2.956	1.520 🔻

National Rate of People per LCSW = 2,917

Notes: The counts of licensed clinical social workers classified as Out of State and Unknown by these analyses are 674 and 5, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Statewide, Kentucky has 1,520 people per licensed clinical social worker (LCSW), which is considerably better than the national rate of 2,917 individuals per LCSW. There is some regional variation in terms of this distribution in Kentucky, and four ADD regions have rates that are worse than the national one (Big Sandy, Buffalo Trace, Cumberland Valley, and Purchase). Patients in the KIPDA ADD have the most favorable rate at 1,037 people per licensed clinical social worker, while the Buffalo Trace ADD has the least favorable rate at 4,649 people per therapist.

# LICENSED PRACTICAL NURSES (LPN)

	National Rate	of People per LPNs = 518		
Area Developme	nt District	LPNs	P	eople per LPN
Barren River		762		407 🔻
Big Sandy		390		362 🔻
Bluegrass		1,784		465 🔻
Buffalo Trace		297		188 🔻
Cumberland Valle	ey	592		389 🔻
FIVCO		687		196 🔻
Gateway		276		309 🔻
Green River		377		574 🔺
Kentucky River		362		296 🔻
KIPDA		2,651		385 🔻
Lake Cumberland	l	984		210 🔻
Lincoln Trail		803		348 🔻
Northern Kentuck	xy	873		534 🔺
Pennyrile		610		352 🔻
Purchase		666		296 🔻
Kentucky		12,114		371 🔻

*Notes: The counts of licensed practical nurses classified as Out of State and Unknown by these analyses were 0.Values below national rate indicated by downward green arrow* ( $\mathbf{V}$ ) *and above national rate by upward red arrow* ( $\mathbf{A}$ ).



Kentucky has 371 people per LPN, which is better than the national rate of 518 individuals per LPN. Green River and Northern Kentucky regions have rate that are slightly worse than the national rate. These regions have people per nurse rate that are 10% and 3% lower than the national rate. Buffalo Trace ADD has the most favorable rate of 188 people per LPN, 2.8 times the national rate.

### LICENSED PSYCHOLOGISTS

Area Development District	Licensed Psychologists	People Per LP
Barren River	37	8,380 🔺
Big Sandy	11	12,822 🔺
Bluegrass	233	3,559 🔻
Buffalo Trace	4	13,948 🔺
Cumberland Valley	11	20,937 🔺
FIVCO	15	8,997 🔺
Gateway	22	3,879 🔻
Green River	12	18,039 🔺
Kentucky River	15	7,134 🔺
KIPDA	315	3,240 🔻
Lake Cumberland	15	13,773 🔺
Lincoln Trail	30	9,310 🔺
Northern Kentucky	57	8,177 🔺
Pennyrile	22	9,746 🔺
Purchase	28	7,029 🔺
Kentucky	827	5,434 🔻

National Rate of People per Licensed Psychologists = 5,715

Notes: The counts of licensed psychologists classified as Out of State and Unknown by these analyses are 64 and 580, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has 5,434 people per licensed psychologists, which is slightly better than the national rate of 5,715, though this trend does not hold across all ADDs. KIPDA, Bluegrass, and Gateway have a higher concentration of Licensed Psychologists compared to the rest of the commonwealth. The Green River and Cumberland Valley regions have the highest number of people per licensed psychologists. It should be noted that for a significant number of

psychologists (580) licensed in Kentucky, a practice location could not be identified. As such, results should be interpreted with caution.

# MARRIAGE & FAMILY THERAPISTS (MFT)

Area Development District	Marriage & Family Therapists	People per Marriage & Family Therapist
Barren River	28	11,073 🔺
Big Sandy	3	47,016 🔺
Bluegrass	62	13,375 🔺
Buffalo Trace	1	55,792 🔺
Cumberland Valley	3	76,770 🔺
FIVCO	1	134,951 🔺
Gateway	3	28,446 🔺
Green River	12	18,039 🔺
Kentucky River	0	🔺
KIPDA	256	3,987 🔻
Lake Cumberland	9	22,955 🔺
Lincoln Trail	17	16,429 🔺
Northern Kentucky	14	33,292 🔺
Pennyrile	4	53,605 🔺
Purchase	2	98,407 🔺
Kentucky	415	10.829

National Rate of People per Marriage & Family Therapist = 6,059

Notes: The counts of marriage & family therapists classified as Out of State and Unknown by these analyses are 26 and 338, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has 10,829 people per MFT, which is worse than the national rate of 6,059 individuals per MFT. The KIPDA region, containing Jefferson County, is the only Kentucky ADD where the rate is better than the national average. Many regions in Kentucky have very low numbers of providers recorded. However, results should be interpreted with caution, as approximately 43%

of the MFTs licensed in Kentucky have unknown location information, potentially altering the findings of this analysis.

# **MENTAL HEALTH COUNSELOR (MHC)**

Area Development District	MHC	People per MHC
Barren River	181	1,713 🔺
Big Sandy	192	735 🔻
Bluegrass	518	1,601 🔺
Buffalo Trace	38	1,468 🔺
Cumberland Valley	184	1,252 🔺
FIVCO	199	678 🔻
Gateway	63	1,355 🔺
Green River	156	1,388 🔺
Kentucky River	94	1,138 🔺
KIPDA	532	1,919 🔺
Lake Cumberland	233	887 🔻
Lincoln Trail	163	1,713 🔺
Northern Kentucky	235	1,983 🔺
Pennyrile	81	2,647 🔺
Purchase	107	1,839 🔺
Kentucky	2,976	1,510

National Rate of People per Mental Health Counselors = 1068

Notes: The counts of mental health counselors classified as Out of State and Unknown by these analyses are 183 and 2,750, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



MHC include Alcohol and Drug Counselors and Licensed Professional Counselors. Kentucky has a rate of 1,510 people per MHC. This is worse than the national rate of 1,068 people per MHC. While this trend is seen across the state, it is worst in the Pennyrile region, where the rate is over double that of the national average at 2,647. The only ADDs where the rate is better than

the national average are Lake Cumberland, FIVCO, and Big Sandy. It should be noted that for nearly half (2,750) of MHCs licensed in Kentucky a practice location could not be identified. As such, the extent to which an ADD has a shortage of providers should be interpreted with caution.

### **OCCUPATIONAL THERAPISTS**

Area Development District	Occupational	People Per
-	Inerapists	Occupational Therapist
Barren River	152	2,040 🔻
Big Sandy	67	2,105 🔻
Bluegrass	731	1,134 🔻
Buffalo Trace	42	1,328 🔻
Cumberland Valley	129	1,785 🔻
FIVCO	69	1,956 🔻
Gateway	43	1,985 🔻
Green River	203	1,066 🔻
Kentucky River	50	2,140 🔻
KIPDA	926	1,102 🔻
Lake Cumberland	103	2,006 🔻
Lincoln Trail	208	1,343 🔻
Northern Kentucky	262	1,779 🔻
Pennyrile	171	1,254 🔻
Purchase	130	1,514 🔻
Kentucky	3.286	1.368 🔻

National Rate of People per Occupational Therapists = 2,597

Notes: The counts of occupational therapists classified as Out of State and Unknown by these analyses are 659 and 170, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has 1,368 people per occupational therapists, which is better than the national rate of 2,597 people per occupational therapist. Notably, all ADD regions report rates better than the national average. The Green River ADD has the greatest concentration of occupational therapists at a rate of 1,066 people per occupational therapist, while the Kentucky River has the lowest access at 2,140. These results suggest that, when compared to the rest of the nation, Kentucky has a better rate of people per occupational therapists.

#### **OPTOMETRISTS**

Area Development District	Optometrists	People Per Optometrist
Barren River	47	6,597 🔻
Big Sandy	36	3,918 🔻
Bluegrass	143	5,799 🔻
Buffalo Trace	5	11,158 🔺
Cumberland Valley	31	7,429 🔻
FIVCO	19	7,103 🔻
Gateway	15	5,689 🔻
Green River	32	6,764 🔻
Kentucky River	7	15,287 🔺
KIPDA	146	6,991 🔻
Lake Cumberland	29	7,124 🔻
Lincoln Trail	38	7,350 🔻
Northern Kentucky	82	5,684 🔻
Pennyrile	22	9,746 🔺
Purchase	42	4,686 🔻
Kentuckv	694	6,476 🔻

National Rate of People per Optometrist = 8,575

Notes: The counts of Optometrists classified as Out of State and Unknown by these analyses are 170 and 9, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has 6,476 people per optometrist, which is better than the national rate of 8,575 people per optometrist. Buffalo Trace, Pennyrile, and Kentucky River ADD regions have rates worse than the national average. Big Sandy stands out as the ADD with the best rate of people per optometrist.

#### **PHARMACISTS**

Area Development District	Pharmacists	People Per Pharmacist
Barren River	313	991 🔻
Big Sandy	218	647 🔻
Bluegrass	1,655	501 🔻
Buffalo Trace	40	1,395 🔺
Cumberland Valley	290	794 🔻
FIVCO	174	776 🔻
Gateway	77	1,108 🔺
Green River	219	988 🔻
Kentucky River	148	723 🔻
KIPDA	1,668	612 🔻
Lake Cumberland	220	939 🔻
Lincoln Trail	241	1,159 🔺
Northern Kentucky	526	889 🔻
Pennyrile	173	1,239 🔻
Purchase	243	810 🔻
Kentucky	6,205	724 🔻

National Rate of People per Pharmacist = 1,062

Notes: The counts of pharmacists classified as Out of State and Unknown by these analyses are 5,589 and 0, respectively. Values below national rate indicated by downward green arrow ( $\checkmark$ ) and above national rate by upward red arrow ( $\blacktriangle$ ).



Kentucky has 724 people per pharmacist, which is better than the national rate of 1,062 people per pharmacist. Among the ADDs, four ADDs are worse than the national rate for pharmacists: Buffalo Trace, Gateway, Lincoln Trail, and Pennyrile. Among these, the most significant difference is seen in Buffalo Trace, with a rate 24% below the national rate. The Bluegrass is the best performing ADD for pharmacists, with 501 people per pharmacist, or a rate 212% better than the national rate.

# **PHYSICAL THERAPISTS**

Area Development District	Physical Therapists	People Per Physical Therapists
Barren River	378	820 🔻
Big Sandy	116	1,216 🔻
Bluegrass	1,127	736 🔻
Buffalo Trace	40	1,395 🔻
Cumberland Valley	226	1,019 🔻
FIVCO	156	865 🔻
Gateway	76	1,123 🔻
Green River	312	694 🔻
Kentucky River	164	652 🔻
KIPDA	1,521	671 🔻
Lake Cumberland	274	754 🔻
Lincoln Trail	287	973 🔻
Northern Kentucky	458	1,018 🔻
Pennyrile	249	861 🔻
Purchase	330	596 🔻
Kentucky	5.714	787 🔻

National Rate of People per Physical Therapists = 1,473

Notes: The counts of Physical Therapists classified as Out of State and Unknown by these analyses are 1,068 and 4, respectively. Values below national rate indicated by downward green arrow (♥) and above national rate by upward red arrow (▲).



Kentucky has 787 people per physical therapist, which is better than the national rate of 1,473 people per physical therapist. The Purchase region has the most favorable rate of 596 people per provider. Buffalo Trace is closest to the national rate with 1,395. Eastern Kentucky tends to have better rates than western Kentucky, although this is not strictly the case. The quality of the physical therapist licensure data is high with only four unknown practice locations.

#### **PHYSICIANS**

Area Development District	Physicians	People per Physician
Barren River	580	535 🔺
Big Sandy	376	375 🔺
Bluegrass	3,446	241 🔻
Buffalo Trace	67	833 🔺
Cumberland Valley	374	616 🔺
FIVCO	335	403 🔺
Gateway	146	585 🔺
Green River	421	514 🔺
Kentucky River	192	557 🔺
KIPDA	4,071	251 🔻
Lake Cumberland	293	705 🔺
Lincoln Trail	341	819 🔺
Northern Kentucky	1,090	428 🔺
Pennyrile	329	652 🔺
Purchase	409	481 🔺
Kentucky	12,470	360

National Rate of People per Physician = 344

*Notes: The counts of physicians classified as Out of State and Unknown by these analyses are 8,495 and 6, respectively. Values below national rate indicated by downward green arrow* ( $\mathbf{V}$ ) *and above national rate by upward red arrow* ( $\mathbf{A}$ ).



Kentucky has 360 people per physician, which is slightly worse than the national rate of 344 individuals per physician. The only ADD regions that are better than the national rate are Bluegrass and KIPDA, with a rate of 241 and 251 individuals per physician, respectively. Buffalo Trace and Lincoln Trail have the highest rate, servicing 833 and 819 individuals per physician, correspondingly.

### **PHYSICIAN ASSISTANTS**

Area Development District	Physician Assistants	People Per Physician Assistant
Barren River	37	8,380 🔺
Big Sandy	55	2,564 🔺
Bluegrass	558	1,486 🔻
Buffalo Trace	11	5,072 🔺
Cumberland Valley	94	2,450 🔻
FIVCO	50	2,699 🔺
Gateway	55	1,552 🔻
Green River	83	2,608 🔺
Kentucky River	34	3,147 🔺
KIPDA	334	3,056 🔺
Lake Cumberland	39	5,297 🔺
Lincoln Trail	55	5,078 🔺
Northern Kentucky	119	3,917 🔺
Pennyrile	30	7,147 🔺
Purchase	68	2,894 🔺
Kentucky	1.622	2.771

National Rate of People per Physician Assistant = 2,498

Notes: The counts of physician assistants classified as Out of State and Unknown by these analyses are 241 and 2, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has 2,771 people per physician assistant, marginally better than the national rate of 2,498 individuals per physician assistant. The only ADD regions that are better than the national rate are Bluegrass, Gateway, and Cumberland Valley, with rates of 1,486, 1,552, and 2,450 individuals per physician assistant, respectively. Barren River and Pennyrile have the greatest need for additional workforce, servicing 8,380 and 7,147 individuals per physician assistant, respectively.

#### **PODIATRISTS**

National Rate o	The per Podiatrist $= 3$	7,300
Area Development District	Podiatrists	People Per Podiatrist
Barren River	3	103,352 🔺
Big Sandy	7	20,150 🔻
Bluegrass	31	26,750 🔻
Buffalo Trace	1	55,792 🔺
Cumberland Valley	5	46,062 🔺
FIVCO	4	33,738 🔻
Gateway	3	28,446 🔻
Green River	6	36,077 🔻
Kentucky River	4	26,752 🔻
KIPDA	70	14,582 🔻
Lake Cumberland	12	17,216 🔻
Lincoln Trail	9	31,032 🔻
Northern Kentucky	18	25,894 🔻
Pennyrile	5	42,884 🔺
Purchase	5	39,363 🔺
Kentucky	183	24,558

National Pate of People per Podiatrist 27 5 60

Notes: The counts of podiatrists classified as Out of State and Unknown by these analyses are 46 and 55, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has a rate of 24,558 people to podiatrist, which is better than the national rate of 37,560 individuals to podiatrist. Barren River is the one ADD significantly far from the national rate. It makes up part of western Kentucky, which is fairing worse on podiatrist-to-patient rates than central and eastern Kentucky. There is a large amount of missing and unknown data for podiatrists. Better data could alter the reported ADD podiatrist-to-patient rates and make more regions closer to or better than the national average.

# **RADIATION THERAPISTS & NUCLEAR MEDICINE TECHNOLOGISTS (RTNMT)**

Area Development District	RTNMT	People Per RTNMT
Barren River	29	10,692
Big Sandy	18	7,836 🔻
Bluegrass	88	9,423 🔻
Buffalo Trace	3	18,597 🔺
Cumberland Valley	15	15,354 🔺
FIVCO	22	6,134 🔻
Gateway	5	17,068 🔺
Green River	21	10,308 🔺
Kentucky River	16	6,688 🔻
KIPDA	114	8,954 🔻
Lake Cumberland	11	18,781 🔺
Lincoln Trail	26	10,742 🔺
Northern Kentucky	25	18,644 🔺
Pennyrile	15	14,295 🔺
Purchase	20	9,841 🔻
Kentucky	428	10,500

National Rate of People per RT or NMT = 10,004

Notes: The counts of RTNMTs classified as Out of State and Unknown by these analyses are 62 and 19, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has 10,500 people per RTNMT, slightly better than the national rate of 10,004 people per RTNMT. The ADD region with the best rate was FIVCO, with 6,134 individuals per RTNMT. Lake Cumberland, Northern Kentucky, and Buffalo Trace have the worst rates, servicing 18,781, 18,644, and 18,597 individuals per radiation therapist/nuclear medicine technologist, respectively.

### **RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS**

National Rate of People per Radiologic Technologists and Technicians = 1,534

Area Development District	Radiologic Technologists and Technicians	People Per Radiologic Technologists and Technicians
Barren River	403	769 🔻
Big Sandy	228	619 🔻
Bluegrass	1,294	641 🔻
Buffalo Trace	67	833 🔻
Cumberland Valley	259	889 🔻
FIVCO	225	600 🔻
Gateway	89	959 🔻
Green River	293	739 🔻
Kentucky River	167	641 🔻
KIPDA	1,711	597 🔻
Lake Cumberland	212	974 🔻
Lincoln Trail	345	810 🔻
Northern Kentucky	400	1,165 🔻
Pennyrile	223	962 🔻
Purchase	308	639 🔻
Kentucky	6,224	722 🔻

Notes: The counts of classified as radiological technologists and technicians Out of State and Unknown by these analyses are 959 and 115, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{V}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).



Kentucky has 722 people per radiologic technologist, which is significantly better than the national rate of 1,534 individuals per technologist. For all ADD regions, the number of people per radiological technologist and technician is lower than the national rate.

# **REGISTERED NURSES (RN)**

Area Development District	<b>Registered Nurses</b>	People per Registered Nurse
Barren River	3,859	80 🔻
Big Sandy	2,116	67 🔻
Bluegrass	13,833	60 🔻
Buffalo Trace	788	71 🔻
Cumberland Valley	2,956	78 🔻
FIVCO	2,372	57 🔻
Gateway	1,017	84 🔻
Green River	3,264	66 🔻
Kentucky River	1,897	56 🔻
KIPDA	17,019	60 🔻
Lake Cumberland	2,598	80 🔻
Lincoln Trail	3,947	71 🔻
Northern Kentucky	6,206	75 🔻
Pennyrile	2,689	80 🔻
Purchase	2,906	68 🔻
Kentucky	67,467	67 🔻

National Rate of People per Registered Nurses = 109

*Notes:* The counts of registered nurses classified as Out of State and Unknown by these analyses were 0. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has a rate of 67 people per RN, which is better than the national rate of 109 people per RN. Each ADD performs relatively similarly within Kentucky; however, Kentucky River has the best rate at 56 people per nurse, followed closely by FIVCO at 57 people per nurse.

## **Respiratory Therapists**

Area Development District	<b>Respiratory Therapists</b>	People per Respiratory Therapist
Barren River	230	1,348 🔻
Big Sandy	195	723 🔻
Bluegrass	516	1,607 🔻
Buffalo Trace	50	1,116 🔻
Cumberland Valley	315	731 🔻
FIVCO	140	964 🔻
Gateway	80	1,067 🔻
Green River	92	2,353 🔻
Kentucky River	109	982 🔻
KIPDA	569	1,794 🔻
Lake Cumberland	125	1,653 🔻
Lincoln Trail	181	1,543 🔻
Northern Kentucky	153	3,046 🔺
Pennyrile	111	1,932 🔻
Purchase	120	1,640 🔻
Kentucky	2,986	1,505 🔻

National Rate of People per Respiratory Therapist = 2,489

Notes: The counts of respiratory therapists classified as Out of State and Unknown by these analyses are 1,304 and 0, respectively. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has a statewide workforce rate of 1,505 people per respiratory therapist, which is better than the national rate of 2,489. Every ADD region outperforms the national rate, except for the Northern Kentucky region. This region has 3,046 people per respiratory therapist, which is about 22% higher when compared to the national rate. Big Sandy is the best performing ADD among all regions, only having 723 people per respiratory therapist.

#### **SPEECH-LANGUAGE PATHOLOGISTS**

National Rate of People per Speech-Language Pathologists = 2,252



Notes: The counts of speech-language pathologists classified as Out of State and Unknown by these analyses are 1,926 and 73, respectively. Despite using the linking method to NPPES data, greater than 50% of geographic data for licensed speech-language pathologists was missing. For this reason, only the statewide value (which includes providers with missing data), and rate is reported. Values below national rate indicated by downward green arrow ( $\mathbf{N}$ ) and above national rate by upward red arrow ( $\mathbf{A}$ ).

Kentucky has 1,306 people per speech-language pathologist, which is better than the national rate. The high level of missing data in the licensure dataset for speech-language pathologists prohibits analysis of regional variation within Kentucky. It is important to note that the rate described here rests on the assumption that all the providers with unknown addresses are providers who mostly practice in Kentucky, and the degree to which those providers maintain an active Kentucky license but mostly practice in another state could significantly alter the conclusions presented here. Results should be interpreted with caution.
### **STATE REGISTERED NURSE AIDES (SRNAS)**

Area Development District	SRNAs	People per SRNA
Barren River	2,621	118 🔻
Big Sandy	1,267	111 🔻
Bluegrass	6,732	123 🔻
Buffalo Trace	621	90 🔻
Cumberland Valley	2,120	109 🔻
FIVCO	1,520	89 🔻
Gateway	743	115 🔻
Green River	2,367	91 🔻
Kentucky River	1,985	54 🔻
KIPDA	4,990	205 🔻
Lake Cumberland	2,150	96 🔻
Lincoln Trail	2,373	118 🔻
Northern Kentucky	2,368	197 🔻
Pennyrile	2,189	98 🔻
Purchase	2,146	92 🔻
Kentucky	36,192	124 🔻

National Rate of People per SRNAs = 253

Notes: The counts of state registered nurse aides classified as Out of State and Unknown by these analyses were 0. Values below national rate indicated by downward green arrow ( $\mathbf{\nabla}$ ) and above national rate by upward red arrow ( $\mathbf{\Delta}$ ).



Kentucky has a rate of 124 people per SRNA, which is better than the national rate of 253 individuals per aides. While all ADDs demonstrate an adequate number of SRNAs, the best people per nurse rate is seen in Kentucky River, at 54 people per SRNA. This makes the rate of SRNAs to people in Kentucky River 4.7 times better than the national average.

### VII. KENTUCKY MEDICAL GRADUATE RETENTION

Figure VII-1. Total Graduates from M.D. and D.O Granting Institutions in Kentucky Annually from 2010 through 2022



**Figure VII-2**. Graduates from M.D. and D.O Granting Institutions in Kentucky that are Licensed to Practice in Kentucky, Grouped by Graduation Year from 2010 through 2018.







Figures VII-1, VII-2, and VII-3 describe the Kentucky medical school graduate numbers and instate retention rate. Figure VII-2 and Figure VII-3 stop reporting information in 2018, as that is the latest that someone could have graduated from medical school and completed the shortest residency. Figure VII-3 rates represent the percentage of people from each graduating year who subsequently became licensed to practice in Kentucky. For example, if a doctor graduated in 2011, completed residency, and became licensed in Kentucky in 2017, they would be counted in the 2011 group of retention rates. Likewise, in Figure VII-2, this doctor would be counted in the 2011 year of graduates licensed in Kentucky.

From 2011 through 2022, there was an overall increasing trend in graduates from the state's medical schools. More applications and more admissions may have driven this change. Nationally, students applying for medical school increased by 18% for the 2021-22 school year, according to the Association of American Medical Colleges (AAMC).<sup>23</sup> Potentially, the COVID-19 public health emergency motivated additional applications as it highlighted importance of healthcare professionals -- nicknamed the "Dr. Fauci effect". Furthermore, the pandemic may have limited and altered some career prospects, encouraging more people to consider medical school.<sup>24,25</sup> To alleviate this, medical schools have expanded campus locations. The University of Kentucky Medical School has even taken steps to expand its admitted class size by adding partnership locations where clinical rotations can occur outside the main Lexington campus.<sup>26</sup>

A given year's graduate numbers and retention percentage may overrepresent the number of physicians who will eventually become licensed to practice in Kentucky. Upon graduation, doctors may match with and complete a residency. Often, new doctors match with an out-of-state residency program. Residency can be a critical time for a new doctor's family formation. Planting roots in a community during residency may increase the likelihood that a new doctor will stay out of state if they do not match into a Kentucky residency program. Given the rise in graduates in Kentucky, increasing residency program capacity could be an avenue to achieve higher retention of physicians.

<sup>27</sup>Recent graduates who return to Kentucky following completion of an out-of-state residency or fellowship may retroactively increase the retention rates for 2018; however, these retroactive increases are not anticipated to significantly alter the overall decline in retention depicted in Graph VII-3 or alter the fact that fewer Kentucky graduates are becoming licensed to practice in Kentucky despite increases in graduating class size. The decrease in retention rates presented in Graph VII-3 is not solely attributable to increases in graduating class size.

