

# Controlled Substance Prescribing Council Annual Report 2024



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### Advisory Council Members

Tricia Steward, Chair Inspector General	Van Ingram Office of Drug Control Policy	Jill Lee RPH BOP*
Wendy Fletcher, APRN KBN*	Jennifer Ramsey, APRN KBN*	Jessica Estes, APRN KBN*
Kara Henshaw, APRN KBN*	Paul Krestik, DPM Board of Podiatry	Keith Slayden, OD Board of Optometric Examiners
Justin Kolasa, DMD BOD*	William Collins, DMD BOD*	Michael Harned, MD KBML*
Ryan Stanton, MD KBML*	Rick Miles, MD KBML*	Colleen Ryan, MD KBML*

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#### Advisory Council Support Staff

Laurie Robinson Executive Assistant	Misty Rose KASPER Administrator	Jordan Shannon Epidemiologist
Tim Anderson Assistant Director Audits & Investigations		Susan Harris Director Audits & Investigations

#### OIG Pharmacist Consultants

Carrie Gentry, Duncan McCracken, Amy Whitley, Laura Wells, Kelly Dixon

\*KBML=Kentucky Board of Medical Licensure, KBN = Kentucky Board of Nursing, BOD=Board of Dentistry, BOP=Board of Pharmacy

## Background

Governor Andy Beshear established the Controlled Substance Prescribing Council by signing Senate Bill 94 into law in 2023, which is now codified as KRS 218A.025.

The council shall meet at least quarterly to discuss matters relating to the safe and appropriate prescribing and dispensing of controlled substances, including:

- The review of quarterly reports issued by the Office of the Inspector General pursuant to KRS 218A.202(9) to identify potential improper, inappropriate, or illegal prescribing or dispensing of controlled substances by examining aggregate patterns of prescribing by profession of the prescriber and county where the medication was prescribed and dispensed.
- Recommendations for improvements in data collection and reporting by the electronic system for monitoring controlled substances pursuant to KRS 218A.202.
- Recommendations for best prescribing practices based on up to date research;
- Recommendations to professional licensing boards for actions to aid in enforcing current law, reviewing prescribing and dispensing data, and correcting improper, inappropriate, or illegal prescribing or dispensing of a controlled substance; and
- Development and communication of any recommendations, based on review of data or research, to each licensure board. The licensure boards shall respond in writing to the panel within ninety (90) days of receiving the recommendations with an explanation of their response to the recommendation. Review charter applications and make recommendations to the Kentucky Board of Education for final approval of charter applications.

The council may request information from the licensure boards regarding their procedures for conducting investigations and taking actions regarding the possible improper, inappropriate, or illegal prescribing or dispensing of controlled substances.

## Council Meeting Dates and Topics

**Date:** September 19, 2023

**Topics:** Initiatives and Recommendations to the General Assembly to Curb Abuse of Illegal and Prescription Drugs

Welcome and Introductions; Inspector General Adam Mather

1<sup>st</sup> Quarter Data Review; Opioid-Opioid Overlaps

**Date:** December 20, 2023

**Topics:** Implementing Statute

Welcome and Introductions; Acting Inspector General David Lovely

2<sup>nd</sup> Quarter Data Review; Opioid-Benzo Overlaps

**Date:** March 11, 2024

**Topics:** Creating Data Work Group

Welcome and Introductions; Acting Inspector General David Lovely

3<sup>rd</sup> Quarter Data Review