## VIII. DISPERSION OF IMGS ACROSS THE COMMONWEALTH

IMGs are integral to the healthcare workforce in Kentucky. Most IMGs are foreign-born non-American citizens that graduated from medical schools outside the United States. Although Americans who choose to attend international medical schools are also considered to be IMGs, this section largely focuses on those physicians that are non-citizens and trained outside the United States. Compared to physicians trained in American medical schools, foreign-trained physicians are more likely to practice in lower-income and disadvantaged communities.<sup>28</sup>

Likely, visa programs help incentivize IMGs to address the needs of rural Kentuckians. Approximately 50% of IMGs receive J-1 visa waivers in exchange for their service to more isolated rural areas. This is a boon for underserved communities as the J-1 visa waiver program is tied to health provider shortage areas (HPSAs).<sup>29</sup> The waivers allow IMGs to stay in the country instead of having to leave the U.S. for at least two years following the completion of their residency before being eligible to return.<sup>30</sup>



Figure VIII-1 Country of Medical School for Doctors Licensed in Kentucky in 2022.

Note: The one entry with an unknown medical school was removed from the sample. U.S. and Canada are grouped together as they have a joint accreditation agreement conferred upon a medical school student's graduation licensing

a practitioner in both countries. International would include both Americans that graduated from IMGs and foreignborn individuals that graduated from IMGs.

Using the KBLM licensing board data, slightly more than 1 in 5 licensed doctors in Kentucky are from international locations. This illustrates that IMGs are vital to the supply of Kentucky doctors. Kentucky's percentage of IMGs is slightly less than the national rate of IMG practitioners.<sup>30</sup>

School Name Location **Count of Graduates** Licensed in KY St. George's University Grenada 394 Dow Medical College, University of Karachi Pakistan 234 University of Santo Tomas Philippines 207 Syria University of Damascus 194 American University of the Caribbean School of Medicine Sint Maarten 186 King Edward Medical University Pakistan 139 Osmania Medical College, Osmania University India 121 Universidad Autonoma De Guadalajara, Jalisco Mexico 105 University of the Philippines Manila Philippines 103 American University of Beirut Lebanon 101

 Table VIII-1. Top Ten Colleges that IMGs Licensed in KY Graduated from.

This table describes the ten international colleges from which IMGs licensed in Kentucky have graduated. Grenada, Pakistan, the Philippines, Syria, Sint Maarten, India, Mexico, and Lebanon are countries that have a substantial number of graduates in Kentucky. Identifying that these countries produce the most IMGs for the Commonwealth could be a starting place for recruiting more heavily from these regions.

Figure VIII-2. Percent of Providers that Graduated from an IMG.



Note: This is a map of Kentucky where each county is colored based on the percentage of providers that graduated from an international medical school. The colors are binned by percentages, where white shaded regions indicate that 0% of providers are IMGs, grey shaded is 1 to >25%, light blue shaded is 25% to >50%, medium shaded blue 50% to >75%, and the deepest blue shaded is 75% to 100%.

IMGs provide substantial care to the more rural areas of Kentucky, particularly in the southeastern region, a more rural region of the state; and in western Kentucky, particularly the area around Bowling Green (Warren County). Notably, both Nicholas County and Butler County have the largest percentage of IMGs, with 75% or more of the providers in their counties being IMGs.

# **IX.** CONCLUSION

The healthcare workforce is a vital component of Kentucky's infrastructure, ensuring the health and wellbeing of its citizens. With approximately 184,000 active healthcare professionals registered in the state, these individuals provide a significant service to the Commonwealth. Their work ensures that the other realms of life within Kentucky can flourish, and thus having an adequate workforce is an important component towards a bright, healthy future for the Commonwealth.

This report found a disparity in the number of physicians practicing and licensed in Kentucky in every ADD except Bluegrass and KIPDA when compared to the national rate. Diabetes educators applied behavioral analysts, audiologists, MFTs, mental health counselors, physician assistants, and RTNMTs are also practicing or licensed in Kentucky at a rate worse than the national average. Significant shortages exist within the Buffalo Trace, Kentucky River, Cumberland Valley, Purchase, Pennyrile, and Green River ADDs. For many of these regions, larger metropolitan areas are a greater distance to travel for care, suggesting that residents may face significant health disparities due to a lack of easily accessible providers.

While data indicates that the number of healthcare physicians will likely continue to grow, rapidly growing older population may dramatically increase the need for these individuals beyond the supply. Therefore, the healthcare workforce shortages observed within this report represent an urgent area of concern for Kentucky. By further focusing efforts on growing a vital component to the wellbeing of Kentucky, we create a better community for Kentuckians to live in and thus ensure that Kentucky continues thriving for years to come.

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# **XI. REPORT AUTHORS**

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### SUPPLEMENT

#### Preface

The purpose of this supplement is two-fold: to provide additional detail supporting the data and visualizations published in the 2023 Workforce Capacity main report and to provide a summary of recommended data fields for all licensure boards.

In the main report, the specific rate of each provider type (presented as number of people per provider) is summarized for each Area Development District. Tables 1-25 in this supplement reports provider type-specific rates by county, where applicable. Community health workers were unable to be reported in any aggregate less than the state-level in the main report and thus are not summarized further in the supplement. By-county summaries can be found in Supplement Tables 1-25.

In addition, a list of recommend data fields for licensure boards is presented. These fields are recommended based on elucidated gaps in data required for the Cabinet of Health and Family Services to effectively identify, locate, and categorize practicing providers in Kentucky. The recommended data fields can be found in Supplement Table 26.

# **Table 1.** Advanced Practice Registered Nurses by County

National Rate:	1,159	
County	Provider Count	People per Provider
Adair	27	697 🔻
Allen	14	1,472
Anderson	14	1,689
Ballard	1	7,814
Barren	79	560 🔻
Bath	9	1,409
Bell	37	667 🔻
Boone	154	874 🔻
Bourbon	16	1,268
Boyd	193	251 🔻
Boyle	83	367 🔻
Bracken	4	2,099
Breathitt	20	683 🔻
Breckinridge	15	1,356
Bullitt	52	1,572
Butler	29	428 🔻
Caldwell	22	575 🔻
Calloway	69	540 🔻
Campbell	106	878 🔻
Carlisle	1	4,821
Carroll	11	983 🔻
Carter	27	993 🔻
Casey	12	1,322
Christian	87	832 🔻
Clark	66	556 🔻
Clay	51	402 🔻
Clinton	13	721 🔻
Crittenden	10	900 🔻
Cumberland	6	1,004 🔻
Daviess	238	431 🔻
Edmonson	8	1,521
Elliott	5	1,483
Estill	13	1,089 🔻
Fayette	1,304	246 🔻
Fleming	13	1,154 🔻
Floyd	94	384 🔻
Franklin	74	694 🔻
Fulton	2	3,254
Gallatin	7	1,242
Garrard	7	2,431
Grant	6	4,153
Graves	46	800 🔻
Grayson	34	775 🔻
Green	11	1,013 🔻
Greenup	34	1,059 🔻
Hancock	5	1,810
Hardin	217	508 🔻
Harlan	34	792 🔻
Harrison	32	584 🔻
Hart	16	1,200
Henderson	64	705 🔻
Henry	6	2,615
Hickman	3	1,510
Hopkins	107	425 🔻
Jackson	7	1,861
Jefferson	2,132	366 🔻
Jessamine	35	1,515 🔺
Johnson	21	1,085
Kenton	438	384 🔻
Knott	10	1,451
Knox	61	498 🔻
Larue	12	1,231
Laurel	114	545 🔻
Lawrence	50	325 🔻

National Rate:	1.159		
County	Provider Count	People per	Provider
Lee	7	1,038	•
Leslie	16	664	•
Letcher	31	703	V
Lewis	8	1,638	<b>▲</b>
Lincoln	20	1,216	<b>▲</b>
Livingston	17	529	V
Logan	25	1,093	V
Lyon	12	725	
McCracken	292	231	<b>_</b>
McCreary	21	812	
McLean	145	1,312	<b>_</b>
Madison	145	636	<u> </u>
Magoffin	14	844	<u>.</u>
Marion	26	1055	-
Marshall	30	1,055	
Mason	41	1,200	•
Maada	41	417	
Menifee	1/	2 050	
Mercer	13	2,030	-
Metcalfe	13	2 569	•
Monroe	5	2,50)	-
Montgomery	52	540	-
Morgan	15	918	<b>V</b>
Muhlenberg	46	674	×.
Nelson	72	645	V
Nicholas	4	1.879	À
Ohio	50	477	V
Oldham	65	1,040	•
Owen	3	3,720	
Owsley	6	682	▼
Pendleton	4	3,656	<b>A</b>
Perry	145	196	•
Pike	153	385	V
Powell	13	1,004	V
Pulaski	158	410	•
Robertson	0		
Rockcastle	17	951	•
Rowan	56	440	V
Russell	21	853	
Scott	47	1,197	<b>▲</b>
Shelby	47	1,011	
Simpson	19	1,017	V
Spencer	11	1,751	
Taylor	52	499	<b>•</b>
Todd	15	814	
Trigg	15	938	
Trimble	2	4,251	<b>_</b>
Union	16	862	<u>.</u>
warren Waahimataa	322	414	-
w asnington	15	(97	
wayne Wabstar	51	03/	
webster	0	2,100	-
Wolfo	114	521	
Woodford	1	952	<b>*</b>
Statewide	22	511	<b>V</b>
Statewide	0,000	500	
Out of State	20/		

#### Table 2. Audiologists by County

National Rate:	25,077		
County	<b>Provider Count</b>	People pe	er Provider
Adair	0		
Allen	0		
Anderson	0		
Ballard	0		
Barren	0		
Bath	0		
Bell	0		
Boone	2	67,300	<b>▲</b>
Bourbon	1	20,281	V
Boyd	4	12,112	V
Boyle	2	15,235	V
Bracken	0		
Breathitt	0		
Breckinridge	0		
Bullitt	0		
Butler	0		
Caldwell	0		
Calloway	0		
Campbell	3	31,008	<b>A</b>
Carlisle	0		
Carroll	0	0.000	
Carter	1	26,820	
Casey	0	0 6 4 0 0	
Christian	2	36,189	
Clark	0		
Clay	0		
Clinton	0		
Crittenden	0		
Cumberland	0	20,400	-
Daviess	5	20,498	•
Edmonson	0		
Elliott	0		
Estill	42	7 65 1	-
Fayette	42	7,051	•
Floyd	0		
Floyd	0	17 106	•
Fulton	0	17,100	•
Gallatin	0		
Garrard	0		
Grant	0		
Graves	0		
Graves	1	26 351	
Green	0	20,351	-
Greenup	0		
Hancock	0		
Hardin	3	36.711	
Harlan	0	,	
Harrison	0		
Hart	0		
Henderson	1	45,102	<b>A</b>
Henry	0		
Hickman	0		
Hopkins	2	22,716	V
Jackson	0		
Jefferson	51	15,303	V
Jessamine	0		
Johnson	0		
Kenton	8	21,033	•
Knott	0		
Knox	1	30,367	<b>A</b>
Larue	0		
Laurel	0		
Lawrence	0		

National Rate:	25,077		
County	Provider Count	People pe	r Provider
Lee	0		
Leslie	0		
Letcher	0		
Lewis	0		
Lincoln	0		
Livingston	0		
Logan	0		
Lyon	0		
McCracken	6	11,232	V
McCreary	0		
McLean	0		
Madison	3	30,731	
Magoffin	0		
Marion	1	19,556	
Marshall	0		
Martin	0		
Mason	1	17,103	V
Meade	0		
Menifee	0		
Mercer	0		
Metcalfe	0		
Monroe	0		
Montgomery	0		
Morgan	0		
Muhlenberg	0		
Nelson	1	46,440	
Nicholas	0		
Ohio	0		
Oldham	0		
Owen	0		
Owsley	0		
Pendleton	0		
Perry	1	28,421	<b></b>
Pike	1	58,914	
Powell	0		
Pulaski	2	32,359	
Robertson	0		
Rockcastle	0		
Rowan	1	24,654	
Russell	0		
Scott	1	56,267	
Shelby	1	47,523	
Simpson	1	19,324	•
Spencer	0		
Taylor	1	25,948	<b>A</b>
Todd	0		
Trigg	0		
Trimble	0		
Union	0	10.00	_
Warren	7	19,031	•
Washington	0		
wayne	0		
Webster	0	10,100	-
whitley	3	12,193	•
Wolle	0		
woodford	0	07.571	
	163	27,571	
Out of State	28		
Unknown	92		

#### Table 3. Chiropractors by County

National Rate:	9,272		
County	Provider Count	People pe	r Provider
Adair	3	6,277	
Allen	5	4.121	V
Anderson	7	3,378	•
Ballard	2	3.907	•
Barren	9	4.920	•
Bath	0	.,, = -	
Bell	5	4,935	•
Boone	38	3 542	<b>V</b>
Bourbon	2	10 141	
Boyd	16	3 028	V
Boyle	10	2 539	¥
Bracken	0	2,000	•
Breathitt	2	6.826	•
Breckinridge	3	6 782	¥
Bullitt	8	10 216	
Butler	1	12 413	-
Caldwall	2	4 214	-
Callower	0	4,214	¥
Camphall	9	4,143	-
Carliala	24	3,870	-
Carnisle	1	4,821	-
Carroll	3	3,603	
Carter	2	13,410	<b>_</b>
Casey	4	3,966	
Christian	1	10,340	<b>_</b>
Clark	4	9,179	•
Clay	0	4 - 10 - 1	_
Clinton	2	4,686	<b>•</b>
Crittenden	2	4,499	
Cumberland	1	6,023	
Daviess	19	5,394	
Edmonson	0		
Elliott	0		
Estill	1	14,157	<b>A</b>
Fayette	68	4,726	V
Fleming	1	14,996	<b>A</b>
Floyd	3	12,042	<b></b>
Franklin	14	3,666	V
Fulton	1	6,507	
Gallatin	1	8,694	V
Garrard	1	17,018	<b></b>
Grant	5	4,984	V
Graves	3	12,265	
Grayson	3	8,784	V
Green	1	11,141	
Greenup	7	5,142	•
Hancock	1	9,050	V
Hardin	14	7.867	•
Harlan	0	.,	
Harrison	3	6.230	•
Hart	2	9.597	
Henderson	11	4 100	-
Henry	6	2 615	V
Hickman	0	2,015	•
Honkins	7	6 4 9 0	V
Jackson	0	0,470	*
Jefferson	174	4 485	
Iessamine	0	5 801	
Johnson	7	22 704	¥
Kenton	20	5 202	-
Kenton	29	5,802	*
Knou	0	20.267	
<b>N</b> IIOX	1	50,507	
Larue	1	14,/68	-
	/	8,870	<b>V</b>
Lawrence	2	8,137	•

CountyProvider CoLee0Leslie0Letcher1Lewis0Lincoln1Livingston0Logan3Lyon2McCracken21McCracken21McCreary1Madison17Magoffin1Marion2Marshall10Martin1Mason6	People per Provider         21,784       ▲         24,314       ▲         9,106       ▼         4,350       ▼         3,209       ▼         17,044       ▲         9,182       ▼         5,423       ▼         11,818       ▲
Lee0Leslie0Letcher1Lewis0Lincoln1Livingston0Logan3Lyon2McCracken21McCreary1McLean1Madison17Magoffin1Marion2Marshall10Martin1Mason6	21,784 ▲ 24,314 ▲ 9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Leslie0Letcher1Lewis0Lincoln1Livingston0Logan3Lyon2McCracken21McCreary1McLean1Matison17Magoffin1Marion2Marshall10Martin1Mason6	21,784 ▲ 24,314 ▲ 9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Letcher1Lewis0Lincoln1Livingston0Logan3Lyon2McCracken21McCreary1McLean1Matison17Magoffin1Marion2Marshall10Martin1Mason6	21,784 ▲ 24,314 ▲ 9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Lewis0Lincoln1Livingston0Logan3Lyon2McCracken21McCreary1McLean1Matison17Magoffin1Marion2Marshall10Martin1Mason6	24,314 ▲ 9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Lincoln1Livingston0Logan3Lyon2McCracken21McCreary1McLean1Matison17Magoffin1Marion2Marshall10Martin1Mason6	24,314 ▲ 9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Livingston0Logan3Lyon2McCracken21McCreary1McLean1Madison17Magoffin1Marion2Marshall10Martin1Mason6	9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Logan3Lyon2McCracken21McCreary1McLean1Maison17Magoffin1Marion2Marshall10Martin1Mason6	9,106 ▼ 4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
Lyon2McCracken21McCreary1McLean1Magoffin1Marion2Marshall10Martin1Mason6	4,350 ▼ 3,209 ▼ 17,044 ▲ 9,182 ▼ 5,423 ▼ 11,818 ▲ 9,778 ▲
McCracken21McCreary1McLean1Magoffin1Marion2Marshall10Martin1Mason6	3,209 ↓ 17,044 ▲ 9,182 ↓ 5,423 ↓ 11,818 ▲ 9,778 ▲
McCreary1McLean1Madison17Magoffin1Marion2Marshall10Martin1Mason6	17,044 9,182 5,423 11,818
McLean1Madison17Magoffin1Marion2Marshall10Martin1Mason6	9,182 V 5,423 V 11,818
Machson17Magoffin1Marion2Marshall10Martin1Mason6	5,425 V 11,818 A 9,778 A
Magorini 1 Marion 2 Marshall 10 Martin 1 Mason 6	0.778
Marion 2 Marshall 10 Martin 1 Mason 6	
Martin 1 Mason 6	2,170
Mason 6	11 30/
Mason 0	2 851
Meade 2	14 868
Menifee 0	14,808
Mercer 4	5 618
Metcalfe 2	5 138
Monroe 0	5,150 (
Montgomery 5	5.617
Morgan 1	13.772
Muhlenberg 3	10.337
Nelson 9	5.160
Nicholas 0	- ,
Ohio 2	11,931
Oldham 15	4,506 🔻
Owen 1	11,160
Owsley 0	
Pendleton 1	14,625
Perry 5	5,684 🔻
Pike 8	7,364 🔻
Powell 1	13,050
Pulaski 10	6,472 🔻
Robertson 0	
Rockcastle 2	8,084 🔻
Rowan 5	4,931 🔻
Russell 3	5,970
Scott 9	6,252
Shelby 7	6,789
Simpson 2	9,662
Spencer 0	1 225
Taylor 6	4,325
Trimble 1	8 502
I linion 2	8,3U2 V 4,505 V
Worron 22	4,393 V 5 702 V
Washington 2	5,192 V 5,070 V
Wayne 2	9 872
Webster 1	12 994
Whitley 9	4 572
Wolfe 0	₹,572 ₹
Woodford 10	2 676
<b>Total</b> 701	4.V/V
Out of State 30	5 682
Unknown 73	5,682

#### Table 4. Community health workers by County

National Rate:	5,442		
County	Provider Count	People pe	r Provider
Adair	0		
Allen	0		
Anderson	0		
Ballard	0		
Barren	0		
Bath	2	6,340	
Bell	0		
Boone	0		
Bourbon	0		
Boyd	1	48,447	
Boyle	0		
Bracken	0		
Breathitt	0		
Breckinridge	0		
Bullitt	0		
Butler	0		
Caldwell	0		
Calloway	0		
Campbell	0		
Carlisle	1	4,821	
Carroll	0		
Carter	0		
Casey	0		
Christian	1	72,377	
Clark	0		
Clay	1	20,484	
Clinton	0		
Crittenden	0		
Cumberland	0		
Daviess	0		
Edmonson	0		
Elliott	1	7,414	
Estill	0	20.005	
Fayette	16	20,085	
Fleming	0		_
Floyd	1	5,161	
Franklin	3	17,106	<b>A</b>
Fulton	0		
Gallatin	0		
Garrard	0		
Grant	0		
Graves	0		
Grayson	0		
Greenup	0		
Hancock	0		
Hardin	0		
Harlan	1	26.021	
Harrison	0	20,921	-
Hart	0		
Henderson	1	45 102	
Henry	0	+5,102	-
Hickman	0		
Honkins	0		
Jackson	0		
Jefferson	34	22 954	
Jessamine	0	<i>22,73</i> 7	-
Johnson	1	22 794	
Kenton	0	22,194	-
Knott	1	14.506	
Knox	0	1,000	_
Larue	0		
Laurel	4	15.523	
Lawrence	0	.,	

National Rate:	5,442		
County	Provider Count	People pe	r Provider
Lee	1	7,263	
Leslie	1	10,622	<b></b>
Letcher	0		
Lewis	2	6,552	<b>A</b>
Lincoln	0		
Livingston	1	8,989	<b>A</b>
Logan	0		
Lyon	0		
McCracken	5	13,479	<b>A</b>
McCreary	0		
McLean	0	16.005	
Madison	2	46,097	<b>A</b>
Magoffin	1	11,818	
Marion	0		
Marshall	0		
Mason	1	17 102	
Maada	1	17,105	-
Monifoo	0		
Mercer	0		
Metcalfe	0		
Monroe	0		
Montgomery	4	7 021	
Morgan	0	7,021	-
Muhlenberg	0		
Nelson	0		
Nicholas	Ő		
Ohio	0		
Oldham	0		
Owen	0		
Owsley	0		
Pendleton	0		
Perry	28	1,015	V
Pike	0		
Powell	0		
Pulaski	0		
Robertson	0		
Rockcastle	0		
Rowan	4	6,164	<b>A</b>
Russell	0		
Scott	0		
Shelby	0		
Simpson	0		
Spencer	0		
Taylor	0		
Todd	0		
Trigg	0		
Trimble	0		
Union	0	66.600	
warren Waabin	2	66,608	
w asnington	0		
wayne	0		
webster	0	26 570	
whitley	1	36,578	
Woodford	0		
Total	129	25.110	
10tal	128	35,110	
Unknown	0		
UNKNOWN	3		

#### Table 5. Dentists by County

National Rate:	2,662		
County	<b>Provider Count</b>	People per Provider	
Adair	4	4,708	
Allen	3	6,868	
Anderson	8	2,956	
Ballard	1	7,814	
Barren	15	2,952	
Bath	2	6,340	
Bell	14	1,762	
Boone	86	1,565 🔻	
Bourbon	13	1,560 🔻	
Boyd	25	1,938 🔻	
Boyle	22	1,385 🔻	
Bracken	2	4,197 🔺	
Breathitt	3	4,551 🔺	
Breckinridge	3	6,782 🔺	
Bullitt	22	3,715 🔺	
Butler	0		
Caldwell	5	2,528 🔻	
Calloway	13	2,869	
Campbell	42	2,215 🔻	
Carlisle	2	2,411 🔻	
Carroll	0		
Carter	3	8,940	
Casey	3	5,288	
Christian	28	2,585 🔻	
Clark	20	1,836 🔻	
Clay	5	4,097	
Clinton	2	4,686	
Crittenden	0		
Cumberland	5	1,205 🔻	
Daviess	59	1,737 🔻	
Edmonson	2	6,083	
Elliott	2	3,707	
Estill	5	2,831	
Fayette	434	740 🔻	
Fleming	3	4,999 🔺	
Floyd	24	1,505 🔻	
Franklin	30	1,711 🔻	
Fulton	1	6,507	
Gallatin	1	8,694 🔺	
Garrard	1	17,018 🔺	
Grant	7	3,560	
Graves	11	3,345 🔺	
Grayson	7	3,764 🔺	
Green	4	2,785 🔺	
Greenup	9	4,000	
Hancock	6	1,508 🔻	
Hardin	80	1,377 🔻	
Harlan	8	3,365 🔺	
Harrison	7	2,670	
Hart	5	3,839	
Henderson	18	2,506	
Henry	4	3,923	
Hickman	1	4,529	
Hopkins	15	3,029	
Jackson	2	6,515	
Jefferson	708	1,102	
Jessamine	18	2,945	
Johnson	3	7,598	
Kenton	76	2,214	
Knott	4	3,627	
Knox	9	3,374	
Larue	1	14,768	
Laurel	23	2,700	
Lawrence	4	4,069	

National Rate:	2,662		
County	Provider Count	People pe	r Provider
Lee	1	7,263	
Leslie	4	2,656	•
Letcher	6	3,631	
Lewis	5	2,621	V
Lincoln	2	12,157	<b>A</b>
Livingston	1	8,989	<b>A</b>
Logan	6	4,553	
Lyon	2	4,350	<b>_</b>
McCracken	59	1,142	•
McCreary	1	17,044	_ <b>_</b>
McLean	1	9,182	
Madison	47	1,962	
Magoffin	3	3,939	<b>A</b>
Marion	5	3,911	<b>A</b>
Marshall	9	3,518	
Mason	12	11,394	-
Masda	12	5.047	
Menifee	5	6 1 / 0	-
Mercer	5	1 49	-
Metcalfe	2	5 1 3 8	<b>.</b>
Monroe	5	2 254	-
Montgomery	13	2,254	¥
Morgan	3	4 591	<b>Å</b>
Muhlenberg	8	3,876	Ā.
Nelson	25	1.858	<b>T</b>
Nicholas	1	7.517	
Ohio	6	3.977	
Oldham	31	2,180	•
Owen	4	2,790	<b></b>
Owsley	2	2,047	•
Pendleton	1	14,625	<b></b>
Perry	16	1,776	V
Pike	36	1,637	•
Powell	4	3,263	<b></b>
Pulaski	43	1,505	•
Robertson	1	2,196	V
Rockcastle	2	8,084	
Rowan	13	1,896	
Russell	4	4,477	
Scott	21	2,679	<b>_</b>
Shelby	23	2,066	
Simpson	6	3,221	<b>A</b>
Spencer	5	3,851	<b>A</b>
T aylor	9	2,883	<b>A</b>
Toda	0	7.024	
Trimble	ے 1	8 502	
Union	5	0,302	<b>A</b>
Warren	85	1 567	-
Washington	6	1,007	¥
Wayne	5	3 949	
Webster	1	12,994	-
Whitley	22	1.663	V
Wolfe	1	6,666	<b></b>
Woodford	10	2,676	
Total	2,541	1,769	V
Out of State	523	-,	
Unknown	19		

#### Table 6. Diabetes educators by County

National Rate:	5,947		
County	Provider Count	People pe	r Provider
Adair	0		
Allen	1	20,604	<b></b>
Anderson	0		
Ballard	0		
Barren	1	44,277	<b></b>
Bath	0		
Bell	0		
Boone	4	33,650	<b>▲</b>
Bourbon	0		
Boyd	1	48,447	
Boyle	0		
Bracken	0		
Breathing	0	20.245	
Bullitt	0	20,545	<b></b>
Butler	0		
Caldwell	1	12 641	
Calloway	0	12,041	-
Campbell	5	18 605	
Carlisle	1	4.821	T
Carroll	0	.,	
Carter	0		
Casey	0		
Christian	1	72,377	<b></b>
Clark	0		
Clay	1	20,484	<b></b>
Clinton	2	4,686	V
Crittenden	0		
Cumberland	0		
Daviess	3	34,163	<b>A</b>
Edmonson	0		
Elliott	0		
Estill	0		
Fayette	19	16,913	
Fleming	0		
Floyd	0	12.920	
FIGIIKIIII	4	12,850	-
Gallatin	0		
Garrard	1	17.018	
Grant	0	17,010	-
Graves	3	12.265	
Gravson	0	,	
Green	0		
Greenup	0		
Hancock	0		
Hardin	5	22,027	<b>A</b>
Harlan	0		
Harrison	0		
Hart	0		
Henderson	0		
Henry	0		
Hickman	0		
Hopkins	0		
Jackson	0	07.070	
Jefferson	28	27,873	<b>A</b>
Jessamine	5	17,672	<b>A</b>
Jonnson	1	18 606	
Kenton	9	18,090	
Knox	1	30 367	-
Larue	1	30,307	-
Laurel	4	15 523	
T	-	10,020	-

National Rate:	5.947		
County	Provider Count	People pe	er Provider
Lee	1	7,263	
Leslie	0		
Letcher	1	21,784	<b>A</b>
Lewis	2	6,552	<b>A</b>
Lincoln	0		
Livingston	0		
Logan	1	27,319	
Lyon	0	0.000	
McCracken	1	9,628	<b>A</b>
McCreary	1	17,044	
McLean	0	20 721	•
Magaffin	3	50,751	-
Magonin	1	11,010	
Marshall	2	15 831	
Martin	0	15,051	-
Mason	1	17 103	
Meade	0	17,105	-
Menifee	Ő		
Mercer	1	22,470	
Metcalfe	0	,	
Monroe	0		
Montgomery	3	9,361	<b>A</b>
Morgan	0		
Muhlenberg	0		
Nelson	1	46,440	<b></b>
Nicholas	0		
Ohio	1	23,861	
Oldham	4	16,897	
Owen	0		
Owsley	0		
Pendleton	0		
Perry	0	00.457	
Pike	2	29,457	
Powell	0	21 572	•
Pulaski	3	21,372	<b></b>
Pockcastle	1	16 167	
Rowan	0	10,107	-
Russell	0		
Scott	0		
Shelby	2	23,762	
Simpson	0		
Spencer	0		
Taylor	2	12,974	<b>A</b>
Todd	0		
Trigg	1	14,067	<b>A</b>
Trimble	0		
Union	0		
Warren	3	44,405	<b>A</b>
Washington	0		
Wayne	1	19,743	
Webster	0		
Whitley	5	7,316	
wolfe	1	6,666	•
Woodford	152	20 5 67	•
	152	29,567	
Out of State	15		
Unknown	134		

#### Table 7. Dietitians and nutritionists by County

National Rate:	4,978		
County	Provider Count	People pe	r Provider
Adair	0		
Allen	4	5,151	<b></b>
Anderson	1	23,646	<b>A</b>
Ballard	0		
Barren	5	8,855	<b>A</b>
Bath	1	12,680	
Bell	0	7.010	
Boone	1/	7,918	<b>.</b>
Bourbon	1	20,281	<b>.</b>
Boyle	3	10,050	-
Bracken	0	10,150	-
Breathitt	2	6.826	
Breckinridge	1	20.345	
Bullitt	4	20,432	
Butler	0	- / -	
Caldwell	0		
Calloway	8	4,661	V
Campbell	8	11,628	<b></b>
Carlisle	0		
Carroll	0		
Carter	0		
Casey	0	10.070	
Christian	6	12,063	· •
Clark	4	9,179	<b>A</b>
Clay	1	20,484	
Crittenden	0	1 100	•
Cumberland	2	4,499	•
Daviess	19	5 394	
Edmonson	1	12 165	<b>A</b>
Elliott	0	12,100	-
Estill	2	7,079	<b></b>
Fayette	116	2,770	•
Fleming	0		
Floyd	3	12,042	<b>A</b>
Franklin	10	5,132	<b>A</b>
Fulton	0		
Gallatin	0		
Garrard	1	17,018	· •
Grant	1	24,918	<b>_</b>
Graves	ð 2	4,000	•
Green	ے 1	11 1/1	
Greenup	3	11,141	
Hancock	1	9.050	Ā
Hardin	12	9,178	Ā
Harlan	3	8,974	<b></b>
Harrison	1	18,690	<b></b>
Hart	1	19,194	<b></b>
Henderson	2	22,551	<b>A</b>
Henry	0		
Hickman	0		_
Hopkins	11	4,130	•
Jackson	0	C 1 4 5	
Jefferson	12/	0,145	<b>A</b>
Jessamine	4	13,254	<b>A</b>
Joinison	5 27	6 222	
Knott	0	0,232	-
Knox	1	30 367	
Larue	0	50,507	-
Laurel	6	10,348	
Lawrence	1	16,274	

National Rate:	4,678		
County	Provider Count	People pe	r Provider
Lee	0		
Leslie	1	10,622	<b></b>
Letcher	0		
Lewis	0		
Lincoln	0		
Livingston	1	8,989	
Logan	0		
Lyon	1	8,700	
McCracken	19	3,547	•
McCreary	0		
McLean	0	0.010	
Madison	10	9,219	
Magomn	0	6.510	•
Marion	3	0,519	
Marshall	3	10,554	
Mason	1	11,394	-
Masda	4	4,270	
Menifee	2	14,000	<b></b>
Mercer	2	11 235	
Metcalfe	0	11,235	-
Monroe	1	11 269	
Montgomery	2	14 042	<b>.</b>
Morgan	0	14,042	-
Muhlenberg	3	10.337	
Nelson	3	15,480	
Nicholas	0	10,100	_
Ohio	2	11.931	
Oldham	6	11,264	<b></b>
Owen	0	, i	
Owsley	0		
Pendleton	1	14,625	
Perry	11	2,584	V
Pike	6	9,819	<b></b>
Powell	2	6,525	<b>A</b>
Pulaski	8	8,090	<b>A</b>
Robertson	0		
Rockcastle	4	4,042	V
Rowan	4	6,164	
Russell	2	8,955	
Scott	2	28,134	<b>A</b>
Shelby	3	15,841	<b>A</b>
Simpson	0		
Spencer	0	0 5 10	
Taylor	3	8,649	<b>A</b>
Todd	1	12,206	<b>A</b>
1 rigg	0		
Immole	0	12 706	
Union	1	13,/80	
warren Washington	28	4,/38	
washington	<u>ک</u>	3,979	<b>A</b>
Webster	1	19,745	<b>A</b>
Whitley	1	12,994	<b>A</b>
Wolfe	0	12,193	-
Woodford	4	6 690	
Total	59/	7.566	
Out of State	1/2	7,500	
Unknown	922		

#### Table 8. Licensed clinical social workers by County

National Rate:	2,917		
County	<b>Provider Count</b>	People per Provide	er
Adair	8	2,354	
Allen	6	3,434	
Anderson	8	2,956	
Ballard	3	2,605 🔻	
Barren	14	3,163	
Bath	4	3,170	
Bell	2	12,337	
Boone	68	1,9/9	
Bourbon	0	3,380	
Boya	25	1,303	
Bracken	1	8 39/	
Breathitt	10	1 365	
Breckinridge	9	2.261	
Bullitt	22	3.715	
Butler	4	3.103	
Caldwell	3	4,214	
Calloway	6	6,215	
Campbell	51	1,824 🔻	
Carlisle	0		
Carroll	3	3,603	
Carter	12	2,235 🔻	
Casey	5	3,173	
Christian	42	1,723	
Clark	19	1,932	
Clay	6	3,414	
Clinton	1	9,372	
Crittenden	4	2,249	
Daviasa	2	3,012	
Edmonson	19	6.082	
Elliott	1	7 414	
Estill	0	/,+1+	
Favette	448	717	
Fleming	2	7.498	
Floyd	20	1,806	
Franklin	26	1,974 🔻	
Fulton	1	6,507 🔺	
Gallatin	2	4,347 🔺	
Garrard	4	4,255	
Grant	7	3,560	
Graves	11	3,345	
Grayson	13	2,027	
Green	6	1,857	
Greenup	10	3,600	
Hancock	102	4,525	
Harlan	6	1,080	
Harrison	3	6,230	
Hart	1	19 194	
Henderson	19	2.374	
Henry	4	3.923	
Hickman	0	-,	
Hopkins	17	2,672	
Jackson	4	3,257	
Jefferson	864	903 🔻	
Jessamine	50	1,060 🔻	
Johnson	10	2,279	
Kenton	94	1,790	
Knott	7	2,072	
Knox	4	7,592	
Larue	1	2,110	
Lauren	16	3,881	
Lawrence	4	4.009	

National Rate:	2.917		
County	Provider Count	People pe	r Provider
Lee	1	7,263	
Leslie	3	3,541	<b></b>
Letcher	8	2,723	•
Lewis	2	6,552	<b></b>
Lincoln	6	4,052	<b></b>
Livingston	1	8,989	<b></b>
Logan	7	3,903	<b></b>
Lyon	0		
McCracken	30	2,246	•
McCreary	3	5,681	
McLean	1	9,182	
Madison	71	1,299	•
Magoffin	2	5,909	
Marion	9	2,173	V
Marshall	12	2,639	
Martin	2	5,697	
Mason	7	2,443	
Meade	5	5,947	<b></b>
Menifee	2	3,075	<b></b>
Mercer	17	1,322	•
Metcalfe	3	3,425	<b></b>
Monroe	1	11,269	<b>▲</b>
Montgomery	21	1,337	V
Morgan	1	13,772	<b></b>
Muhlenberg	8	3,876	<b></b>
Nelson	28	1,659	V
Nicholas	1	7,517	<b></b>
Ohio	9	2,651	•
Oldham	58	1,165	V
Owen	2	5,580	<b>▲</b>
Owsley	1	4,094	<b></b>
Pendleton	4	3,656	
Perry	16	1,776	V
Pike	14	4,208	<b>▲</b>
Powell	4	3,263	
Pulaski	31	2,088	V
Robertson	0		
Rockcastle	3	5,389	<b>▲</b>
Rowan	21	1,174	V
Russell	8	2,239	V
Scott	39	1,443	V
Shelby	22	2,160	V
Simpson	7	2,761	V
Spencer	14	1,375	V
Taylor	16	1,622	V
Todd	4	3,052	
Trigg	8	1,758	V
Trimble	0		
Union	2	6,893	
Warren	123	1,083	V
Washington	3	3,986	<b>A</b>
Wayne	11	1,795	•
Webster	2	6,497	<b></b>
Whitley	22	1,663	•
Wolfe	5	1,333	<b>V</b>
Woodford	34	787	V
Total	2,956	1,520	
Out of State	674		
Unknown	5		

#### Table 9. Psychologists by County

National Rate:	5,714		
County	Provider Count	People pe	r Provider
Adair	2	9,416	
Allen	0	ŕ	
Anderson	0		
Ballard	0		
Barren	4	11,069	<b>A</b>
Bath	2	6,340	
Bell	0		
Boone	15	8,973	
Bourbon	1	20,281	<b></b>
Boyd	14	3,461	V
Boyle	8	3,809	
Bracken	0		
Breathitt	2	6,826	<b>A</b>
Breckinridge	1	20,345	<b>A</b>
Bullitt	4	20,432	<b>A</b>
Butler	0		
Caldwell	0		
Calloway	9	4,143	•
Campbell	12	7,752	<b>A</b>
Carlisle	0		
Carroll	0		
Carter	0		
Casey	0		
Christian	16	4,524	V
Clark	3	12,239	
Clay	0		
Clinton	0		
Crittenden	0		
Cumberland	0		
Daviess	11	9,317	
Edmonson	1	12,165	<b>A</b>
Elliott	1	7,414	
Estill	0	4 9 - 9	_
Fayette	172	1,868	•
Fleming	0		_
Floyd	/	5,161	
Franklin	11	4,665	•
Fulton	0	9 (04	•
Gallann	1	8,694	<b>A</b>
Garrard	0	10.450	•
Grant	1	12,459	
Graves	1	20,790	
Green	0	0,704	-
Greenup	0		
Hancock	0		
Hardin	18	6.119	
Harlan	0	0,117	-
Harrison	0		
Hart	1	19,194	
Henderson	1	45,102	
Henry	0	-,	
Hickman	0		
Hopkins	3	15,144	
Jackson	0		
Jefferson	294	2,655	V
Jessamine	8	6,627	<b>A</b>
Johnson	0		
Kenton	27	6,232	<b>A</b>
Knott	0		
Knox	1	30,367	<b>A</b>
Larue	0		
Laurel	3	20,697	<b>A</b>
Lawrence	0		

National Rate:	5,714		
County	Provider Count	People pe	r Provider
Lee	0		
Leslie	0		
Letcher	1	21,784	<b></b>
Lewis	0		
Lincoln	0		
Livingston	0		
Logan	0		
Lyon	2	4,350	•
McCracken	17	3,964	V
McCreary	1	17,044	<b>A</b>
McLean	0		
Madison	20	4,610	V
Magoffin	0		
Marion	1	19,556	<b>A</b>
Marshall	1	31,662	<b>A</b>
Martin	0		
Mason	4	4,276	
Meade	2	14,868	<b></b>
Menifee	2	3,075	
Mercer	2	11,235	<b>A</b>
Metcalfe	0		
Monroe	0		
Montgomery	7	4,012	V
Morgan	3	4,591	
Muhlenberg	0		
Nelson	5	9,288	<b>A</b>
Nicholas	0		
Ohio	0		
Oldham	13	5,199	
Owen	0		
Owsley	0		
Pendleton	0		
Perry	10	2,842	V
Pike	4	14,729	<b>A</b>
Powell	1	13,050	<b>A</b>
Pulaski	9	7,191	<b>A</b>
Robertson	0		
Rockcastle	0		
Rowan	8	3,082	V
Russell	0		
Scott	6	9,378	
Shelby	4	11,881	
Simpson	0		
Spencer	0		
Taylor	2	12,974	<b>A</b>
Todd	0		
Trigg	1	14,067	<b>A</b>
Trimble	0		
Union	0		_
Warren	31	4,297	•
Washington	0		
Wayne	1	19,743	
Webster	0		_
Whitley	7	5,225	<b>_</b>
Wolfe	2	3,333	•
Woodford	1	26,758	<b>_</b>
Total	827	5,434	
Out of State	64		
Unknown	580		

Table 10	. Marriage	and family tl	herapists by	County
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National Rate:	6,058		
County	<b>Provider Count</b>	People pe	r Provider
Adair	2	9,416	<b></b>
Allen	0		
Anderson	0		
Ballard	0		
Barren	4	11,069	<b>A</b>
Bath	0		
Bell	0		
Boone	3	44,866	<b>▲</b>
Bourbon	0		
Boyd	0		
Boyle	3	10,156	<b>A</b>
Bracken	0		
Breathitt	0		
Breckinridge	0		
Bullitt	10	8,173	
Butler	0		
Caldwell	0		
Calloway	0		
Campbell	2	46,512	<b>A</b>
Carlisle	0		
Carroll	0		
Carter	0		
Casey	0		
Christian	2	36,189	
Clark	2	18,358	<b>A</b>
Clay	1	20,484	<b>A</b>
Clinton	0		
Crittenden	0		
Cumberland	1	6,023	
Daviess	8	12,811	
Edmonson	0		
Elliott	0		
Estill	0		
Fayette	41	7,838	
Fleming	0		
Floyd	3	12,042	
Franklin	4	12,830	<b>A</b>
Fulton	0		
Gallatin	0		
Garrard	0		
Grant	0		
Graves	0		
Grayson	0		
Green	0		
Greenup	0		
Hancock	1	9,050	<b>A</b>
Hardin	11	10,012	<b>A</b>
Harlan	0		
Harrison	0		
Hart	1	19,194	
Henderson	3	15,034	<b>A</b>
Henry	1	15,691	
Hickman	0		
Hopkins	1	45,432	
Jackson	0		_
Jefferson	233	3,350	•
Jessamine	7	7,574	<b>A</b>
Johnson	0		
Kenton	9	18,696	<b>A</b>
Knott	0		
Knox	1	30,367	<b>A</b>
Larue	2	7,384	
Laurel	0		
Lawrence	1	16,274	

National Rate:	6,058		
County	<b>Provider Count</b>	People pe	r Provider
Lee	0		
Leslie	0		
Letcher	0		
Lewis	0		
Lincoln	0		
Livingston	0		
Logan	1	27,319	
Lyon	0		
McCracken	2	33,697	<b>A</b>
McCreary	0		
McLean	0		
Madison	1	92,194	
Magoffin	0		
Marion	0		
Marshall	0		
Martin	0		
Mason	1	17,103	<b>A</b>
Meade	1	29,735	<b>A</b>
Menifee	0		
Mercer	0		
Metcalfe	0		
Monroe	0		
Montgomery	3	9,361	
Morgan	0		
Muhlenberg	0		
Nelson	2	23,220	
Nicholas	0		
Ohio	0		
Oldham	8	8,448	
Owen	0		
Owsley	0		
Pendleton	0		
Perry	0		
Pike	0		
Powell	0		
Pulaski	4	16,179	
Robertson	0		
Rockcastle	0		
Rowan	0		
Russell	0	1100	
Scott	4	14,067	<b>A</b>
Shelby	4	11,881	<b>A</b>
Simpson	1	19,324	<b>A</b>
Spencer	0	10.074	
1 aylor Todd	2	12,974	<b>A</b>
1 Odd	0	14.067	
Trimble	1	14,067	<b>A</b>
Union	0		
Warran	21	6211	•
Washington	21	0,544	<b>A</b>
Wayna	1	11,937	-
Wabster	0		
Whitley	0	26 570	
Wolfe	1	30,378	<b>A</b>
Woodford	0		
Total	415	10.920	
Total	415	10,829	
Unknown	20 329		
Onknown	338		

**Table 11.** Mental health counselors (includes ADCs& LPCs) by County

National Rate:	1,068		
County	<b>Provider Count</b>	People pe	r Provider
Adair	29	649	V
Allen	5	4,121	<b>▲</b>
Anderson	4	5,912	<b></b>
Ballard	1	7,814	<b></b>
Barren	35	1,265	<b>A</b>
Bath	4	3,170	
Bell	3	8,225	<b>A</b>
Boone	55	2,447	<b>A</b>
Bourbon	11	1,844	<b>A</b>
Boyd	99	489	•
Boyle	21	1,451	<b>A</b>
Bracken	0		
Breathitt	11	1,241	<b>A</b>
Breckinridge	1	20,345	
Bullitt	17	4,808	<b>A</b>
Butler	3	4,138	
Caldwell	3	4,214	<b>A</b>
Calloway	13	2,869	
Campbell	38	2,448	<b>A</b>
Carlisle	1	4,821	<b>A</b>
Carroll	3	3,603	
Carter	6	4,470	
Casey	9	1,763	
Christian	47	1,540	
Clark	18	2,040	
Clay	12	1,707	
Clinton	8	1,172	<b>A</b>
Crittenden	0		
Cumberland	1	6,023	<b>A</b>
Daviess	117	876	V
Edmonson	1	12,165	<b>A</b>
Elliott	3	2,471	
Estill	4	3,539	
Fayette	240	1,339	<b>A</b>
Fleming	2	7,498	<b>_</b>
Floyd	128	282	•
Franklin	48	1,069	<b>A</b>
Fulton	3	2,169	_ <b>A</b>
Gallatin	2	4,347	<b>A</b>
Garrard	3	5,673	_ <b>A</b>
Grant	3	8,306	<b>A</b>
Graves	15	2,453	<b>A</b>
Grayson	8	3,294	<b>_</b>
Green	13	857	
Greenup	1/	2,11/	<b>A</b>
Hancock	100	9,050	-
Harlan	108	2,001	¥
Harrison	2	6 220	<b>A</b>
Hart	3 7	0,230	<b>A</b>
Handarson	20	2,742	<b>A</b>
Henry	50	1,505	-
Hickman	0		
Honking	10	2 201	
Topkins	19	2,391	
Jackson	3	4,545	-
Jenerson	409	1,004	
Johnson	19	1,473	-
Kenton	10	1,200	-
Knott	150	2 001	-
Knox	J 18	1 697	-
Larua	10	1,007	-
Laurel	38	1 63/	1
Lawrence	74	220	T I
Lawrence	/ -	220	*

National Rate:	1,068		
County	<b>Provider Count</b>	People pe	r Provider
Lee	2	3,632	
Leslie	0		
Letcher	7	3,112	<b></b>
Lewis	1	13,103	
Lincoln	0		
Livingston	3	2,996	
Logan	2	13,660	<b>A</b>
Lyon	1	8,700	<b>▲</b>
McCracken	66	1,021	V
McCreary	12	1,420	<b>A</b>
McLean	0		
Madison	72	1,280	
Magoffin	4	2,955	
Marion	10	1,956	
Marshall	8	3,958	<b>A</b>
Martin	6	1,899	
Mason	35	489	V
Meade	2	14,868	
Menifee	7	878	•
Mercer	13	1,728	
Metcalfe	2	5,138	
Monroe	3	3,756	
Montgomery	26	1,080	
Morgan	2	6,886	
Muhlenberg	8	3,876	
Nelson	13	3,572	
Nicholas	0		
Ohio	3	7,954	<b>A</b>
Oldham	23	2,939	<b>A</b>
Owen	3	3,720	<b>A</b>
Owsley	2	2,047	<b>A</b>
Pendleton	1	14,625	<b>_</b>
Perry	65	437	
Pike	36	1,637	
Powell	5	2,610	<b>.</b>
Pulaski	104	622	•
Robertson Decision	0	2 (05	•
Rockcastle	0	2,095	-
Rowall	12	1,027	•
Russen	13	1,576	
Shelby	23	2,066	
Simpson	23	4 821	-
Spencer	4	4,051	-
Taylor	24	1.081	
Todd	0	1,001	-
Trigg	0		
Trimble	0		
Union	3	4,595	
Warren	119	1,119	Ā
Washington	20	598	V
Wavne	20	987	<b>V</b>
Webster	2	6.497	
Whitley	95	385	V
Wolfe	2	3.333	
Woodford	10	2,676	
Total	2,976	1,510	
Out of State	183		
Unknown	2,750		

**Table 12.** Licensed practical nurses (LPNs) by

 County

National Rate:	518	
County	<b>Provider Count</b>	People per Provider
Adair	77	245 🔻
Allen	55	375 🔻
Anderson	60	394 🔻
Ballard	36	217
Barren	211	210
Bath	46	276
Bell	81	305
Boone	229	588
Bourbon	44	401
Boyle	122	250
Bracken	38	221
Breathitt	48	284
Breckinridge	51	399
Bullitt	307	266
Butler	26	477
Caldwell	31	408
Calloway	113	330
Campbell	140	664
Carlisle	16	301 🔻
Carroll	48	225 🔻
Carter	135	199 🔻
Casey	85	187 🔻
Christian	177	409 🔻
Clark	92	399 🔻
Clay	36	569 🔺
Clinton	107	88 🔻
Crittenden	19	474 🔻
Cumberland	52	116
Daviess	173	592
Edmonson	37	329
Elliott	31	239
Estill	25	566
Fayette	454	708
Fleming	73	205
Floya	19	457
Fulton	21	310
Gallatin	21	310
Garrard	88	193
Grant	51	489
Graves	137	269
Gravson	54	488
Green	78	143
Greenup	205	176
Hancock	15	603
Hardin	248	444 🔻
Harlan	117	230 🔻
Harrison	50	374 🔻
Hart	51	376 🔻
Henderson	54	835 🔺
Henry	88	178 🔻
Hickman	17	266 🔻
Hopkins	162	280 🔻
Jackson	28	465 🔻
Jefferson	1,876	416
Jessamine	116	457
Johnson	79	289
Kenton	298	565
Knott	39	3/2
Knox	57	535 A
Larue	41	30U V
	121	515 V 220 V
Lawrence	/4	220 🔻

National Rate:	518		
County	<b>Provider Count</b>	People per	Provider
Lee	11	660	<b></b>
Leslie	37	287	V
Letcher	97	225	▼
Lewis	89	147	▼
Lincoln	119	204	▼
Livingston	26	346	▼
Logan	54	506	▼
Lyon	24	363	▼
McCracken	211	319	▼
McCreary	105	162	▼
McLean	20	459	▼
Madison	194	475	▼
Magoffin	28	422	•
Marion	83	236	▼
Marshall	115	275	▼
Martin	30	380	▼
Mason	88	194	▼
Meade	82	363	▼
Menifee	32	192	▼
Mercer	113	199	▼
Metcalfe	57	180	▼
Monroe	66	171	▼
Montgomery	76	370	▼
Morgan	58	237	▼
Muhlenberg	97	320	▼
Nelson	185	251	▼
Nicholas	30	251	▼
Ohio	59	404	▼
Oldham	123	549	<b></b>
Owen	50	223	▼
Owsley	9	455	▼
Pendleton	30	488	▼
Perry	93	306	▼
Pike	174	339	▼
Powell	31	421	▼
Pulaski	258	251	▼
Robertson	9	244	▼
Rockcastle	70	231	•
Rowan	64	385	•
Russell	75	239	•
Scott	138	408	•
Shelby	134	355	•
Simpson	36	537	<b></b>
Spencer	79	244	•
Taylor	67	387	▼
Todd	29	421	•
Trigg	45	313	▼
Trimble	44	193	•
Union	23	599	<b>A</b>
Warren	169	788	
Washington	59	203	▼
Wayne	80	247	
Webster	33	394	▼
Whitley	82	446	•
Wolfe	28	238	
Woodford	31	863	
Total	12,114	371	
Out of State	652		
Unknown	0		

#### Table 13. Registered nurses (RNs) by County

National Rate:	109	
County	<b>Provider Count</b>	People per Provider
Adair	258	73
Allen	244	84 🔻
Anderson	442	53 🔻
Ballard	101	77 🔻
Barren	628	71 🔻
Bath	132	96 🔻
Bell	335	74
Boone	1,970	68
Bourbon	289	70
Boyd	935	52
Boyle	384	79 V
Bracken	240	55
Breakinridge	249	00
Bullitt	1 535	53
Butler	1,555	85
Caldwell	179	71
Calloway	436	86
Campbell	1 220	76
Carlisle	58	83
Carroll	75	144
Carter	410	65
Casey	182	87 🔻
Christian	578	125
Clark	547	67 🔻
Clay	192	107 🔻
Clinton	135	69 🔻
Crittenden	130	69 🔻
Cumberland	89	68 🔻
Daviess	1,588	65 🔻
Edmonson	152	80 🔻
Elliott	56	132
Estill	137	103 🔻
Fayette	5,726	56
Fleming	222	68
Floyd	576	63
Franklin	566	91
Fulton	34	191
Gallatin	84	104
Garrard	296	57
Grant	252	62
Graves	255	74
Graen	180	74 V 50 V
Greenup	731	19 V
Hancock	137	66
Hardin	1 422	77
Harlan	361	75
Harrison	309	60
Hart	208	92
Henderson	593	76 🔻
Henry	219	72 🔻
Hickman	37	122
Hopkins	783	58 🔻
Jackson	113	115
Jefferson	12,175	64 🔻
Jessamine	981	54 🔻
Johnson	330	69 🔻
Kenton	2,278	74 🔻
Knott	268	54 🔻
Knox	377	81 🔻
Larue	204	72 🔻
Laurel	918	68 🔻
Lawrence	240	68 🔻

National Rate:	109		
County	Provider Count	People pe	r Provider
Lee	58	125	
Leslie	170	62	V
Letcher	434	50	V
Lewis	139	94	V
Lincoln	318	76	V
Livingston	139	65	V
Logan	320	85	
Lyon	120	73	V
McCracken	1,146	59	
McCreary	139	123	
McLean	163	56	<b>_</b>
Madison	1,599	58	
Magoffin	166	71	<b>_</b>
Marion	276	71	
Marshall	509	62	
Martin	96	119	<b>_</b>
Mason	268	64	<b>_</b>
Meade	375	79	
Menifee	65	95	<b>_</b>
Mercer	413	54	<b>.</b>
Metcalfe	98	105	<b>_</b>
Monroe	141	80	<b>.</b>
Montgomery	345	81	<b>_</b>
Morgan	152	91	<b>.</b>
Muhlenberg	472	66	<u> </u>
Nelson	897	52	<b>•</b>
Nicholas	98	11	<b>_</b>
Ohio	356	67	<b>.</b>
Oldham	1,599	42	<u> </u>
Owen	128	87	<b>•</b>
Owsley	54	/6	<u> </u>
Pendleton	199	/3	
Perry	574	50	<u>.</u>
Pike	948	62	-
Powell	139	94	-
Pulaski Dahartaan	803	/5	-
Robertson	5/	59	-
Rockcastle	1/4	93	-
Rowan	323	76	-
Saott	1.065	53	¥
Shelby	873	54	¥
Simpson	200	07	¥
Shipson	200	36	¥
Taylor	318	30	<b>•</b>
Todd	97	126	
Trigg	101	74	-
Trimble	88	97	<b>V</b>
Union	217	64	¥
Warren	1 722	77	¥
Washington	191	63	<b>V</b>
Wayne	186	106	·
Webster	210	62	<b>V</b>
Whitley	486	75	·
Wolfe	90	73	•
Woodford	524	51	▼
Total	67.467	67	V
Out of State	6.918	07	
Unknown	11		

**Table 14.** State registered nurse assistants (SRNAs)

 by County

National Rate:	253	
County	<b>Provider Count</b>	People per Provider
Adair	174	108 🔻
Allen	154	134 🔻
Anderson	236	100 🔻
Ballard	58	135 🔻
Barren	480	92 🔻
Bath	122	104 🔻
Bell	282	87 🔻
Boone	592	227 🔻
Bourbon	251	81 🔻
Boyd	568	85 🔻
Boyle	282	108 🔻
Bracken	117	72 🔻
Breathitt	269	51 🔻
Breckinridge	209	97 🔻
Bullitt	236	346
Butler	192	65 🔻
Caldwell	163	78 🔻
Calloway	205	182 🔻
Campbell	374	249 🔻
Carlisle	63	77 🔻
Carroll	103	105 🔻
Carter	339	79 🔻
Casey	195	81 🔻
Christian	494	147 🔻
Clark	356	103 🔻
Clay	164	125 🔻
Clinton	120	78 🔻
Crittenden	107	84 🔻
Cumberland	121	50 🔻
Daviess	885	116 🔻
Edmonson	75	162 🔻
Elliott	43	172 🔻
Estill	125	113 🔻
Fayette	2,407	134 🔻
Fleming	166	90 🔻
Floyd	328	110 🔻
Franklin	338	152 🔻
Fulton	66	99 🔻
Gallatin	78	111 🔻
Garrard	206	83 🔻
Grant	194	128 🔻
Graves	362	102 🔻
Grayson	321	82 🔻
Green	179	62 🔻
Greenup	390	92 🔻
Hancock	91	99 🔻
Hardin	885	124 🔻
Harlan	282	95 🔻
Harrison	279	67 🔻
Hart	213	90 🔻
Henderson	436	103 🔻
Henry	157	100 🔻
Hickman	46	98 🔻
Hopkins	647	70 🔻
Jackson	156	84 🔻
Jefferson	4,045	193 🔻
Jessamine	470	113 🔻
Johnson	243	94 🔻
Kenton	741	227 🔻
Knott	220	66 🔻
Knox	226	134 🔻
Larue	76	194 🔻
Laurel	398	156 🔻
Lawrence	180	90 🔻

National Rate:	253		
County	<b>Provider Count</b>	People pe	r Provider
Lee	123	59	V
Leslie	246	43	V
Letcher	331	66	
Lewis	193	68	V
Lincoln	368	66	
Livingston	82	110	V
Logan	255	107	
Lyon	55	158	•
McCracken	694	97	
McCreary	168	101	
McLean	254	36	
Madison	284	325	<b>▲</b>
Magoffin	99	119	
Marion	201	97	
Marshall	652	49	
Martin	172	66	
Mason	107	160	V
Meade	146	204	
Menifee	97	63	V
Mercer	308	73	
Metcalfe	184	56	V
Monroe	134	84	
Montgomery	211	133	V
Morgan	129	107	
Muhlenberg	467	66	V
Nelson	385	121	
Nicholas	127	59	V
Ohio	350	68	V
Oldham	170	398	
Owen	143	78	V
Owsley	87	47	
Pendleton	143	102	
Perry	548	52	
Pike	425	139	
Powell	112	117	
Pulaski	568	114	
Robertson	38	58	
Rockcastle	153	106	<b>_</b>
Rowan	184	134	
Russell	221	81	
Scott	405	139	<u> </u>
Shelby	233	204	
Simpson	124	156	-
Spencer	89	216	
Taylor	258	101	-
Toda	8/	140	
Trigg	8/	1.42	-
Immble	00	142	-
Worren	183	15	-
Washington	010	104	¥
Wayne	130	125	¥
Webster	140	155	¥.
Whitley	108	20	¥
Wolfo	4.39	0U 41	¥
Woodford	179	41	▼ ▼
Total	36 102	124	¥
Out of State	8 205	124	V
Unknown	0,295		
UNKNOWN	U		

#### Table 15. Occupational therapists by County

County         Provider Count         People per Provider           Adair         6         3,139         ▲           Allen         7         2,943         ▲           Anderson         16         1,478         ▼           Ballard         2         3,907         ▲           Barten         19         2,330         ▼           Bath         6         2,113         ▼           Boone         103         1,898         ▼           Boone         103         1,898         ▼           Boyle         21         1,451         ▼           Breakinitit         5         2,730         ▲           Breakinitige         5         4,069         ▲           Butler         5         2,483         ▼           Calloway         18         2,072         ▼           Cambpell         50         1,860         ▼           Carroll         2         5,404         ▲           Carroll         2         5,404         ▲           Carroll         2         5,404         ▲           Carroll         2         5,404         ▲           Carrol	National Rate:	2,597		
Adair       6       3,139         Allen       7       2,943         Anderson       16       1,478         Ballard       2       3,907         Barnen       19       2,330         Bath       6       2,113         Bell       13       1,898         Boone       103       1,307         Bourbon       7       2,897         Boyd       25       1,938         Boyd       25       1,938         Boyde       21       1,451         Breathitt       5       2,730         Breathitt       5       2,730         Breathitt       5       2,483         Caldwell       15       8,43         Calloway       18       2,072         Carbell       50       1,860         Carroll       2       5,404         Carroll       2       5,404         Caree       8       3,353         Casey       5       3,173         Christian       30       2,413         Clay       11       1,862         Clay       11       1,862         Clay       1	County	<b>Provider Count</b>	People per	r Provider
Allen       7       2.943         Anderson       16       1.478         Ballard       2       3.907         Barren       19       2.330         Bath       6       2.113         Bell       13       1.898         Boone       103       1.307         Bourbon       7       2.897         Boyd       25       1.938         Boyd       25       1.938         Boyd       25       1.938         Boyd       25       1.938         Breackinridge       5       4.069         Builit       51       1.603         Butler       5       2.483         Calloway       18       2.072         Campbell       50       1.860         Carroll       2       5.404         Carroll       2       5.404         Care       8       3.53         Care       8       3.53         Care       8       3.53         Care       8       3.53         Carlisk       4       1.205         Carroll       2       5.404         Care       2.008	Adair	6	3,139	
Anderson       16 $1,478$ Ballard       2 $3,907$ Barren       19 $2,330$ Bath       6 $2,113$ Bell       13 $1,898$ Boone       103 $1,307$ Bourbon       7 $2,897$ Boyd       25 $1,938$ Boyle       21 $1,451$ Bracken       3 $2,798$ Breackinridge       5 $4,069$ Bullitt       51 $1,603$ Bulet       5 $2,483$ Caldwell       15 $843$ Carloy       18 $2,072$ Campbell       50 $1,860$ Carroll       2 $5,404$ Carter       8 $3,353$ Casey       5 $3,173$ Clay       11 $1,862$ <td>Allen</td> <td>7</td> <td>2,943</td> <td><b>A</b></td>	Allen	7	2,943	<b>A</b>
Ballard       2       3,907         Barren       19       2,330         Bath       6       2113         Bell       13       1,898         Boone       103       1,307         Bourbon       7       2,897         Boyd       25       1,938         Boyle       21       1,451         Bracken       3       2,798         Breathit       5       2,730         Breckinridge       5       4,069         Bullit       51       1,603         Butler       5       2,483         Caldwell       15       843         Caldwell       5       3,173         Carroll       2       5,404         Carroll       2       5,404         Careroll       3       2,008         Careroll       3       2,008         Careroll       3       2,008         Daviess       106       967         Eliott <td>Anderson</td> <td>16</td> <td>1,478</td> <td></td>	Anderson	16	1,478	
Barren       19       2,330       ▼         Bath       6       2,113       ▼         Bell       13       1,898       ▼         Boone       103       1,307       ▼         Boyd       25       1,938       ▼         Boyd       21       1,451       ▼         Bracken       3       2,798       ▲         Breackinridge       5       4,069       ▲         Bullitt       51       1,603       ▼         Butler       5       2,483       ▼         Caldwell       15       843       ▼         Carbpell       50       1,860       ▼         Carroll       2       5,404       ▲         Carroll       2       5,404       ▲         Carroll       2       5,404       ▲         Carter       8       3,533       ▲         Clay       11       1,862       ▼         Clay       11       1,862       ▼         Clay       11       1,862       ▼         Clay       11       7,414       ▲         Edmonson       0       ●       ●      D	Ballard	2	3,907	
Bath       6       2,113       V         Bell       13       1,898       V         Boone       103       1,307       V         Bourbon       7       2,897 $\land$ Boyle       21       1,451       V         Bracken       3       2,798 $\land$ Breckinridge       5       4,069 $\land$ Bullit       51       1,603       V         Butler       5       2,483       V         Caldwell       15       843       V         Calloway       18       2.072       V         Carmpbell       50       1,860       V         Carroll       2       5,404 $\land$ Carter       8       3,533 $\land$ Careroll       2       5,404 $\land$ Carter       8       3,533 $\land$ Carter       8       3,533 $\land$ Careroll       20       1,860 $\vee$ Clark       24       1,530 $\vee$ Clark       24       1,530 $\vee$ Clary       11       1,862	Barren	19	2,330	•
Bell       13       1,898 $\vee$ Bourbon       7       2,897 $\wedge$ Boyle       21       1,451 $\vee$ Bracken       3       2,798 $\wedge$ Bracken       3       2,798 $\wedge$ Bracken       3       2,798 $\wedge$ Breachint       5       2,730 $\wedge$ Butler       5       4,069 $\wedge$ Bullit       51       1,603 $\vee$ Caldwell       15       843 $\vee$ Caldwell       15       843 $\vee$ Campbell       50       1,860 $\vee$ Carter       8       3,353 $\wedge$ Carter       8       3,353 $\wedge$ Clark       24       1,530 $\vee$ Clark       24       1,53	Bath	6	2,113	V
Boone       103       1,307 $\checkmark$ Boyd       25       1,388 $\checkmark$ Boyd       21       1,451 $\checkmark$ Bracken       3       2,798 $\land$ Breackinidge       5       4,069 $\land$ Bullit       51       1,603 $\checkmark$ Bullit       51       1,603 $\checkmark$ Bullit       51       1,603 $\checkmark$ Caldwell       15       843 $\checkmark$ Caldwell       15       843 $\checkmark$ Caronoll       2       5,404 $\land$ Carroll       2       5,404 $\land$ Carroll       2       5,404 $\land$ Carter       8       3,353 $\land$ Carsol       2,413 $\checkmark$ $(Clartar)       2,413 \lor         Clark       24       1,530       \checkmark (Clartar)       2,008 \checkmark         Clark       24       1,530       \checkmark (Clartar)       2,008 \checkmark         Clark       24       1,530       \checkmark (Clartar)       2,022 \checkmark $	Bell	13	1,898	•
Bourbon       7       2,897 $\land$ Boyle       21       1,431 $\checkmark$ Boyle       21       1,451 $\checkmark$ Bracken       3       2,798 $\land$ Breckinridge       5       4,069 $\land$ Bullit       51       1,603 $\checkmark$ Bullit       51       1,603 $\checkmark$ Caldwell       15       843 $\checkmark$ Calloway       18       2,072 $\checkmark$ Campbell       50       1,860 $\checkmark$ Carroll       2       5,404 $\land$ Carter       8       3,353 $\land$ Carey       5       3,173 $\land$ Clark       24       1,530 $\lor$ Clay       11       1,862 $\checkmark$ Clinton       5       1,874 $\lor$ Crittenden       6       1,500 $\lor$ Edmonson       0 $\bullet$ $\bullet$ Daviess       106       967 $\checkmark$ Floyd       20       1,806 $\checkmark$ Franklin       2	Boone	103	1,307	•
Boyd       25       1,938 $\checkmark$ Boyle       21       1,451 $\checkmark$ Bracken       3       2,798 $\land$ Breathitt       5       2,730 $\land$ Breckinridge       5       4,069 $\land$ Bullitt       51       1,603 $\lor$ Butler       5       2,483 $\checkmark$ Caldwell       15       8,43 $\checkmark$ Calloway       18       2,072 $\checkmark$ Campbell       50       1,860 $\checkmark$ Carroll       2       5,404 $\land$ Carter       8       3,353 $\land$ Casey       5       3,173 $\land$ Christian       30       2,413 $\lor$ Clay       11       1,862 $\lor$ Clinton       5       1,874 $\checkmark$ Christian       30       2,008 $\checkmark$ Daviess       106       967 $\lor$ Edmonson       0 $\bullet$ $\bullet$ Elliott       1       7,414 $\land$ Floyd       20 </td <td>Bourbon</td> <td>7</td> <td>2,897</td> <td><b>A</b></td>	Bourbon	7	2,897	<b>A</b>
Boyle       21 $1,451$ $\checkmark$ Bracken       3 $2,798$ $\land$ Breackinridge       5 $2,730$ $\land$ Breckinridge       5 $2,069$ $\land$ Bullit       51 $1,603$ $\checkmark$ Butler       5 $2,483$ $\checkmark$ Calloway       18 $2,072$ $\checkmark$ Campbell       50 $1,860$ $\checkmark$ Carroll       2 $5,404$ $\land$ Carroll       2 $5,404$ $\land$ Carter       8 $3,353$ $\land$ Carter       8 $3,353$ $\land$ Clay       11 $1,862$ $\checkmark$ Clay       11 $1,862$ $\checkmark$ Clinton       5 $1,874$ $\checkmark$ Crittenden       6 $1,500$ $\checkmark$ Cumberland       3 $2,008$ $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\bullet$ $\bullet$ Eliott       1 $7,414$ $\land$ <t< td=""><td>Boyd</td><td>25</td><td>1,938</td><td>•</td></t<>	Boyd	25	1,938	•
Bracken       3       2,798         Breathitt       5       2,730         Breckinridge       5       4,069         Bullit       51       1,603         Butler       5       2,483         Caldwell       15       843         Calloway       18       2,072         Campbell       50       1,860         Cartoll       2       5,404         Cartoll       2       5,404         Carter       8       3,353         Casey       5       3,173         Christian       30       2,413         Clay       11       1,862         Clinton       5       1,874         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0       10         Elliott       1       7,414         Estill       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Gar	Boyle	21	1,451	
Breathitt       5       2,730 $\checkmark$ Breckinridge       5       4,069 $\checkmark$ Bullitt       51       1,603 $\checkmark$ Butler       5       2,483 $\checkmark$ Caldwell       15       843 $\checkmark$ Calloway       18       2,072 $\checkmark$ Campbell       50       1,860 $\checkmark$ Carroll       2       5,404 $\land$ Carroll       2       5,404 $\land$ Carter       8       3,353 $\land$ Carter       8       3,353 $\land$ Clark       24       1,530 $\checkmark$ Editor       1       7,414 $\land$ Estill       7	Bracken	3	2,798	
Breckinridge       5       4.069 $\land$ Buller       5       2.483 $\checkmark$ Caldwell       15       843 $\checkmark$ Caldwell       15       843 $\checkmark$ Caldwell       15       843 $\checkmark$ Campbell       50       1.860 $\checkmark$ Carroll       2       5.404 $\land$ Carroll       2       5.404 $\land$ Carter       8       3.353 $\land$ Careoy       5       3.173 $\land$ Clark       24       1.530 $\checkmark$ Curberland       3       2.008 $\checkmark$ Estill       7       <	Breathitt	5	2,730	<b></b>
Bullitt       51       1,603         Butler       5       2,483         Caldwell       15       843         Calloway       18       2,072         Campbell       50       1,860         Carroll       2       5,404         Carroll       2       5,404         Carter       8       3,353         Casey       5       3,173         Christian       30       2,413         Clark       24       1,530         Clay       11       1,862         Clay       11       1,862         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0       1         Elliott       1       7,414         Estill       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Garard       12       1,418         Grant       11       2,265         Graves	Breckinridge	5	4,069	
Butler       5       2,483 $\checkmark$ Caldwell       15       843 $\checkmark$ Calloway       18       2,072 $\checkmark$ Campbell       50       1,860 $\checkmark$ Cartisle       4       1,205 $\checkmark$ Cartoll       2       5,404 $\land$ Carter       8       3,353 $\land$ Casey       5       3,173 $\land$ Christian       30       2,413 $\checkmark$ Clark       24       1,530 $\checkmark$ Clark       1       7,414 $\land$ Estill       7       2,142 $\checkmark$ Floyd       20       1,8	Bullitt	51	1,603	•
Caldwell       15 $843$ Calloway       18 $2,072$ Campbell       50 $1,860$ Carlisle       4 $1,205$ Carroll       2 $5,404$ Carron $5$ $3,173$ Christian $30$ $2,413$ Clark $24$ $1,530$ Clark $24$ $1,530$ Clinton $5$ $1,874$ Crittenden $6$ $1,500$ Daviess $106$ $967$ Daviess $106$ $967$ Edmonson $0$ $1071$ Fleming $7$ $2,142$ Floyd $20$ $1,806$ Franklin $26$ $1,974$ Galatin	Butler	5	2,483	V
Calloway       18       2,072         Campbell       50       1,860         Cartisle       4       1,205         Carroll       2       5,404         Carter       8       3,353         Casey       5       3,173         Christian       30       2,413         Clark       24       1,530         Clay       11       1,862         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0       967         Edmonson       0       97         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Galatin       2       2,4347         Gararad       12       1,418         Graves       24       1,533         Graves       24       1,533         Greenu	Caldwell	15	843	•
Campbell       50       1,860         Carlisle       4       1,205         Carroll       2       5,404         Carter       8       3,353         Casey       5       3,173         Christian       30       2,413         Clark       24       1,530         Clark       24       1,530         Clay       11       1,862         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0       0         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Garard       12       1,418         Grant       11       2,265         Graves       24       1,533         Green       4       2,785         Greenup       34       1,059         Hardin	Calloway	18	2,072	V
Cartisle       4       1,205         Carroll       2       5,404         Carter       8       3,353         Casey       5       3,173         Christian       30       2,413         Clark       24       1,530         Clay       11       1,862         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0       0         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Gallatin       2       4,347         Garard       12       1,418         Grant       11       2,265         Graves       24       1,533         Green       4       2,785         Greenup       34       1,059         Hardin       70       1,573         Hardin	Campbell	50	1,860	•
Carroll       2       5,404 $\land$ Carter       8       3,353 $\land$ Casey       5       3,173 $\land$ Christian       30       2,413 $\checkmark$ Clark       24       1,530 $\checkmark$ Clay       11       1,862 $\checkmark$ Clinton       5       1,874 $\checkmark$ Crittenden       6       1,500 $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\bullet$ $\bullet$ Elliott       1       7,414 $\blacktriangle$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Floyd       20       1,806 $\checkmark$ Franklin       26       1,974 $\checkmark$ Fulton       5       1,301 $\checkmark$ Gallatin       2       4,347 $\land$ Grared       12       1,418 $\checkmark$ Graves       24       1,533 $\land$ Greenup       34       1,059 $\checkmark$ Hardin       7	Carlisle	4	1,205	V
Carter       8       3,353 $\blacktriangle$ Casey       5       3,173 $\checkmark$ Christian       30       2,413 $\checkmark$ Clark       24       1,530 $\checkmark$ Clark       24       1,530 $\checkmark$ Clay       11       1,862 $\checkmark$ Clinton       5       1,874 $\checkmark$ Crittenden       6       1,500 $\checkmark$ Cumberland       3       2,008 $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\bullet$ $\bullet$ Elliott       1       7,414 $\blacktriangle$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Fleming       7       2,142 $\checkmark$ Floyd       20       1,886 $\checkmark$ Fauklin       26       1,974 $\checkmark$ Fulton       5       1,301 $\checkmark$ Garard       12       1,418 $\checkmark$ Grant       11       2,265 $\checkmark$ Graves       24	Carroll	2	5.404	
Casey       5 $3,173$ $\blacktriangle$ Christian       30 $2,413$ $\checkmark$ Clark       24 $1,530$ $\checkmark$ Clay       11 $1,862$ $\checkmark$ Clinton       5 $1,874$ $\checkmark$ Cintenden       6 $1,500$ $\checkmark$ Cumberland       3 $2,008$ $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $=$ $=$ Edmonson       0 $=$ $=$ Fayette       300 $1,071$ $\checkmark$ Fayette       300 $1,071$ $\checkmark$ Fleming       7 $2,142$ $\checkmark$ Floyd       20 $1,806$ $\checkmark$ Franklin       26 $1,974$ $\checkmark$ Fulton       5 $1,301$ $\checkmark$ Garrard       12 $1,418$ $\bigcirc$ Graves       24 $1,533$ $\bigcirc$ Graves       24 $1,533$ $\bigcirc$ Greenup       34 $1,059$ $\leftarrow$	Carter	8	3,353	
Christian       30 $2,413$ Clark       24 $1,530$ Clay       11 $1,862$ Clinton       5 $1,874$ Crittenden       6 $1,500$ Cumberland       3 $2,008$ Daviess       106 $967$ Edmonson       0         Elliott       1 $7,414$ Estill       7 $2,022$ Fayette       300 $1,071$ Floyd       20 $1,806$ Franklin       26 $1,974$ Fulton       5 $1,301$ Gallatin       2 $4,347$ Garard       12 $1,418$ Grant       11 $2,265$ Graves       24 $1,533$ Graves       24 $1,533$ Green       4 $2,785$ Greenup       34 $1,059$ Hardin       70 $1,573$ Hardin       70 $2,670$ Hardin       7 $2,670$ Hard       7 $2,670$	Casev	5	3,173	<b>A</b>
Clark       24       1,530 $\checkmark$ Clay       11       1,862 $\checkmark$ Clinton       5       1,874 $\checkmark$ Crittenden       6       1,500 $\checkmark$ Cumberland       3       2,008 $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\bullet$ $\bullet$ Elliott       1       7,414 $\blacktriangle$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Fleming       7       2,142 $\checkmark$ Floyd       20       1,806 $\checkmark$ Franklin       26       1,974 $\checkmark$ Fulton       5       1,301 $\checkmark$ Galatin       2       4,347 $\land$ Garard       12       1,418 $\checkmark$ Graves       24       1,533 $\lor$ Graves       24       1,533 $\lor$ Graves       24       1,533 $\lor$ Graves       24       1,533 $\lor$ Hardin       70	Christian	30	2.413	V
Clay       11       1,862         Clinton       5       1,874         Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Gallatin       2       4,347         Garard       12       1,418         Grant       11       2,265         Graves       24       1,533         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       2,670         Hart       7       2,670         Hart       7       2,670         Hart       7       2,670         Hart       7       2,	Clark	24	1.530	•
Clinton       5       1.874 $\checkmark$ Crittenden       6       1,500 $\checkmark$ Cumberland       3       2,008 $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\bullet$ $\bullet$ Edmonson       0 $\bullet$ $\bullet$ Editott       1       7,414 $\blacktriangle$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Fleming       7       2,142 $\checkmark$ Floyd       20       1,806 $\checkmark$ Franklin       26       1,974 $\checkmark$ Fulton       5       1,301 $\checkmark$ Garard       12       1,418 $\checkmark$ Grant       11       2,265 $\checkmark$ Graves       24       1,533 $\checkmark$ Greenup       34       1,059 $\checkmark$ Hardin       70       1,573 $\land$ Hardin       70       2,670 $\land$ Hart       7       2,742 $\land$ Henderson       37	Clay	11	1,862	<b>V</b>
Crittenden       6       1,500         Cumberland       3       2,008         Daviess       106       967         Edmonson       0         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Floridt       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Gallatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Greenup       34       1,059         Hardin       70       1,573         Hardin       70       1,573         Hardin       70       2,670         Hart       7       2,742         Henderson       37       1,219         Henderson       37       1,219         Henderson       4       3,257         Jefferson       712       1,096         Johnson       9       2,533         Kenton	Clinton	5	1.874	
Cumberland       3       2,008 $\checkmark$ Daviess       106       967 $\checkmark$ Edmonson       0 $\circ$ $\circ$ Edmonson       0 $\circ$ $\bullet$ Editiot       1       7,414 $\land$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Floyd       20       1,806 $\bullet$ Franklin       26       1,974 $\checkmark$ Gallatin       2       4,347 $\land$ Garard       12       1,418 $\checkmark$ Grant       11       2,265 $\checkmark$ Graves       24       1,533 $\checkmark$ Graves       24       1,533 $\checkmark$ Greenup       34       1,059 $\vee$ Hancock       4       2,263 $\vee$ Hardin       70       1,573 $\vee$ Hardin       70       2,670 $\wedge$ Hart       7       2,670 $\wedge$ Hart       7       2,742 $\wedge$ Henderson       37	Crittenden	6	1,500	<b>V</b>
Daviess       106       967 $\checkmark$ Edmonson       0       0         Elliott       1       7,414 $\blacktriangle$ Estill       7       2,022 $\checkmark$ Fayette       300       1,071 $\checkmark$ Floyd       20       1,806 $\checkmark$ Franklin       26       1,974 $\checkmark$ Fulton       5       1,301 $\checkmark$ Gallatin       2       4,347 $\land$ Garard       12       1,418 $\checkmark$ Grant       11       2,265 $\checkmark$ Graves       24       1,533 $\checkmark$ Green       4       2,785 $\land$ Greenup       34       1,059 $\lor$ Hancock       4       2,263 $\lor$ Hardin       70       1,573 $\lor$ Hardin       70       2,670 $\land$ Hart       7       2,670 $\land$ Hart       7       2,742 $\land$ Henderson       37       1,219 $\lor$ Hendrson       90 $\checkmark$ <t< td=""><td>Cumberland</td><td>3</td><td>2.008</td><td></td></t<>	Cumberland	3	2.008	
Edmonson       0         Elliott       1       7,414         Estill       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Gallatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hardin       70       1,573         Hardin       70       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0	Daviess	106	967	<b>V</b>
Elliott       1       7,414         Estil       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Gallatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,667         Hardin       70       1,573         Hardin       70       2,670         Hart       7       2,670         Johnson       9       <	Edmonson	0	201	
Estill       7       2,022         Fayette       300       1,071         Fleming       7       2,142         Floyd       20       1,806         Franklin       26       1,974         Fulton       5       1,301         Galatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       2,670         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henderson       4       3,257         Jefferson       712       1,096         Jessamine       44       1,205         Jefferson       91       1,849         Kenton       91       1,849         Knox       2       15,184         La	Elliott	1	7 4 1 4	
Fayette $300$ $1,071$ Fleming       7 $2,142$ Floyd $20$ $1,806$ Franklin $26$ $1,974$ Fulton $5$ $1,301$ Gallatin $2$ $4,347$ Garrard $12$ $1,418$ Grant $11$ $2,265$ Graves $24$ $1,533$ Grayson $18$ $1,464$ Green $4$ $2,785$ Greenup $34$ $1,059$ Hancock $4$ $2,6670$ Hardin $70$ $1,573$ Harlan $10$ $2,692$ Harrison $7$ $2,670$ Hart $7$ $2,670$ Hart $7$ $2,670$ Henderson $37$ $1,219$ Hendrson $712$ $1,096$ Jefferson $712$ $1,096$ Jessamine $44$ $1,205$ Johnson $9$ $2,533$ Kenton $91$ $1,849$ <tr< td=""><td>Estill</td><td>7</td><td>2 022</td><td>-</td></tr<>	Estill	7	2 022	-
Hord       Soc $1,071$ Fleming       7 $2,142$ Floyd       20 $1,806$ Franklin       26 $1,974$ Fulton       5 $1,301$ Gallatin       2 $4,347$ Garrard       12 $1,418$ Grant       11 $2,265$ Graves       24 $1,533$ Grayson       18 $1,464$ Green       4 $2,785$ Greenup       34 $1,059$ Hancock       4 $2,263$ Hardin       70 $1,573$ Harlan       10 $2,692$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Jessamine       44 $1,205$ Johnson       9 $2,533$ <	Favette	300	1 071	<b>V</b>
Floyd       20       1,802         Floyd       20       1,802         Franklin       26       1,974         Fulton       5       1,301         Galatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,663         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Jessamine       44       1,205         Johnson       9       2,533         Kenton       91       1,849         Knott	Fleming	7	2 142	×
Hoya       26       1,974         Franklin       26       1,974         Fulton       5       1,301         Gallatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Johnson       9       2,533         Kenton       91       1,849         Knott       3       4,835         Knox       <	Floyd	20	1 806	<b>V</b>
Fulton       5       1,301         Gallatin       2       4,347         Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       10       2,692         Hartin       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Jessamine       44       1,205         Johnson       9       2,533         Kenton       91       1,849         Knox       2       15,184         Laurel       51       1,217         Laurel       51       1,217	Franklin	26	1,000	×
Gallatin       2 $4,347$ Garrard       12 $1,418$ Grant       11 $2,265$ Graves       24 $1,533$ Grayson       18 $1,464$ Green       4 $2,785$ Greenup       34 $1,059$ Hancock       4 $2,263$ Hardin       70 $1,573$ Hardin       10 $2,692$ Hartison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Jessamine       44 $1,205$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Laurel       51 $1,217$	Fulton	5	1 301	<b>V</b>
Garrard       12       1,418         Grant       11       2,265         Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Johnson       9       2,533         Kenton       91       1,849         Knox       2       15,184         Larue       2       7,384         Laurel       51       1,217	Gallatin	2	4 347	
Grant       11 $2,265$ Grant       11 $2,265$ Graves       24 $1,533$ Grayson       18 $1,464$ Green       4 $2,785$ Greenup       34 $1,059$ Hancock       4 $2,263$ Hardin       70 $1,573$ Harlan       10 $2,692$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knott       3 $4,835$ Knox       2 $15,184$ Laurel       51 $1,217$	Garrard	12	1 418	-
Graves       24       1,533         Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Johnson       9       2,533         Kenton       91       1,849         Knott       3       4,835         Knox       2       15,184         Larue       2       7,384         Laurel       51       1,217	Grant	11	2 265	¥
Grayson       18       1,464         Green       4       2,785         Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Johnson       9       2,533         Kenton       91       1,849         Knott       3       4,835         Knox       2       15,184         Laurel       51       1,217         Laurel       51       1,217	Graves	24	1 533	<b>V</b>
Green       4 $2,785$ Greenup       34 $1,059$ Hancock       4 $2,263$ Hardin       70 $1,573$ Hardin       10 $2,692$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Jessamine       44 $1,205$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Laurel       2 $7,384$ Laurel       51 $1,217$	Graveon	18	1,555	¥
Greenup       34       1,059         Hancock       4       2,263         Hardin       70       1,573         Hardin       70       1,573         Harlan       10       2,692         Harrison       7       2,670         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0       1         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096         Jessamine       44       1,205         Johnson       9       2,533         Kenton       91       1,849         Knox       2       15,184         Larue       2       7,384         Laurel       51       1,217	Green	4	2 785	<b>Å</b>
Hancock       4 $2,263$ Hardin       70 $1,573$ Harlan       10 $2,692$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Jessamine       44 $1,205$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Larue       2 $7,384$ Laurel       51 $1,217$	Greenup	34	1 059	-
Hardin       70 $1,573$ Hardin       10 $2,692$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Jessamine       44 $1,205$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Larue       2 $7,384$ Laurel       51 $1,217$	Hancock	4	2 263	<b>V</b>
Harlan       10 $2,692$ Harison       7 $2,670$ Hart       7 $2,670$ Hart       7 $2,670$ Hart       7 $2,742$ Henderson       37 $1,219$ Henry       11 $1,426$ Hickman       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Larue       2 $7,384$ Laurel       51 $1,217$	Hardin	70	1 573	¥
Harrison       7 $2,670$ Harrison       7 $2,670$ Hart       7 $2,742$ Henderson $37$ $1,219$ Henry       11 $1,426$ Hickman       0         Hopkins       50       909         Jackson       4 $3,257$ Jefferson       712 $1,096$ Josamine       44 $1,205$ Johnson       9 $2,533$ Kenton       91 $1,849$ Knox       2 $15,184$ Larue       2 $7,384$ Laurel       51 $1,217$	Harlan	10	2 692	<b>Å</b>
Hart       7       2,070         Hart       7       2,742         Henderson       37       1,219         Henry       11       1,426         Hickman       0         Hopkins       50       909         Jackson       4       3,257         Jefferson       712       1,096       V         Jessamine       44       1,205       V         Johnson       9       2,533       V         Kenton       91       1,849       V         Knox       2       15,184       Larue         Laurel       51       1,217       V	Harrison	7	2,670	<b>A</b>
Hand $7$ $2,742$ Henderson $37$ $1,219$ Henry       11 $1,426$ Hickman       0         Hopkins $50$ $909$ Jackson       4 $3,257$ Jefferson $712$ $1,096$ Josamine       44 $1,205$ Johnson $9$ $2,533$ Kenton $91$ $1,849$ Knox $2$ $15,184$ Laurel $51$ $1,217$ Lawrence $1$ $16,274$	Hart	7	2,070	
Henry       11 $1,217$ $\sqrt{12}$ Henry       11 $1,426$ $\sqrt{12}$ Hickman       0 $\sqrt{12}$ $\sqrt{12}$ $\sqrt{12}$ Hopkins       50       909 $\sqrt{12}$ $\sqrt{12}$ $\sqrt{12}$ Jefferson       712 $1,096$ $\sqrt{12}$ $\sqrt{10}$ $\sqrt{12}$ Jefferson       91 $1,849$ $\sqrt{12}$ $\sqrt{12}$ $\sqrt{12}$ $\sqrt{12}$ Johnson       9 $2,533$ $\sqrt{12}$ <	Henderson	37	1 210	-
Hickman     0       Hopkins     50     909       Jackson     4     3,257       Jefferson     712     1,096       Johnson     9     2,533       Kenton     91     1,849       Knott     3     4,835       Larue     2     7,384       Laurel     51     1,217	Henry	11	1 426	
Hopkins     50     909       Hopkins     50     909       Jackson     4     3,257       Jefferson     712     1,096       Jessamine     44     1,205       Johnson     9     2,533       Kenton     91     1,849       Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Hickman	0	1,720	
Jackson     4     3,257       Jackson     712     1,096       Jefferson     712     1,096       Jessamine     44     1,205       Johnson     9     2,533       Kenton     91     1,849       Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Honkins	50	909	V
Jefferson     712     1,096       Jessamine     44     1,205       Johnson     9     2,533       Kenton     91     1,849       Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Jackson	4	3 257	
Jessamine     44     1,00       Johnson     9     2,533       Kenton     91     1,849       Knott     3     4,835       Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Jefferson	712	1 096	-
Johnson     9     2,533       Johnson     9     2,533       Kenton     91     1,849       Knott     3     4,835       Larue     2     15,184       Laurel     51     1,217	Jessamine	112	1 205	•
Source     9     2,353       Kenton     91     1,849       Knott     3     4,835       Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Johnson	-+4	2 522	• •
Kenton $21$ $1,642$ V       Knott     3 $4,835$ $\blacktriangle$ Knox     2 $15,184$ $\blacktriangle$ Larue     2 $7,384$ $\blacktriangle$ Laurel     51 $1,217$ $\checkmark$	Kenton	9	2,555	•
Knox     2     15,184       Larue     2     7,384       Laurel     51     1,217	Knott	3	1,049	
Laurel         2         15,164           Laurel         2         7,384           Laurel         51         1,217	Knox	2	4,000	-
Laurel 51 1,217 V	Lorue	2	7 294	-
Laurence 1 $16.274$	Laurel	51	1 217	-
	Laurence	1	16 274	

National Rate:	2,597		
County	Provider Count	People pe	r Provider
Lee	4	1,816	V
Leslie	3	3,541	<b></b>
Letcher	9	2,420	V
Lewis	15	874	V
Lincoln	18	1,351	V
Livingston	3	2,996	<b>A</b>
Logan	16	1,707	V
Lyon	4	2,175	
McCracken	68	991	•
McCreary	1	17,044	<b>_</b>
McLean	10	918	<u> </u>
Madison	158	2 0 2 0	
Magoffin	3	3,939	<b>_</b>
Marion	1/	1,150	
Marshall	9	3,518	
Martin	1	11,394	-
Maada	13	1,140	-
Menifee	2	3 075	
Margar	12	1 7 2 8	-
Metcalfe	8	1,720	-
Monroe	4	2 817	
Montgomery	10	1 478	-
Morgan	2	6 8 8 6	
Muhlenberg	45	689	-
Nelson	65	714	¥
Nicholas	2	3 7 5 9	
Ohio	13	1.835	-
Oldham	78	866	×.
Owen	1	11.160	
Owsley	1	4,094	<b>A</b>
Pendleton	2	7,313	<b></b>
Perry	20	1,421	•
Pike	34	1,733	•
Powell	3	4,350	<b></b>
Pulaski	50	1,294	•
Robertson	2	1,098	V
Rockcastle	9	1,796	V
Rowan	14	1,761	V
Russell	5	3,582	<b>_</b>
Scott	52	1,082	<b>•</b>
Shelby	55	864	•
Simpson	3	6,441	<b>_</b>
Spencer	18	1,070	
Taylor	13	1,996	
Todd	0	2,034	-
Trimble	12	8 502	
Union	1	0,502	-
Warran	92	1 605	¥
Washington	0.5	854	V
Wayne	11	1 795	V
Webster	18	722	×
Whitley	29	1 261	V
Wolfe	5	1,333	•
Woodford	21	1,274	<b>V</b>
Total	3.286	1.368	V
Out of State	659	1,000	
Unknown	170		

#### Table 16. Optometrists by County

National Rate:	8,575		
County	Provider Count	People pe	r Provider
Adair	3	6,277	V
Allen	1	20,604	<b></b>
Anderson	1	23,646	<b></b>
Ballard	0		
Barren	8	5,535	•
Bath	0		
Bell	6	4,112	
Boone	31	4,342	V
Bourbon	1	20,281	<b>A</b>
Boyd	12	4,037	V
Boyle	6	5,078	V
Bracken	0		
Breathitt	0		
Breckinridge	0		
Bullitt	7	11,676	<b>A</b>
Butler	1	12,413	<b>_</b>
Caldwell	2	6,321	<b>_</b>
Calloway	8	4,661	<b>•</b>
Campbell	20	4,651	•
Cariisie	0	10.000	
Carroll	1	10,808	<b>_</b>
Carter	4	6,705	•
Casey	0	10.240	
Christian	1	10,340	-
Clark	0	0,119	
Clay	1	20,464	-
Crittenden	1	9,372	-
Cumberland	0	0,997	-
Daviess	17	6.029	
Edmonson	0	0,027	•
Elliott	0		
Estill	Ő		
Favette	72	4.463	V
Fleming	1	14,996	<b>A</b>
Floyd	4	9,032	
Franklin	10	5,132	V
Fulton	0		
Gallatin	0		
Garrard	1	17,018	<b>A</b>
Grant	3	8,306	V
Graves	4	9,199	<b>A</b>
Grayson	4	6,588	V
Green	0		
Greenup	2	17,998	<b>_</b>
Hancock	2	4,525	<b>_</b>
Hardin	20	5,507	
Harlan	2	13,461	<b>.</b>
Harrison	4	4,6/3	
Hart	10	19,194	-
Henderson	10	4,510	•
Highman	0		
Hopkins	5	0.0%	
Topkins	0	9,000	-
Jackson	126	6 19/	
Jessamine	0	5 801	¥
Johnson	3	7 508	V
Kenton	26	6.472	
Knott	0	0,772	* 
Knox	2	15.184	
Larue	1	14.768	
Laurel	14	4,435	•
Lawrence	1	16.274	

National Rate:	8,575		
County	Provider Count	People pe	er Provider
Lee	0		
Leslie	1	10,622	
Letcher	4	5,446	V
Lewis	1	13,103	<b></b>
Lincoln	2	12,157	<b>A</b>
Livingston	0		
Logan	4	6,830	
Lyon	0		
McCracken	22	3,063	
McCreary	2	8,522	
McLean	0	<b>F</b> 100	_
Madison	17	5,423	
Magoffin	1	11,818	<b>A</b>
Marion	2	9,778	<b>.</b>
Marshall	8	3,958	•
Martin	0	5 701	-
Mason	3	5,701	
Monifec	2	14,868	<b>A</b>
Manager	0	7 400	-
Metcalfo	3	5 1 2 9	*
Monroe	2	2,130	¥
Montgomery	4	2,017	<b>•</b>
Morgan	1	13 772	
Muhlenberg	5	6 202	-
Nelson	7	6 634	<b>V</b>
Nicholas	0	0,054	•
Ohio	2	11 931	
Oldham	2 6	11,264	<b>A</b>
Owen	1	11,160	
Owsley	1	4.094	<b>V</b>
Pendleton	0	.,	
Perry	1	28,421	<b></b>
Pike	28	2,104	V
Powell	0		
Pulaski	12	5,393	V
Robertson	0		
Rockcastle	0		
Rowan	6	4,109	
Russell	1	17,909	<b>A</b>
Scott	6	9,378	<b>A</b>
Shelby	7	6,789	V
Simpson	3	6,441	V
Spencer	0		
Taylor	7	3,707	V
Todd	0		
Trigg	2	7,034	
Trimble	0		
Union	1	13,786	
Warren	23	5,792	
Washington	2	5,979	<b>*</b>
Wayne	3	6,581	▼
webster	0	6006	-
Whitley	6	6,096	▼
Woodford	0	5 250	-
woodford	5	5,352	·
	094	6,476	•
Out of State	1/0		
I TREFICIAN/FI	4		

#### Table 17. Pharmacists by County

National Rate:	1,062	
County	Provider Count	People per Provider
Adair	29	649 🔻
Allen	10	2,060
Anderson	16	1,478 🔺
Ballard	5	1,563 🔺
Barren	50	886 🔻
Bath	7	1,811 🔺
Bell	33	748 🔻
Boone	155	868 🔻
Bourbon	11	1,844
Boyd	70	692
Boyle	55	2708
Bracken	3	1 128
Breakinridge	12	1,138
Bullitt	59	1 385
Butler	3	1,385 A
Caldwell	10	1 264
Calloway	34	1,204
Campbell	125	744
Carlisle	1	4 821
Carroll	2	5.404
Carter	22	1.219
Casev	4	3.966
Christian	43	1,683
Clark	54	680 🔻
Clay	14	1,463 🔺
Clinton	13	721 🔻
Crittenden	6	1,500 🔺
Cumberland	9	669 🔻
Daviess	134	765 🔻
Edmonson	2	6,083 🔺
Elliott	1	7,414 🔺
Estill	5	2,831
Fayette	983	327
Fleming	10	1,500
Floyd	65	556
Franklin	43	1,193
Fulton	/	8 604
Garrard	1	1 / 18
Grant	12	2,077
Graves	28	1 314
Graves	20	1 255
Green	12	928
Greenup	58	621
Hancock	5	1.810
Hardin	103	1.069
Harlan	27	997 🔻
Harrison	20	935 🔻
Hart	8	2,399
Henderson	38	1,187 🔺
Henry	18	872 🔻
Hickman	3	1,510 🔺
Hopkins	53	857 🔻
Jackson	6	2,172
Jefferson	1,361	573
Jessamine	101	525
Johnson	36	633
Kenton	219	/68
Knott	13	1,116
<b>N</b> IIOX	21	1,125
Larue	102	2,110
Laurer	102	709

County         Provider Count         People per Provider           Lee         8         908         ✓           Letcher         27         807         ✓           Lewis         12         1,092         ▲           Lincoln         10         2,431         ▲           Livingston         4         2,247         ▲           Logan         12         2,277         ▲           Logan         12         2,277         ▲           Logan         12         2,277         ▲           McCracken         124         544         ▼           McCracken         124         544         ▼           McCracken         13         9,182         ▲           Madoffin         4         2.955         ▲           Marion         18         1,086         ▲           Marin         6         1.899         ▲           Mason         15         1,140         ▲           Meade         13         2,287         ▲           Menifee         5         2,055         ▲           Montion         59         787         ▼           Morigomery	National Rate:	1.062		
Lee       8       908       V         Lestie       4       2,656 $\land$ Letcher       27       807       V         Lewis       12       1,092 $\land$ Lincoln       10       2,431 $\land$ Logan       12       2,277 $\land$ Logan       12       2,277 $\land$ Logan       12       2,277 $\land$ Magon       9       967 $\lor$ McCreaken       124       544 $\lor$ McCreary       7       2,435 $\land$ Mation       135       683 $\lor$ Marion       18       10,86 $\land$ Marin       6       1,899 $\land$ Marin       6       1,899 $\land$ Mason       15       1,140 $\land$ Meade       13       2,287 $\land$ Menifee       5       1,230 $\land$ Morgan       7       1,967 $\land$ Munorgan       7       1,967 $\land$ Muhlenberg       30       1,034	County	Provider Count	People per	Provider
Leslie       4       2,656         Letcher       27       807         Lewis       12       1,092         Lincoln       10       2,431         Livingston       4       2,247         Logan       12       2,277         McCracken       124       544         McCreary       7       2,435         McLean       1       9,182         Mation       135       683         Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroo       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Owen	Lee	8	908	•
Letcher       27 $807$ Lewis       12       1,092         Lincoln       10       2,431         Logan       12       2,277         Lyon       9       967         McCracken       124       544         McCracken       124       544         McCracken       124       544         Madison       135       683         Madison       135       683         Marion       18       1,086         Marshall       41       772         Marin       6       1899         Mason       15       1,140         Meade       13       2,287         Menifee       5       2,055         Monroe       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nicholas       5       1,503         Owen       5       2,232         Owen       5       2,232         Owen       <	Leslie	4	2,656	<b></b>
Lewis       12       1,092         Lincoln       10       2,431         Livingston       4       2,247         Logan       12       2,277         Lyon       9       967         McCracken       124       544         McCreary       7       2,435         McLean       1       9,182         Madison       135       683         Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Marion       15       1,140         Meade       13       2,287         Marin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menfee       5       1,230         Mercer       22       1,021         Montgomery       23       1,221         Montgom       5       1,503         Montgom       5       1,503         Olhan       156       433         Owen       5       2,232         Owen       5       2,232         Owen       5 <td>Letcher</td> <td>27</td> <td>807</td> <td>V</td>	Letcher	27	807	V
Lincoln       10       2,431         Livingston       4       2,247         Logan       12       2,277         Lyon       9       967         McCracken       124       544         McCreary       7       2,435         Mactean       1       9,182         Madison       135       683         Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Merifee       5       2,055         Morron       22       1,021         Metreer       22       1,021         Morgan       7       1,967         Muhlenberg       30       1,034         Nicholas       5       1,503         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Owen       5       3,865         Scott <td< td=""><td>Lewis</td><td>12</td><td>1,092</td><td><b>▲</b></td></td<>	Lewis	12	1,092	<b>▲</b>
Livingston       4       2,247       ▲         Logan       12       2,277       ▲         Lyon       9       967       ▼         McCracken       124       544       ▼         McCracken       124       544       ▼         McCracken       1       9,182       ▲         Madison       135       683       ▼         Mation       18       1,086       ▲         Marion       18       1,086       ▲         Marion       15       1,140       ▲         Meade       13       2,287       ▲         Marin       6       1,899       ▲         Marin       6       1,899       ▲         Marin       6       1,899       ▲         Marin       6       1,899       ▲         Matin       6       1,899       ▲         Mercer       22       1,021       ▼         Morgan       7       1,967       ▲         Mulpenberg       30       1,034       ▼         Nelson       59       7,87       ▼         Nicholas       5       1,203       ▲	Lincoln	10	2,431	<b>A</b>
Logan       12       2,277         Lyon       9       967         McCracken       124       544         McCreary       7       2,435 $\land$ Madison       135       683 $\checkmark$ Madison       135       683 $\checkmark$ Magoffin       4       2,955 $\land$ Marion       18       1,086 $\land$ Marshall       41       772 $\checkmark$ Marin       6       1,899 $\land$ Mason       15       1,140 $\land$ Meade       13       2,287 $\land$ Mercer       22       1,021 $\checkmark$ Motzafe       5       2,055 $\land$ Morgan       7       1,967 $\land$ Mulenberg       30       1,034 $\checkmark$ Nicholas       5       1,503 $\land$ Owen       5       2,232 $\land$ Owen       5       2,232 $\land$ Owen       5       2,232 $\land$ Owen       5       2,232 $\land$ Owen <td>Livingston</td> <td>4</td> <td>2,247</td> <td><b>▲</b></td>	Livingston	4	2,247	<b>▲</b>
Lyon       9       967       ▼         McCracken       124       544       ▼         McCreary       7       2,435       ▲         Madison       135       683       ▼         Madison       135       683       ▼         Marion       18       1,086       ▲         Marion       18       1,086       ▲         Marin       6       1,899       ▲         Mason       15       1,140       ▲         Meade       13       2,287       ▲         Menifee       5       1,230       ▲         Mercer       22       1,021       ▼         Motogomery       23       1,221       ▲         Morgan       7       1,967       ▲         Mulhenberg       30       1,034       ▼         Nicholas       5       1,503       ▲         Ohio       19       1,256       ▲         Oldham       156       433       ▼         Owen       5       2,232       ▲         Oweley       6       682       ▼         Perry       69       412       ▼      <	Logan	12	2,277	<b>▲</b>
McCracken       124       544         McCreary       7       2,435         Madison       135       683         Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Morgan       7       1,967         Mulenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Owen       5       2,232         Owen       5       2,232         Owen       5       2,232         Owen       7       2,089         Perty       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0	Lyon	9	967	
McCreary       7       2,435       ▲         Madison       135       683       ▼         Magoffin       4       2,955       ▲         Marion       18       1,086       ▲         Marshall       41       772       ▼         Martin       6       1,899       ▲         Martin       6       1,899       ▲         Meade       13       2,287       ▲         Menifee       5       1,230       ▲         Mercer       22       1,021       ▼         Motgomery       23       1,221       ▲         Mongoan       7       1,967       ▲         Muhlenberg       30       1,034       ▼         Nicholas       5       1,503       ▲         Ohio       19       1,256       ▲         Oldham       156       433       ▼         Owen       5       2,232       ▲         Owen       7       2,089       ▲         Perry       69       412       ▼         Pike       107       551       ▼         Powell       6       2,175       ▲	McCracken	124	544	V
McLean       1       9,182         Madison       135       683         Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Motgomery       23       1,221         Monroe       22       512         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,322         Owsley       6       682         Perry       69       412         Pike       107       551         Powell       6       2,175         Rowan       35	McCreary	7	2,435	
Madison       135 $683$ Magoffin       4 $2,955$ Marion       18 $1,086$ Marshall       41 $772$ Martin       6 $1,899$ Mason       15 $1,140$ Meade       13 $2,287$ Menifee       5 $1,230$ Mercer       22 $1,021$ Metcalfe       5 $2,055$ Monroe       22 $512$ Monroe       22 $512$ Mongomery       23 $1,221$ Morgan       7 $1,967$ Muhlenberg       30 $1,034$ Nelson       59 $787$ Nicholas       5 $1,503$ Ohio       19 $1,256$ Oldham       156       433         Owen       5 $2,232$ Owsley       6 $682$ Pendleton       7 $2,089$ Perry       69 $412$ Pike $107$ $551$ Powell       6 $2,175$ <td>McLean</td> <td>1</td> <td>9,182</td> <td><b></b></td>	McLean	1	9,182	<b></b>
Magoffin       4       2,955         Marion       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Mongan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Obio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Rowan       35       704         Russell       31       578         Scott       108	Madison	135	683	
Marton       18       1,086         Marshall       41       772         Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Rowan       35       704         Russell       31       578         Scott       108	Magoffin	4	2,955	<b>A</b>
Marshall       41 $7/2$ Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Mongomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Rowan       35       704         Russell       31       578         Scott       108       52.1         Shelby       58	Marion	18	1,086	<b>_</b>
Martin       6       1,899         Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Obio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0       0         Roxan       35       704         Russell       31       578         Scott       108       521         Shelby       58	Marshall	41	1 000	
Mason       15       1,140         Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Mongomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owen       5       2,232         Owen       5       2,232         Owen       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Robertson       0       10         Rokcastle       15       1,078         Scott       108       521         Shelby       58       819         Simpson       5	Martin	0	1,899	<b>A</b>
Meade       13       2,287         Menifee       5       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0       0         Rockcastle       15       1,078         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Trimble       4 </td <td>Masda</td> <td>15</td> <td>1,140</td> <td></td>	Masda	15	1,140	
Mercer       2       1,230         Mercer       22       1,021         Metcalfe       5       2,055         Mongomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Powell       6       2,175         Powell       6       2,175         Rokcastle       15       1,078         Roscott       108       521         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Trigg       8       1,758         Tringg       8 <td>Manifaa</td> <td>13</td> <td>2,287</td> <td><b>A</b></td>	Manifaa	13	2,287	<b>A</b>
Metcelf       22       1,021         Metcalfe       5       2,055         Monroe       22       512         Morgam       7       1,967         Mulenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Powell       6       2,175         Robertson       0       0         Rockcastle       15       1,078         Rowan       35       704       V         Russell       31       578       Socot         Simpson       5       3,865       S         Spencer       12       1,605       Taylor         Todd       10       1,221       S         Union       6       2,298       S         Wa	Mennee	3	1,230	-
Metcarle       3       2,033         Monroe       22       512         Montgomery       23       1,221         Morgan       7       1,967         Muhlenberg       30       1,034       V         Nelson       59       787       V         Nicholas       5       1,503 $\land$ Ohio       19       1,256 $\land$ Oldham       156       433       V         Owen       5       2,232 $\land$ Owen       5       2,232 $\land$ Owen       7       2,089 $\land$ Pendleton       7       2,089 $\land$ Perry       69       412       V         Pike       107       551       V         Powell       6       2,175 $\land$ Pulaski       68       952       V         Robertson       0 $\bullet$ $\bullet$ Russell       31       578       V         Scott       108       521       V         Shelby       58       819       V         Simpson       5       3,865 </td <td>Mercer</td> <td>5</td> <td>1,021</td> <td></td>	Mercer	5	1,021	
Montgomery       22 $312$ Morgan       7 $1,967$ Muhlenberg       30 $1,034$ Nelson $59$ $787$ Nicholas $5$ $1,503$ Ohio $19$ $1,256$ Oldham $156$ $433$ Owen $5$ $2,232$ Owsley $6$ $682$ Pendleton       7 $2,089$ Perry $69$ $412$ Pike $107$ $551$ Powell $6$ $2,175$ Pulaski $68$ $952$ Robertson $0$ $0$ Rockcastle $15$ $1,078$ $108$ $521$ $\nabla$ Scott $108$ $521$ Shelby $58$ $819$ $\nabla$ Simpson $5$ $3,865$ $\Delta$ Trigg $8$ $1,758$ $\Delta$ Tringle $4$ $2,126$ $\Delta$ Union $6$ $2,298$ $\Delta$ Warren	Monroo	27	2,033	-
Morgan       7       1,221         Morgan       7       1,967         Muhlenberg       30       1,034         Nelson       59       787         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0       7         Rockcastle       15       1,078         Russell       31       578         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Warren       196       680       V         Wayne <td< td=""><td>Montgomery</td><td>22</td><td>1 221</td><td></td></td<>	Montgomery	22	1 221	
Muhlenberg       30       1,907         Muhlenberg       30       1,034 $\checkmark$ Nelson       59       787 $\checkmark$ Nicholas       5       1,503 $\blacktriangle$ Ohio       19       1,256 $\checkmark$ Oldham       156       433 $\checkmark$ Owen       5       2,232 $\checkmark$ Owsley       6       682 $\checkmark$ Pendleton       7       2,089 $\land$ Perry       69       412 $\checkmark$ Powell       6       2,175 $\land$ Pulaski       68       952 $\checkmark$ Robertson       0 $\land$ $\land$ Rowan       35       704 $\checkmark$ Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\land$ Todd       10       1,221 $\land$ Trigg       8       1,758 $\land$ Trinble       4       2,126 $\land$	Morgan	23	1,221	-
Numberlorg       50 $1,034$ Nelson       59       787         Nicholas       5 $1,503$ Ohio       19 $1,256$ Oldham       156       433         Owen       5 $2,232$ Owsley       6       682         Pendleton       7 $2,089$ Perry       69       412         Pike       107       551         Pulaski       68       952         Robertson       0         Rowan       35       704         Russell       31       578         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Warren       196       680         Warren       196       680         Wayne       13       1,519         Washington       8       1,495         Wolfe       9       741	Muhlenberg	30	1,907	÷
Nickola       59       160         Nicholas       5       1,503         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Powell       6       2,175         Powell       6       2,175         Powell       6       2,175         Robertson       0       0         Rockcastle       15       1,078         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Wayne       13       1,	Nelson	59	787	<b>*</b>
Ohio       19       1,265         Ohio       19       1,256         Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0         Rockcastle       15       1,078         Rowan       35       704         Russell       31       578         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Union       6       2,298         Warren       196       680         Wayne       13       1,519         Wayne       13       1,519         Wayne       16       812         Wolfe       9       741	Nicholas	5	1 503	
Oldham       156       433         Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0         Rockcastle       15       1,078         Rowan       35       704         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Union       6       2,298         Warren       196       680         Wayne       13       1,519         Wayne       13       1,519         Wolfe       9       741         Woolford       71       377         Out of State       5,580         Unkowang       0	Ohio	19	1,305	<b>A</b>
Owen       5       2,232         Owsley       6       682         Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Powell       6       2,175         Powell       6       2,175         Powell       6       2,175         Pulaski       68       952         Robertson       0         Rockcastle       15       1,078         Rowan       35       704         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Wayne       13       1,519         Wayne       13       1,519         Webster       16       812	Oldham	156	433	<b>T</b>
Owsley       6 $682$ Pendleton       7 $2,089$ Perry       69 $412$ Pike $107$ $551$ Powell       6 $2,175$ Powell       6 $2,175$ Powell       6 $2,175$ Powell       6 $2,175$ Pulaski $68$ $952$ Robertson       0         Rockcastle       15 $1,078$ Rowan $35$ $704$ Scott $108$ $521$ Shelby $58$ $819$ Simpson $5$ $3,865$ Spencer $12$ $1,605$ Taylor $34$ $763$ Todd $10$ $1,221$ Trigg $8$ $1,758$ Trimble $4$ $2,126$ Union $6$ $2,298$ Warren $196$ $680$ Waying $13$ $1,519$ Wayne $13$ $1,519$ Wolfe $9$ $741$	Owen	5	2.232	À
Pendleton       7       2,089         Perry       69       412         Pike       107       551         Powell       6       2,175         Pulaski       68       952         Robertson       0         Rockcastle       15       1,078         Rowan       35       704         Russell       31       578         Scott       108       521         Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Washington       8       1,495         Wayne       13       1,519         Wolfe       9       741         Woodford       71       377<	Owsley	6	682	<b>T</b>
Perry       69       412 $\checkmark$ Pike       107       551 $\checkmark$ Powell       6       2,175 $\checkmark$ Pulaski       68       952 $\checkmark$ Pulaski       68       952 $\checkmark$ Robertson       0 $\sim$ $\sim$ Rowan       35       704 $\checkmark$ Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\land$ Taylor       34       763 $\checkmark$ Todd       10       1,221 $\land$ Trigg       8       1,758 $\land$ Tringle       4       2,126 $\land$ Union       6       2,298 $\land$ Warren       196       680 $\checkmark$ Wayne       13       1,519 $\land$ Wolfe       9       741 $\checkmark$ Wolfe       9       741 $\checkmark$ Woodford       71       377 $\checkmark$	Pendleton	7	2.089	
Pike       107       551 $\checkmark$ Powell       6       2,175 $\checkmark$ Pulaski       68       952 $\checkmark$ Robertson       0 $\sim$ $\checkmark$ Rockcastle       15       1,078 $\checkmark$ Rowan       35       704 $\checkmark$ Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\land$ Taylor       34       763 $\checkmark$ Todd       10       1,221 $\land$ Trigg       8       1,758 $\land$ Trimble       4       2,126 $\land$ Union       6       2,298 $\land$ Warren       196       680 $\checkmark$ Wayne       13       1,519 $\land$ Wayne       13       1,519 $\land$ Wolfe       9       741 $\checkmark$ Wolfe       9       741 $\checkmark$ Woodford       71       377	Perry	69	412	•
Powell       6 $2,175$ $\checkmark$ Pulaski       68       952 $\checkmark$ Robertson       0 $\checkmark$ $\checkmark$ Rokcastle       15 $1,078$ $\checkmark$ Rowan       35 $704$ $\checkmark$ Russell       31 $578$ $\checkmark$ Scott       108 $521$ $\checkmark$ Shelby       58 $819$ $\checkmark$ Shelby       58 $819$ $\checkmark$ Simpson       5 $3,865$ $\land$ Taylor       34 $763$ $\checkmark$ Todd       10 $1,221$ $\land$ Trigg       8 $1,758$ $\land$ Trimble       4 $2,126$ $\land$ Union       6 $2,298$ $\land$ Warren       196 $680$ $\checkmark$ Wayne       13 $1,519$ $\land$ Wayne       13 $1,519$ $\land$ Wolfe       9 $741$ $\checkmark$ Wolfe       9 $741$ $\checkmark$ Wout of State       <	Pike	107	551	V
Pulaski       68       952       V         Robertson       0 $0$ $0$ Rockcastle       15 $1,078$ $\blacktriangle$ Rowan       35 $704$ $\checkmark$ Russell       31 $578$ $\checkmark$ Scott $108$ $521$ $\checkmark$ Shelby $58$ $819$ $\checkmark$ Simpson $5$ $3,865$ $\land$ Spencer $12$ $1,605$ $\land$ Taylor $34$ $763$ $\checkmark$ Todd $10$ $1,221$ $\land$ Trigg $8$ $1,758$ $\land$ Trimble $4$ $2,126$ $\land$ Union $6$ $2,298$ $\land$ Warren $196$ $680$ $\lor$ Wayne $13$ $1,519$ $\land$ Wayne $13$ $1,519$ $\land$ Wolfe $9$ $741$ $\lor$ Wolfe $9$ $741$ $\checkmark$ Woodford $71$ $377$ $\checkmark$	Powell	6	2,175	<b>A</b>
Robertson       0         Rockcastle       15       1,078         Rowan       35       704 $\checkmark$ Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\triangle$ Spencer       12       1,605 $\triangle$ Taylor       34       763 $\checkmark$ Todd       10       1,221 $\triangle$ Union       6       2,298 $\triangle$ Warren       196       680 $\checkmark$ Wayne       13       1,519 $\triangle$ Wayne       13       1,519 $\triangle$ Wolfe       9       741 $\checkmark$ Wolfe       9       741 $\checkmark$ Out of State       5,580 $\Box$ $\Box$ Unknown       0 $\Box$ $\Box$ $\Box$	Pulaski	68	952	V
Rockcastle       15       1,078         Rowan       35       704 $\checkmark$ Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\land$ Spencer       12       1,605 $\land$ Taylor       34       763 $\checkmark$ Todd       10       1,221 $\land$ Trigg       8       1,758 $\land$ Trimble       4       2,126 $\land$ Union       6       2,298 $\land$ Warren       196       680 $\checkmark$ Wayne       13       1,519 $\land$ Wayne       13       1,519 $\land$ Wolfe       9       741 $\checkmark$ Wolfe       9       741 $\checkmark$ Woodford       71       377 $\checkmark$ Out of State       5,580 $\lor$ $\lor$	Robertson	0		
Rowan       35 $704$ $\bigtriangledown$ Russell       31 $578$ $\checkmark$ Scott       108 $521$ $\checkmark$ Shelby       58 $819$ $\checkmark$ Simpson       5 $3,865$ $\land$ Spencer       12 $1,605$ $\land$ Taylor       34 $763$ $\checkmark$ Todd       10 $1,221$ $\land$ Trigg       8 $1,758$ $\land$ Trimble       4 $2,126$ $\land$ Union       6 $2,298$ $\land$ Warren       196 $680$ $\lor$ Wayne       13 $1,519$ $\land$ Webster       16 $812$ $\lor$ Wolfe       9 $741$ $\lor$ Wolfe       9 $741$ $\checkmark$ Woulf of State $5,580$ $\lor$ $\lor$ Undor of State $5,580$ $\lor$ $\bullet$	Rockcastle	15	1,078	<b>▲</b>
Russell       31       578 $\checkmark$ Scott       108       521 $\checkmark$ Shelby       58       819 $\checkmark$ Simpson       5       3,865 $\blacktriangle$ Spencer       12       1,605 $\checkmark$ Taylor       34       763 $\checkmark$ Todd       10       1,221 $\land$ Trigg       8       1,758 $\land$ Trimble       4       2,126 $\land$ Union       6       2,298 $\land$ Warren       196       680 $\checkmark$ Wayne       13       1,519 $\land$ Webster       16       812 $\checkmark$ Wolfe       9       741 $\checkmark$ Woodford       71       377 $\checkmark$ Out of State       5,580 $\lor$ $\lor$	Rowan	35	704	V
Scott       108 $521$ Shelby       58 $819$ Simpson       5 $3,865$ Spencer       12 $1,605$ Taylor $34$ $763$ Todd       10 $1,221$ Trigg       8 $1,758$ Trimble       4 $2,126$ Union       6 $2,298$ Warren       196 $680$ Washington       8 $1,495$ Wayne       13 $1,519$ Webster       16 $812$ Wolfe       9 $741$ Woodford $71$ $377$ Total $6,205$ $724$ Out of State $5,580$	Russell	31	578	•
Shelby       58       819         Simpson       5       3,865         Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Washington       8       1,495         Wayne       13       1,519         Webster       16       812         Wolfe       9       741         Woodford       71       377         Total       6,205       724         Out of State       5,580         Unlow       0	Scott	108	521	V
Simpson       5 $3,865$ $\blacktriangle$ Spencer       12 $1,605$ $\checkmark$ Taylor $34$ $763$ $\checkmark$ Todd       10 $1,221$ $\checkmark$ Trigg       8 $1,758$ $\land$ Trimble       4 $2,126$ $\land$ Union       6 $2,298$ $\land$ Warren       196 $680$ $\lor$ Washington       8 $1,495$ $\land$ Wayne       13 $1,519$ $\land$ Webster       16 $812$ $\lor$ Wolfe       9 $741$ $\lor$ Woodford $71$ $377$ $\checkmark$ Out of State $5,580$ $\lor$ $\lor$	Shelby	58	819	V
Spencer       12       1,605         Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Washington       8       1,495         Webster       16       812         Whitley       66       554         Wolfe       9       741         Woodford       71       377         Out of State       5,580         Understreer       0	Simpson	5	3,865	<b>▲</b>
Taylor       34       763         Todd       10       1,221         Trigg       8       1,758         Trimble       4       2,126         Union       6       2,298         Warren       196       680         Washington       8       1,495         Wayne       13       1,519         Webster       16       812         Wolfe       9       741         Woodford       71       377         Total       6,205       724         Out of State       5,580         Unknown       0	Spencer	12	1,605	
Todd       10       1,221 $\checkmark$ Trigg       8       1,758 $\checkmark$ Trimble       4       2,126 $\checkmark$ Union       6       2,298 $\checkmark$ Warren       196       680 $\lor$ Washington       8       1,495 $\land$ Wayne       13       1,519 $\land$ Webster       16       812 $\lor$ Wolfe       9       741 $\checkmark$ Woodford       71       377 $\checkmark$ Out of State       5,580 $\downarrow$ $\lor$	Taylor	34	763	
Trigg     8     1,758       Trimble     4     2,126       Union     6     2,298       Warren     196     680       Washington     8     1,495       Wayne     13     1,519       Webster     16     812       Whitley     66     554       Wolfe     9     741       Woodford     71     377       Total     6,205     724	Todd	10	1,221	
Trimble     4     2,126       Union     6     2,298       Warren     196     680       Washington     8     1,495       Wayne     13     1,519       Webster     16     812       Whitley     66     554       Woodford     71     377       Total     6,205     724       Out of State     5,580	Trigg	8	1,758	<b>A</b>
Union         6         2,298           Warren         196         680           Washington         8         1,495           Wayne         13         1,519           Webster         16         812           Whitley         66         554           Woolfe         9         741           Woodford         71         377           Total         6,205         724           Out of State         5,580	Trimble	4	2,126	<b>A</b>
Warren     196     680       Washington     8     1,495       Wayne     13     1,519       Webster     16     812       Whitey     66     554       Wolfe     9     741       Woodford     71     377       Total     6,205     724       Out of State     5,580	Union	6	2,298	<b>_</b>
wasnington     8     1,495       Wayne     13     1,519       Webster     16     812       Whitey     66     554       Wolfe     9     741       Woodford     71     377       Total     6,205     724       Out of State     5,580	Warren	196	680	
wayne     13     1,519       Webster     16     812       Whitey     66     554       Wolfe     9     741       Woodford     71     377       Total     6,205     724       Out of State     5,580	w asnington	8	1,495	
webset         10         812         V           Whiley         66         554         V           Wolfe         9         741         V           Woodford         71         377         V           Total         6,205         724         V           Out of State         5,580         V         V	Wayne	13	1,519	<b>.</b>
willieg         00         554         V           Wolfe         9         741         V           Woodford         71         377         V           Total         6,205         724         V           Out of State         5,580         Unknown         0	webster Whitler	10	812	• •
wone         9         741         V           Woodford         71         377         V           Total         6,205         724         V           Out of State         5,580         Unknown         0	Walfa	00	554 741	
Total         6,205         724           Out of State         5,580	Woodford	9 71	/41 277	<b>•</b>
Out of State         5,580           Unknown         0	Total	6 205	724	V
Unknown = 0	Dut of State	5,205	124	V
	Unknown	5,380		

#### Table 18. Physical therapy by County

National Rate:	1,473	
County	<b>Provider Count</b>	People per Provider
Adair	16	1,177
Allen	20	1,030 🔻
Anderson	20	1,182 🔻
Ballard	6	1,302 🔻
Barren	44	1,006 🔻
Bath	7	1,811
Bell	26	949
Boone	131	1,027
Bourbon	23	882
Boyd	69	/02
Boyle	46	662 V
Bracken	14	8,394
Proclamidae	14	973
Bullitt	57	1 434
Butler	7	1,434
Caldwell	16	790
Calloway	42	888 V
Campbell	110	846
Carlisle	6	804
Carroll	6	1.801
Carter	21	1.277
Casey	21	755 🔻
Christian	48	1,508
Clark	36	1,020 🔻
Clay	13	1,576
Clinton	18	521 🔻
Crittenden	9	1,000 🔻
Cumberland	10	602 🔻
Daviess	183	560 🔻
Edmonson	5	2,433 🔺
Elliott	3	2,471
Estill	2	7,079 🔺
Fayette	637	504 🔻
Fleming	12	1,250
Floyd	41	881
Franklin	45	1,140
Fulton	0	4.247
Gallatin	2	4,34/
Garrard	9	1,891
Grant	11	2,205
Graves	00	228 V
Grayson	21	1,233
Greenup	41	878
Hancock	7	1 293
Hardin	122	903
Harlan	32	841
Harrison	13	1.438
Hart	10	1.919
Henderson	44	1,025
Henry	12	1,308
Hickman	6	755 🔻
Hopkins	84	541 🔻
Jackson	4	3,257
Jefferson	1,270	615 🔻
Jessamine	59	899 🔻
Johnson	18	1,266 🔻
Kenton	192	876 🔻
Knott	16	907 🔻
Knox	16	1,898
Larue	7	2,110
Laurel	64	970 🔻
Lawrence	22	740

National Rate:	1.473		
County	Provider Count	People pe	r Provider
Lee	5	1,453	V
Leslie	21	506	V
Letcher	50	436	V
Lewis	7	1,872	<b></b>
Lincoln	23	1,057	V
Livingston	10	899	V
Logan	18	1,518	<b>A</b>
Lyon	14	621	•
McCracken	156	432	
McCreary	9	1,894	
McLean	8	1,148	•
Madison	89	1,036	
Magoffin	7	1,688	<b>_</b>
Marion	16	1,222	
Marshall	48	660	
Martin	3	3,798	<b>_</b>
Mason	20	855	
Meade	19	1,565	<b>A</b>
Menifee	3	2,050	
Mercer	12	1,873	<b>A</b>
Metcalfe	6	1,713	
Monroe	12	939	V
Montgomery	33	851	V
Morgan	11	1,252	V
Muhlenberg	46	674	V
Nelson	68	683	
Nicholas	2	3,759	
Ohio	33	723	V
Oldham	105	644	
Owen	1	11,160	
Owsley	3	1,365	
Pendleton	5	2,925	
Perry	48	592	<b>•</b>
Pike	47	1,253	
Powell	9	1,450	
Pulaski	117	553	•
Robertson	0	1 418	
Rockcastle	10	1,617	<b>_</b>
Rowan	22	1,121	
Russell	18	995	
Scott	/1	792	
Snelby	49	970	-
Simpson	16	1,208	<u>.</u>
Spencer	25	770	-
1 aylor Todd	35 5	/41	¥
Toda	5	2,441	-
1 rigg	1/	827	¥
Union	21	2,834	-
Union	21	636	<b>v</b>
warren Washington	240	222	¥
w ashington	12	990	¥
Wabster	23	838 010	¥
Whitley	10	ð12 600	¥
Wolfo	01	000	¥
Woodford	/ 21	952	¥
Total	5 714	803 797	V
Total	3,/14	181	
Out of state	1,008		

#### Table 19. Physicians by County

National Rate:	344		
County	<b>Provider Count</b>	People per	· Provider
Adair	10	1,883	<b>A</b>
Allen	4	5,151	<b>▲</b>
Anderson	5	4,729	<b>▲</b>
Ballard	0		
Barren	101	438	<b></b>
Bath	4	3,170	
Bell	39	633	<b>A</b>
Boone	211	638	<b>A</b>
Bourbon	21	966	-
Boyd	288	168	
Doyle	120	242	
Breathitt	4	2,099	-
Breckinridge	14	1 453	1
Bullitt	32	2 554	<b>Ā</b>
Butler	2	6,207	<b>A</b>
Caldwell	11	1,149	
Calloway	62	601	
Campbell	131	710	
Carlisle	2	2,411	<b></b>
Carroll	21	515	<b>A</b>
Carter	10	2,682	<b>A</b>
Casey	5	3,173	<b>A</b>
Christian	129	561	<b>A</b>
Clark	48	765	<b>A</b>
Clay	26	788	<b>▲</b>
Clinton	7	1,339	<b>A</b>
Crittenden	3	2,999	
Cumberland	7	860	
Daviess	302	339	•
Edmonson	2	6,083	<b>A</b>
Elliott	1	7,414	<b>A</b>
Estill	11	1,287	<b>_</b>
Fayette	2,843	113	
Fleming	12	1,250	<b>A</b>
Floyd	80	452	
Fulton	2	3 254	-
Gallatin	2	2 898	<b>1</b>
Garrard	9	1 891	1
Grant	15	1,651	
Graves	36	1.022	<b>A</b>
Gravson	40	659	Ā
Green	5	2,228	<b></b>
Greenup	13	2,769	<b>A</b>
Hancock	1	9,050	<b>A</b>
Hardin	199	553	<b>A</b>
Harlan	50	538	<b>▲</b>
Harrison	25	748	<b>▲</b>
Hart	8	2,399	
Henderson	92	490	
Henry	6	2,615	
Hickman	0		_
Hopkins	138	329	•
Jackson	3	4,343	
Jefferson	3,892	201	
Jessamine	49	1,082	<b>A</b>
Johnson	25	912	-
Kenton	/00 6	240	•
Know	0	2,418	
Larue	24	1,200	-
Laurel	105	5,092	Ā.
Laurenaa	22	708	-

National Rate:	344		
County	Provider Count	People pe	r Provider
Lee	1	7,263	
Leslie	5	2,124	<b></b>
Letcher	40	545	<b></b>
Lewis	8	1,638	<b>A</b>
Lincoln	6	4,052	<b>A</b>
Livingston	8	1,124	<b>▲</b>
Logan	19	1,438	· •
Lyon	3	2,900	<b>_</b>
McCracken	287	235	
McCreary	4	4,261	<b>A</b>
McLean	111	9,182	<b>.</b>
Madison	111	831	<b>.</b>
Magoiiin	0	1,970	<b>.</b>
Marshall	23	1 5 9 2	<b>.</b>
Martin	20	1,365	-
Mason	42	208	-
Maada	43	5 947	-
Menifee	3	2,947	-
Mercer	10	2,050	-
Metcalfe	2	5 138	-
Monroe	9	1 252	<b>A</b>
Montgomery	38	739	Ā
Morgan	10	1.377	<b>A</b>
Muhlenberg	29	1,069	Ā.
Nelson	51	911	
Nicholas	1	7.517	
Ohio	14	1.704	
Oldham	80	845	<b></b>
Owen	4	2,790	<b></b>
Owsley	2	2,047	<b></b>
Pendleton	5	2,925	<b></b>
Perry	117	243	V
Pike	256	230	V
Powell	4	3,263	<b></b>
Pulaski	175	370	<b>A</b>
Robertson	0		
Rockcastle	19	851	<b></b>
Rowan	91	271	
Russell	16	1,119	<b>A</b>
Scott	70	804	<b>A</b>
Shelby	56	849	<b>.</b>
Simpson	16	1,208	<b>A</b>
Spencer	3	6,419	<b>A</b>
Taylor Tadd	49	230	<b>.</b>
Toud	5	4,009	<b>.</b>
Trimble	3	2,015	-
Union	2	4,231	-
Warren	417	2,737	
Washington	41/	3 086	
Wayne	15	1 316	-
Webster	6	2 166	1
Whitley	108	339	<b>•</b>
Wolfe	5	1,333	
Woodford	23	1,163	
Total	12,470	360	
Out of State	8 4 9 5		-
Unknown	6		

#### Table 20. Physician assistants by County

National Rate:	2,497		
County	Provider Count	People pe	r Provider
Adair	1	18,832	
Allen	0		
Anderson	4	5,912	<b></b>
Ballard	1	7,814	<b></b>
Barren	7	6,325	<b></b>
Bath	2	6,340	
Bell	1	24,674	<b></b>
Boone	20	6,730	<b></b>
Bourbon	1	20,281	<b>A</b>
Boyd	32	1,514	•
Boyle	18	1,693	V
Bracken	0		
Breathitt	1	13,652	<b>A</b>
Breckinridge	1	20,345	<b>▲</b>
Bullitt	1	81,729	<b>A</b>
Butler	1	12,413	<b>▲</b>
Caldwell	1	12,641	
Calloway	15	2,486	V
Campbell	27	3,445	<b>A</b>
Carlisle	0		
Carroll	0		
Carter	5	5,364	<b>A</b>
Casey	2	7,932	<b>A</b>
Christian	12	6,031	<b>A</b>
Clark	21	1,748	V
Clay	1	20,484	
Clinton	0		
Crittenden	2	4,499	
Cumberland	0		
Daviess	68	1,507	•
Edmonson	0		
Elliott	0		
Estill	5	2,831	<b></b>
Fayette	427	753	
Fleming	3	4,999	<b>_</b>
Floyd	18	2,007	
Franklin	17	3,019	<b>A</b>
Fulton	0		
Gallatin	0	0.500	
Garrard	2	8,509	<b>A</b>
Grant	1	24,918	<b>.</b>
Graves	3	12,205	<b>.</b>
Grayson	<u> </u>	13,170	<b>_</b>
Greenup	11	3 272	-
Hancock	0	5,212	-
Hardin	40	2 753	
Harlan	3	8 974	-
Harrison	6	3 115	-
Hart	0	5,115	-
Henderson	15	3,007	
Henry	3	5,230	Ā
Hickman	0	5,250	_
Hopkins	8	5.679	
Jackson	1	13.029	
Jefferson	305	2,559	
Jessamine	8	6.627	
Johnson	5	4.559	
Kenton	71	2,370	•
Knott	4	3,627	
Knox	8	3,796	<b>A</b>
Larue	0	- ,	
Laurel	28	2,218	•
Lawrence	2	8 137	

National Rate:	2,497		
County	Provider Count	People pe	r Provider
Lee	3	2,421	V
Leslie	1	10,622	<b></b>
Letcher	1	21,784	<b></b>
Lewis	3	4,368	<b>▲</b>
Lincoln	7	3,473	<b>A</b>
Livingston	3	2,996	
Logan	1	27,319	<b>A</b>
Lyon	0		
McCracken	49	1,375	V
McCreary	1	17,044	<b>A</b>
McLean	0		
Madison	18	5,122	<b>A</b>
Magoffin	3	3,939	<b>A</b>
Marion	3	6,519	<b>A</b>
Marshall	0		
Martin	2	5,697	<b>A</b>
Mason	5	3,421	<b>A</b>
Meade	1	29,735	<b>A</b>
Menifee	2	3,075	<b>A</b>
Mercer	2	11,235	<b>A</b>
Metcalfe	0		
Monroe	1	11,269	<b>▲</b>
Montgomery	21	1,337	V
Morgan	2	6,886	
Muhlenberg	3	10,337	
Nelson	8	5,805	
Nicholas	1	7,517	<b></b>
Ohio	0		
Oldham	9	7,510	<b>A</b>
Owen	0		
Owsley	0		
Pendleton	0		
Perry	21	1,353	V
Pike	27	2,182	•
Powell	2	6,525	<b>A</b>
Pulaski	21	3,082	
Robertson	0		
Rockcastle	7	2,310	•
Rowan	28	881	V
Russell	4	4,477	<b>▲</b>
Scott	12	4,689	<b>A</b>
Shelby	14	3,395	<b>▲</b>
Simpson	2	9,662	<b>A</b>
Spencer	2	9,628	<b>A</b>
Taylor	9	2,883	<b>A</b>
Todd	0		
Trigg	1	14,067	<b>A</b>
Trimble	0		
Union	0		
Warren	25	5,329	<b>A</b>
Washington	0		
Wayne	0		
Webster	0		
Whitley	45	813	V
Wolfe	3	2,222	V
Woodford	7	3,823	
Total	1,622	2,771	
Out of State	241		
Unknown	2		

#### Table 21. Podiatrists by County

National Rate:	37,560		
County	Provider Count	People pe	er Provider
Adair	0		
Allen	0		
Anderson	0		
Ballard	0		
Barren	0		
Bath	0		
Bell	1	24,674	
Boone	10	13,460	
Bourbon	0		
Boyd	4	12,112	V
Boyle	3	10,156	V
Bracken	0		
Breathitt	0		_
Breckinridge	1	20,345	
Bullitt	3	27,243	•
Butler	0		
Caldwell	0	07.001	_
Calloway	1	37,291	
Campbell	1	93,023	<b>A</b>
Carlisle	0		
Carroll	0		
Carter	0		
Casey	0	72 277	•
Christian	1	10 250	-
Clark	2	18,338	•
Clay	0		
Crittenden	0		
Cumberland	0		
Daviess	3	34 163	•
Edmonson	0	54,105	*
Elliott	0		
Estill	0		
Favette	21	15.303	V
Fleming	0	- ,	
Floyd	2	18,064	V
Franklin	2	25,660	V
Fulton	0		
Gallatin	0		
Garrard	0		
Grant	0		
Graves	1	36,796	
Grayson	0		
Green	0		
Greenup	0		
Hancock	0	10.5	_
Hardin	6	18,356	•
Harlan	0	10 500	_
Harrison	1	18,690	•
Hart	0	15.024	-
Henderson	3	15,034	*
Hieleman	0		
Honking	2	15 144	•
Topkins	5	15,144	*
Jackson	65	12 007	
Jessamine	1	53.016	
Johnson	0	55,010	-
Kenton	7	24 038	•
Knott	0	27,050	
Knox	0		
Larue	0		
Laurel	3	20.697	•
Lawrence	0	,0) /	

National Rate:	37,560		
County	Provider Count	People per	Provider
Lee	0	• •	
Leslie	0		
Letcher	2	10,892	•
Lewis	0		
Lincoln	0		
Livingston	0		
Logan	0		
Lyon	0		
McCracken	3	22,465	V
McCreary	0		
McLean	0		
Madison	1	92,194	<b>A</b>
Magoffin	1	11,818	
Marion	1	19,556	•
Marshall	0		
Martin	0	17 102	_
Mason	1	17,103	•
Manifac	0		
Menifee	0		
Mercer Mataalfa	0		
Metcalle	0		
Montoomore	0	14.042	-
Mongon	2	14,042	•
Muhlanbarg	0	31.011	•
Nelson	1	46.440	
Nicholas	0	40,440	-
Ohio	0		
Oldham	1	67 586	•
Owen	0	07,500	-
Owsley	0		
Pendleton	0		
Perrv	2	14.211	•
Pike	4	14,729	•
Powell	0	,	
Pulaski	10	6,472	V
Robertson	0		
Rockcastle	0		
Rowan	1	24,654	•
Russell	0		
Scott	0		
Shelby	1	47,523	<b>A</b>
Simpson	0		
Spencer	0		
Taylor	2	12,974	
Todd	0		
Trigg	0		
Trimble	0		
Union	0	44.40-	
Warren	3	44,405	
Washington	0		
wayne Wabatar	0		
webster	0	26 570	
whitley Walfa	1	30,5/8	•
Woodford	0		
Total	192	24 550	
Out of State	105	24,338	V
Unknown	40 55		
Onknown	55		

**Table 22.** Radiation therapists and nuclear medicine technologists by County

National Rate:	10,003		
County	Provider Count	People pe	r Provider
Adair	2	9,416	
Allen	2	10,302	
Anderson	1	23,646	<b>A</b>
Ballard	0		
Barren	8	5,535	V
Bath	0		
Bell	1	24,674	<b></b>
Boone	5	26,920	<b>A</b>
Bourbon	1	20,281	<b>A</b>
Boyd	19	2,550	V
Boyle	7	4,353	V
Bracken	0		
Breathitt	0		
Breckinridge	1	20,345	
Bullitt	3	27,243	<b>A</b>
Butler	0	10 444	
Caldwell	1	12,641	<b>A</b>
Calloway	1	37,291	<b>A</b>
Campbell	2	46,512	<b>A</b>
Carlisle	0	10.000	
Carroll	1	10,808	<b>A</b>
Carter	1	26,820	
Clasey	0	19.004	
Christian	4	18,094	-
Clark	4	9,179	
Clay	2	10,242	<b>A</b>
Critton	0		
Cumberland	0		
Deviess	11	0 217	•
Edmonson	1	9,517	
Elliott	0	12,105	-
Entill	2	7.079	•
Esurite	57	5,638	<b>V</b>
Fleming	1	14 996	
Floyd	3	12 042	<b>A</b>
Franklin	3	17,106	Ā
Fulton	0	17,100	_
Gallatin	Ő		
Garrard	0		
Grant	0		
Graves	2	18,398	
Grayson	3	8,784	•
Green	0		
Greenup	0		
Hancock	0		
Hardin	15	7,342	V
Harlan	0		
Harrison	1	18,690	<b>A</b>
Hart	0		
Henderson	3	15,034	<b>A</b>
Henry	0		
Hickman	0		_
Hopkins	7	6,490	•
Jackson	0		-
Jetterson	102	7,651	
Jessamine	1	53,016	<b>A</b>
Johnson	17	22,794	<b></b>
Kenton	1/	9,898	*
Knott	0		
KIIOX Lorrad	0		
Larue	0	15 522	
Laurence	4	9 127	
Lawrence	2	0,157	¥

National Rate:	10,003		
County	Provider Count	People pe	r Provider
Lee	0		
Leslie	2	5,311	V
Letcher	4	5,446	
Lewis	0		
Lincoln	0		
Livingston	0		
Logan	0		
Lyon	0		
McCracken	15	4,493	V
McCreary	0		
McLean	0		
Madison	6	15,366	
Magoffin	0		
Marion	1	19,556	
Marshall	2	15,831	<b></b>
Martin	1	11,394	
Mason	2	8,552	•
Meade	1	29,735	
Menifee	0		
Mercer	1	22,470	
Metcalfe	1	10,275	
Monroe	2	5,635	V
Montgomerv	2	14.042	
Morgan	0	, i i i i i i i i i i i i i i i i i i i	
Muhlenberg	2	15.506	
Nelson	4	11,610	
Nicholas	0		
Ohio	5	4.772	V
Oldham	4	16.897	
Owen	0	- ,	
Owsley	0		
Pendleton	0		
Perrv	10	2.842	•
Pike	13	4.532	•
Powell	0	.,	
Pulaski	5	12.943	
Robertson	0	12,910	_
Rockcastle	1	16.167	
Rowan	3	8.218	<b>T</b>
Russell	2	8,955	
Scott	4	14.067	
Shelby	3	15.841	
Simpson	1	19,324	
Spencer	1	19.256	
Tavlor	1	25.948	Ā
Todd	0	,> .0	-
Trigg	1	14.067	
Trimble	1	8,502	V
Union	2	6,893	•
Warren	14	9,515	V V
Washington	1	11,957	
Wavne	1	19.743	Ā
Webster	0	17,745	-
Whitley	7	5 225	V
Wolfe	0	5,225	
Woodford	0		
Total	428	10,500	
Out of State	62	10,500	<b>—</b>
Unknown	10		
Unknown	19		

#### Table 23. Radiological technicians et. al by County

National Rate:	1,534		
County	Provider Count	People pe	r Provider
Adair	8	2,354	
Allen	16	1,288	V
Anderson	11	2,150	<b></b>
Ballard	1	7,814	<b></b>
Barren	59	750	V
Bath	1	12,680	<b>A</b>
Bell	34	726	V
Boone	75	1,795	<b>_</b>
Bourbon	16	1,268	
Boyd	185	262	
Brooken	1	9 204	
Breathitt	20	683	-
Breckinridge	15	1 356	V
Bullitt	65	1,350	×
Butler	8	1.552	À
Caldwell	15	843	V
Calloway	51	731	•
Campbell	38	2,448	<b></b>
Carlisle	5	964	V
Carroll	11	983	V
Carter	12	2,235	<b>▲</b>
Casey	11	1,442	V
Christian	58	1,248	
Clark	71	517	
Clay	13	1,576	<b>.</b>
Clinton	11	852	
Cumborland	0	1,500	
Deviess	102	521	
Edmonson	195	2 /33	
Elliott	1	7 414	-
Estill	13	1.089	<b>T</b>
Favette	800	402	•
Fleming	21	714	•
Floyd	64	564	V
Franklin	60	855	V
Fulton	0		
Gallatin	0		
Garrard	4	4,255	<b>▲</b>
Grant	23	1,083	<b>V</b>
Graves	37	994	
Grayson	24	1,098	
Greenup	12	928	
Hancock	11 4	2 263	
Hardin	188	586	-
Harlan	25	1 077	<b>V</b>
Harrison	29	644	V
Hart	15	1.280	<b>V</b>
Henderson	45	1,002	•
Henry	9	1,743	<b></b>
Hickman	1	4,529	<b></b>
Hopkins	84	541	V
Jackson	3	4,343	<b>A</b>
Jefferson	1,549	504	•
Jessamine	24	2,209	<b></b>
Johnson	19	1,200	-
Kenton	250	6/3	<b>V</b>
Knott	9	1,612	
Larue	10	1,898	<b>A</b>
Laurel	84	4,925	•
Lawrence	16	1 017	

National Rate:	1,534		
County	Provider Count	People pe	r Provider
Lee	6	1,211	
Leslie	10	1,062	V
Letcher	38	573	V
Lewis	5	2,621	<b>A</b>
Lincoln	13	1,870	<b>A</b>
Livingston	5	1,798	
Logan	26	1,051	V
Lyon	1	8,700	
McCracken	189	357	
McCreary	4	4,261	
McLean	2	4,591	<b>_</b>
Madison	85	1,085	
Magoffin	4	2,955	<b>_</b>
Marion	31	631	-
Marshall	24	1,319	
Martin	20	2,279	-
Maada	39 10	439	¥
Menifec	19	1,505	<b>A</b>
Marcar	5 15	2,030	-
Metcalfe	15	1,490	
Monroe	16	704	-
Montgomery	16	1 755	
Morgan	13	1,755	-
Muhlenberg	13	738	¥
Nelson	63	737	¥
Nicholas	3	2 506	
Ohio	32	746	<b>V</b>
Oldham	43	1.572	<b>Å</b>
Owen	3	3.720	
Owsley	2	2,047	<b></b>
Pendleton	0		
Perry	77	369	V
Pike	136	433	V
Powell	7	1,864	<b>A</b>
Pulaski	80	809	V
Robertson	1	2,196	
Rockcastle	12	1,347	
Rowan	56	440	
Russell	15	1,194	
Scott	48	1,172	
Simpson	40	1,100	
Shipson	5	3 851	
Taylor	41	633	-
Todd	1	12 206	
Trigg	11	1 279	-
Trimble	0	1,279	
Union	10	1.379	•
Warren	238	560	
Washington	2	5,979	<b>A</b>
Wayne	20	987	V
Webster	7	1,856	<b>A</b>
Whitley	72	508	•
Wolfe	5	1,333	V
Woodford	16	1,672	<b></b>
Total	6,224	722	
Out of State	959		
Unknown	115		

#### Table 24. Respiratory therapists by County

National Rate:	2,488	
County	Provider Count	People per Provider
Adair	4	4.708
Allen	16	1.288
Anderson	8	2.956
Ballard	0	,
Barren	35	1.265
Bath	9	1 409
Bell	40	617
Boone	43	3.130
Bourbon	12	1 690
Boyd	52	932.
Boyle	16	1.904
Bracken	6	1 399
Breathitt	2	6.826
Breckinridge	8	2 543
Bullitt	57	1 434
Butler	13	955
Caldwell	0	1 405
Calloway	14	2 664
Campball	14	4 228
Carlisle	22	4,228
Carroll	5	5 404
Carton	42	5,404 <b>A</b>
Carter	43	2 172
Clasey	5	3,1/3
Christian	17	4,257
Clark	27	1,360
Clay	13	1,576
Clinton	3	3,124
Crittenden	5	1,799
Cumberland	5	1,205
Daviess	28	3,660
Edmonson	7	1,738
Elliott	0	
Estill	7	2,022
Fayette	190	1,691
Fleming	24	625
Floyd	74	488
Franklin	13	3,948
Fulton	0	
Gallatin	2	4,347
Garrard	12	1,418 🔻
Grant	9	2,769
Graves	38	968 🔻
Grayson	31	850 🔻
Green	5	2,228
Greenup	38	947 🔻
Hancock	4	2,263
Hardin	73	1,509
Harlan	37	728 🔻
Harrison	9	2,077
Hart	8	2,399
Henderson	26	1,735 🔻
Henry	11	1,426 🔻
Hickman	1	4,529
Hopkins	38	1,196 🔻
Jackson	10	1,303 🔻
Jefferson	430	1,815 🔻
Jessamine	32	1,657 🔻
Johnson	34	670 🔻
Kenton	63	2,671
Knott	5	2,901
Knox	27	1,125 🔻
Larue	12	1,231
Laurel	86	722
Lawrence	7	2.325

National Rate:	2,488		
County	Provider Count	People pe	r Provider
Lee	1	7,263	<b></b>
Leslie	4	2,656	<b></b>
Letcher	64	340	V
Lewis	5	2,621	<b>▲</b>
Lincoln	20	1,216	
Livingston	7	1,284	V
Logan	26	1,051	V
Lyon	2	4,350	<b>▲</b>
McCracken	39	1,728	V
McCreary	7	2,435	V
McLean	7	1,312	V
Madison	77	1,197	V
Magoffin	21	563	V
Marion	5	3,911	
Marshall	25	1,266	
Martin	9	1,266	
Mason	14	1,222	•
Meade	10	2,974	
Menifee	6	1,025	
Mercer	8	2,809	
Metcalfe	3	3,425	<b></b>
Monroe	14	805	
Montgomery	22	1,277	<b>_</b>
Morgan	17	810	
Muhlenberg	26	1,193	<b>_</b>
Nelson	36	1,290	<b>_</b>
Nicholas	10	752	<b>_</b>
Ohio	10	2,386	<b>_</b>
Oldham	30	2,253	<b>_</b>
Owen	5	2,232	•
Owsley	0	2 000	_
Pendleton	7	2,089	
Perry	25	1,137	-
Pike	57	1,034	-
Powell	8	1,031	-
Pulaski Dahartaan	52	1,245	
Robertson	1	2,190	-
Dowon	43	0.18	¥
Russell	20	940 853	¥
Scott	41	1 372	<b>•</b>
Shelby	26	1,372	¥.
Simpson	6	3 221	
Spencer	12	1 605	-
Taylor	12	1,005	¥
Todd	4	3 052	
Trigg	3	4 689	<b>A</b>
Trimble	3	2.834	<b>A</b>
Union	6	2,298	T
Warren	102	1,306	
Washington	6	1,993	•
Wayne	10	1,974	V
Webster	11	1,181	•
Whitley	59	620	
Wolfe	8	833	•
Woodford	26	1,029	
Total	2,986	1,505	
Out of State	1,304		
Unknown	0		
#### Table 25. Speech language pathologists by County

National Rate:	2,251		
County	<b>Provider</b> Count	People per Provider	
Adair	3	6,277	
Allen	2	10,302	
Anderson	2	11,823	
Ballard	2	3,907 🔺	
Barren	19	2,330	
Bath	2	6,340	
Bell	6	4,112	
Boone	28	4,807	
Bourbon	5	4,056	
Boyd	19	2,550	
Broolson	15	2,344	
Bracken	3	2,198	
Breckinridge	5	4,060	
Bullitt	9	9.081	
Butler	5	2 483	
Caldwell	4	3 160	
Calloway	16	2.331	
Campbell	30	3.101	
Carlisle	0	5,101 _	
Carroll	2	5,404	
Carter	6	4,470	
Casey	2	7,932	
Christian	17	4,257	
Clark	13	2,824	
Clay	8	2,561	
Clinton	4	2,343	
Crittenden	3	2,999 🔺	
Cumberland	1	6,023	
Daviess	68	1,507 🔻	
Edmonson	2	6,083	
Elliott	1	7,414	
Estill	4	3,539	
Fayette	159	2,021	
Fleming	3	4,999	
Floyd	/	5,161	
Franklin	18	2,851	
Fulton	2	3,234	
Garrard	2	4,547	
Grant	2	12/159	
Graves	14	2 628	
Gravson	12	2,020	
Green	2	5.571	
Greenup	8	4,500	
Hancock	3	3,017	
Hardin	34	3,239	
Harlan	10	2,692	
Harrison	4	4,673	
Hart	2	9,597 🔺	
Henderson	17	2,653	
Henry	4	3,923 🔺	
Hickman	0		
Hopkins	22	2,065	
Jackson	3	4,343	
Jefferson	269	2,901	
Jessamine	12	4,418	
Johnson	7	3,256	
Kenton	47	3,580	
Knott	3	4,835	
Knox	/	4,338	
Larue Laurel	3	4,925	
Laurenco	24	2,301 A	
Lawrence	3	J,42J	

National Rate:	2,251		
County	Provider Count	People pe	r Provider
Lee	2	3,632	
Leslie	4	2,656	<b>A</b>
Letcher	5	4,357	<b>A</b>
Lewis	0		
Lincoln	3	8,105	<b>A</b>
Livingston	3	2,996	
Logan	4	6,830	<b>A</b>
Lyon	3	2,900	<b>_</b>
McCracken	46	1,465	
McCreary	2	8,522	<b>A</b>
McLean	2	4,591	<b>_</b>
Madison	46	2,004	
Magomn	5	3,939	<b>A</b>
Marion	5	3,911	<b>A</b>
Marshall	14	2,202	
Mason	2	3,097	
Maada	1	2,443	<b>A</b>
Menifee	0	4,930	
Mercer	6	3 745	-
Metcalfe	3	3,745	-
Monroe	3	3 756	-
Montgomery	8	3,730	<b>.</b>
Mongan	3	/ 591	-
Muhlenberg	8	3 876	<b>A</b>
Nelson	14	3 317	Ā.
Nicholas	0	5,517	-
Ohio	3	7.954	
Oldham	39	1.733	<b>V</b>
Owen	0	,	
Owsley	0		
Pendleton	1	14,625	<b></b>
Perry	4	7,105	<b>A</b>
Pike	20	2,946	
Powell	2	6,525	<b>A</b>
Pulaski	28	2,311	<b></b>
Robertson	0		
Rockcastle	8	2,021	V
Rowan	5	4,931	<b>A</b>
Russell	3	5,970	<b>A</b>
Scott	19	2,961	<b>A</b>
Shelby	34	1,398	•
Simpson	3	6,441	<b>A</b>
Spencer	5	3,851	
Taylor	11	2,359	<b>A</b>
Todd	3	4,069	
Trigg	1	14,067	<b>A</b>
Trimble	0	0.000	
Union	6	2,298	<b>_</b>
warren Waabin	69	1,931	
w asnington	2	5,979	<b>A</b>
Wayne	4	4,936	<b>A</b>
webster Whitler	3 21	4,551	
Wolfo	21	1,/42	
Woodford	5	4.460	* •
Total	1 515	2,066	
Dut of State	72	2,900	
Uniter State	1 0 2 6		

Variable Name	Variable Description	Variable Values	Variable Notes
License#	Licensee's license number	Numeric value	
License_IssueDate_1st	Date that the license was first issued to the licensee	Date	This variable helps establish how long a healthcare professional has been practicing their discipline.
NPI	National Provider Identifier number	Numeric value	Will not be applicable to all healthcare professionals.
KY_Board_Primary	Which Kentucky licensure board does the licensee consider their primary board of record for their professional healthcare credentials?	Select from list of Kentucky boards	
KY_Board_Secondary	Does the licensee possess a secondary license from a separate healthcare licensure board in Kentucky?	Select from list of Kentucky boards	For example, some social workers are licensed by both the Kentucky Board of Social Work and the Kentucky Board of Licensure for Marriage and Family Therapy.
	Is the licensee also licensed by a	0 = No	For example, some physicians are licensed by the
OtherState_Board	professional board in another state outside of Kentucky?	1 = Yes	Ohio, Kentucky and Indiana, Kentucky and West Virginia, etc.
Name_First	Licensee's first name	String value	
Name_Last	Licensee's last name	String value	
Name_Middle	Licensee's middle name	String value	Full middle name would be preferable (vs. only middle initial).
Degree_Highest	The highest level of education possessed by the licensee that corresponds to their role as a healthcare professional.	High School Diploma Associate of Arts/Science Bachelor of Arts/Science Master of Arts/Science (Includes professional degrees, e.g., MPH, MSW, MSN, etc.) Medical Doctorate Doctor of Osteopathy Doctor of Osteopathy Doctor of Philosophy Pharmacy Doctorate Doctor of Physical Therapy Psychology Doctorate Doctor of Medicine in Dentistry/Doctor of	The degree that permits the licensee to practice their particular healthcare discipline. For example, some practicing physicians also have law degrees or business degrees; in these cases, the preferred response would be to list the medical degree because that is the credential that permits the practice of medicine.
Degree_Institution	The educational institution that conferred the degree listed in the Degree Highest field.	String value	Having this information would allow Kentucky to better understand which educational institutions are training its healthcare workforce.
Grad_Year	The year that the licensee graduated from the educational institution listed in the Degree_Highest field.		
Residency_Location	The licensee's self-identified location where their residency was completed.	String value	Primarily a field for physicians.

#### Table 26. Recommended Data Fields for Kentucky Licensure Boards

Continued Next Page

Variable Name	Variable Description	Variable Values	Variable Notes	
Race	Licensee's self-identified race	American Indian/Alaska Native Black/African American White/Caucasian Native Hawaiian/Pacific Islander Asian	Relies on US Census Bureau race categories. This information is important to know because there is research that suggests that the dynamics of race between physicians and their patients may significantly impact the <u>quality of communication</u> as well as <u>health outcomes and costs</u> .	
Ethnicity	Licensee's self-identified ethnicity.	Hispanic Non-Hispanic	Corresponds to the manner in which the US Census Bureau collects this field.	
Sex	Licensee's self-identified sex	Male Female	Having this information would allow people to better understand the demographics of the healthcare workforce. Additionally, sometimes patients prefer to seek care from a healthcare provider of their same sex.	
Date_of_Birth	Licensee's date of birth	Date	Understanding the age of Kentucky's healthcare workforce is important for several reasons. With this variable, it is possible to understand when providers are likely to retire, how many years of experience providers have on average, age distribution across the state, etc.	
	Describes whether a physician is	No		
Interstate_Compact	ate_Compact licensed in Kentucky via the			
State_Reside	The state in which the licensee resides	String value		
County_Reside	The county in which the licensee resides	String value	It is common for a healthcare professional to live in one county and work in another one.	
County_Employ	The Kentucky county in which the licensee primarily practices their healthcare profession (i.e., where do they see patients?)	One of Kentucky's 120 Counties	It is common for a healthcare professional to live in one county and work in another one.	
County_Employ_Num	The number of Kentucky counties where a licensee saw patients during the past year.	Numeric value	Many healthcare providers see patients in multiple counties during a given year.	
	Does the licensee consider	No	Use the National Cancer Institute definition of a	
Primary_Care	themselves to be a primary care	Yes	primary care provider.	
	provider of general practitioner.	0%		
	Patient treatment time. In a typical	1% - 25%	For the purposes of this item, please include time	
Pt_Trtmnt_Time	week, what percentage of the licensee's time is spent on activities	26% - 75%	dedicated to clinical documentation, care coordination, and billing matters as "activities	
	related to patient care?	76% - 100%	related to patient care."	
Commute_Time	On a typical workday, how many minutes does it take to get from home to work?	Numeric value	Inspired by the US Census Bureau question on the American Community Survey.	
Commute_Distance	On a typical workday, how many miles does it take to get from home to work?	Numeric value		
	Telehealth treatment time. In a	0%	For the nurnoses of this item please include time	
Talahaalth Tima	typical week, what percentage of	1% - 25%	dedicated to clinical documentation, care	
reieneattn_rime	activities related to patient care	26% - 75%	coordination, and billing matters as "activities	
	delivered via telehealth?	76% - 100%	related to patient care."	

Continued Next Page

Variable Name	Variable Description	Variable Values	Variable Notes
Foreign_Language	Does the licensee speak a language other than English at a level of	Spanish Mandarin Chinese Arabic Hindi French	Many patients do not speak English with sufficient fluency to understand their care providers. When
	fluency that they can use it to meaningfully communicate important healthcare information with their patients?	Swahili Slavic Language (Russian, Ukrainian, Polish, etc.) Other Non-English Language	healthcare professionals can speak the same language as their patients, there is <u>evidence that</u> <u>this improves patient outcomes</u> .



# **Higher Education Matters**

## Healthcare Workforce Investment Fund Healthcare Training Scholarship Proposal Evaluation

## SCORES & FEEDBACK

Proposal:			
Evaluator:			

Page 1 of 8



## **Evaluation Form Instructions**

### **Data-Based Items**

These items will be completed by the CPE team based on data available in the HWIF Tableau Dashboard. You will include the pre-populated scores for the items in your point total.

### Likert-Scale Items

Read each item carefully to ensure you understand what is being asked. Once you read the item, reflect on the statement, and decide how strongly you agree or disagree with it based on the information provided in the partnership proposal. The scales may vary slightly (each item is worth a total of 5 or 10 points), but based on each item, indicate whether you strongly disagree, disagree, are neutral, agree, or strongly agree.

### Comments

Evaluators should provide additional insights or specific observations in the 'Comments' box, which can help CPE staff in discussions and decision-making.

**Note:** The HWIF Steering Committee has the authority to add additional criteria during their May meeting. Any necessary assessment items will be added at that time before the June 3, 2024, public release.

Supply/Demand of Credential						
Data-Based Items	< 80th percentile (1 point)	80th - 85th percentile (2 points)	85th - 90th percentile (3 points)	90th - 95th percentile (4 points)	95th - 100th percentile (5 points)	
The regional labor market demand falls within which percentile?	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
The regional labor market supply falls within which percentile?	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (2 points)	Disagree (4 points)	Neutral (6 points)	Agree (8 points)	Strongly Agree (10 points)	
The proposal provides a comprehensive analysis of local healthcare workforce shortages and projects future trends.		$\bigcirc$		$\bigcirc$		

The proposed training programs are directly aligned with the specific needs of regional healthcare employers.	$\bigcirc$			
			Points Total (out of	30)
Comments:				

Focus on Increasing Diversity in Credential/Licensure Area					
Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (1 point)	Disagree (2 points)	Neutral (3 points)	Agree (4 points)	Strongly Agree (5 points)
The proposal clearly explains how the funds will be used to focus on increasing diversity in the credential/licensure area.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The proposed plan to increase diversity aligns with the needs evident in the data from the HWIF Tableau dashboard.		$\bigcirc$			
				Points Total (out o	f 10)
Comments:					

## Geographic Area of Partnership

Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (1 point)	Disagree (2 points)	Neutral (3 points)	Agree (4 points)	Strongly Agree (5 points)
The partnership will serve a geographic area with a low labor market participation rate.	$\bigcirc$		$\bigcirc$	$\bigcirc$	$\bigcirc$
The partnership will serve students from a geographically underserved county or region.				$\bigcirc$	
				Points Total (out of 10	)
Comments:					

Size of Healthcare Partner						
Data-Based Items	> 5,000 employees (2 point)	2,500 – 5,000 employees (4 points)	1,000 – 2,500 employees (6 points)	500 – 1,000 employees (8 points)	< 500 employees (10 points)	
How many employees does the healthcare partner have?						
	Points Total (out of 10)					
		Dedication to Stu	Ident Success			
Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (1 point)	Disagree (2 points)	Neutral (3 points)	Agree (4 points)	Strongly Agree (5 points)	
The proposal describes the program's plan for student recruitment, scholarship criteria, and selection process.	$\bigcirc$		$\bigcirc$	$\bigcirc$		

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The proposal details how to increase student enrollment and program completion.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	
The proposal outlines strategies for onboarding and retaining graduates.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
The partnership will support scholarship students/graduates through their service obligations.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
			Ρ	oints Total (out of 20) _	

Comments:

TOTAL COMPOSITE SCORE				
Supply/Demand of Credential (Page 3 Total Score)	Focusing on Increasing Diversity (Page 4 Total Score)	Geographic Area of Partnership (Page 5 Total Score)	Size of Healthcare Partner (Page 6 Total Score)	Dedication to Student Success (Page 7 Total Score)

Maximum Composite Score = 100



# **Higher Education Matters**

Healthcare Workforce Investment Fund Healthcare Program Incentive Application Evaluation

## SCORES & FEEDBACK

Program: _			
Evaluator:			

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## **Evaluation Form Instructions**

### **Data-Based Items**

These items will be completed by the CPE team based on data available in the HWIF Tableau Dashboard. You will include the pre-populated scores for the items in your point total.

### Likert-Scale Items

Read each item carefully to ensure you understand what is being asked. Once you read the item, reflect on the statement, and decide how strongly you agree or disagree with it based on the information provided in the partnership proposal. The scales may vary slightly (each item is worth a total of 5 or 10 points), but based on each item, indicate whether you strongly disagree, disagree, are neutral, agree, or strongly agree.

### Comments

Evaluators should provide additional insights or specific observations in the 'Comments' box, which can help CPE staff in discussions and decision-making.

**Note:** The HWIF Steering Committee has the authority to add additional criteria during their May meeting. Any necessary assessment items will be added at that time before the June 3, 2024, public release.

		Supply/Demand	of Credential			
Data-Based Items	< 80th percentile (2 point)	80th - 85th percentile (4 points)	85th - 90th percentile (6 points)	90th - 95th percentile (8 points)	95th - 100th percentile (10 points)	
The state labor market demand for the healthcare credential falls within which percentile?	$\bigcirc$			$\bigcirc$		
The state labor market supply for the healthcare credential falls within which percentile?	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$		
Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (2 points)	Disagree (4 points)	Neutral (6 points)	Agree (8 points)	Strongly Agree (10 points)	
The application provides strong evidence of the workforce demands and capacity for the healthcare credential.	$\bigcirc$			$\bigcirc$		
	Points Total (out of 30)					

	Geographic Ar	ea Served by the I	Healthcare Academ	ic Program	
Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (2 point)	Disagree (4 points)	Neutral (6 points)	Agree (8 points)	Strongly Agree (10 points)
The program has effective structures in plan to recruit and retain students from geographically underserved regions.	$\bigcirc$			$\bigcirc$	
The program serves workforce demands and capacity for a healthcare credential in a historically underserved county.	$\bigcirc$				
				Points Total (out o	f 20)

Dedication	to Student Succ	ess
------------	-----------------	-----

Evaluation Criteria (Likert-Scale Items)	Strongly Disagree (2 point)	Disagree (4 points)	Neutral (6 points)	Agree (8 points)	Strongly Agree (10 points)
The program is dedicated to student retention.					
The program has effective career development and/or job placement programs in place.			$\bigcirc$		$\bigcirc$
The program offers impactful simulated and/or clinical setting learning experiences to students.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
				Points Total (out of 3	)

	% Inc	rease in Student Co	ompletion of Progra	am			
Data-Based Item	< 40% (1 point)	40% - 60% (2 points)	61% – 80% (3 points)	81% – 90% (4 points)	91% – 100% (5 points)		
What is the program's graduate rate?			$\bigcirc$				
Data-Based Item	< 0.50% (1 point)	Between 0.50% and 1.0% (2 points)	Between 1.1% and 1.50% (3 points)	Between 1.51% and 2.0% (4 points)	Above 2.0% (5 points)		
How much has the program's graduation rate increased over the past five years? <i>Note: Award 0 points if the rate has decreased.</i>			$\bigcirc$	$\bigcirc$			
	Points Total (out of 10)						

	Graduate	es' Passage Rate o	f Credential Examir	nation	
Data-Based Item	< 80% (2 point)	80% - 85% (4 points)	85% – 90% (6 points)	90% – 95% (8 points)	95% – 100% (10 points)
What is the first-time passage rate of graduates of the healthcare credential examination?	$\bigcirc$		$\bigcirc$		
			Ρ	oints Total (out of 10) _	

TOTAL COMPOSITE SCORE				
Supply/Demand of Credential (Page 2 Total Score)	Geographic Area of Partnership (Page 3 Total Score)	Dedication to Student Success (Page 4 Total Score)	% Increase in Student Completion of Program (Page 5 Total Score)	Graduates' Passage Rate of Credential Examination (Page 6 Total Score)

Maximum Composite Score = 100



## Healthcare Workforce Investment Fund Partnership Proposal Application

Healthcare Training Scholarships

Deadline - August 15, 2024

\* Required

\* This form will record your name, please fill your name.

- 1. Identify the participating healthcare partners and healthcare programs. \*
- 2. Please upload a letter signed by each of the respective chief executive officers that outlines the points of contact for each partner and the amount of the healthcare partner's contributions. \*

↑ Upload file

File number limit: 1 Single file size limit: 10MB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

 Budget - Please upload a copy of the total proposed budget for the program. The budget needs to include the healthcare partner contribution and the amount of healthcare workforce investment funds requested for match. \*

↑ Upload file

File number limit: 1 Single file size limit: 10MB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

4. How will the healthcare program meet local, regional, or state workforce demands? \*

5. How will this partnership improve racial and ethnical diversity within the specific healthcare credential? (if applicable) \*

6. How does this partnership plan to address the specific needs of a historically underserved county? (if applicable) \*

- 7. How many employees does the healthcare partner have? \*
  - > 5,000 employees
  - Between 2,500 and 5,000 employees
  - Between 1,000 and 2,500 employees
  - O Between 500 and 1,000 employees
  - < 500 employees</p>
- 8. How will the healthcare program increase student enrollment in eligible healthcare credentials and program completion? \*

9. How does the entity plan to use the healthcare partner contribution and match from the fund to award healthcare training scholarships in eligible healthcare credentials? \*

10. What is the healthcare program's plan for student recruitment? \*

11. What scholarship award criteria will the program use and how will awardees be selected? \*

12. How will the healthcare partner onboard and retain graduates? \*

13. How will graduates be supported through their service obligations? \*

14. Optional: Please provide any additional details on how this partnership will serve the priorities set forth in KRS 163.0403. \*

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## Healthcare Workforce Investment Fund Healthcare Incentive Proposals

Deadline - August 15, 2024

\* Required

\* This form will record your name, please fill your name.

- 1. Identify the healthcare program requesting funds. \*
- 2. Please provide a summary of the program. \*

3. Budget - Please upload a copy of the total proposed budget for the incentive funds requested.

↑ Upload file

File number limit: 1 Single file size limit: 10MB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

4. Describe the workforce demands and capacity for the healthcare credential. \*

5. Describe how this program serves workforce demands and capacity for the healthcare credential in a historically underserved county. \*

- 6. What is the first-time passage rate of graduates of the healthcare credential examination?
- 7. How does the healthcare credential align with Kentucky's high-demand workforce sectors identified by the Kentucky Workforce Innovation Board and the Education and Labor Cabinet? If not aligned, please provide other verifiable proof of workforce demand for the credential. \*

8. Explain the program's student retention and graduation rates over the past five years

9. What initiatives are in place to retain and graduate students in this program? \*

10. What career development or job placement programs are offered by this program? \*

11. Describe any simulated or clinical setting learning experiences offered in the program? \*

12. Does the program offer learning experiences to middle or high school students? \*

13. Optional: How else does the healthcare program intend to use the requested funds to support the performance and excellence in its production of specific eligible healthcare credentials solely through funding the areas outlined in KRS 164.0404? \*

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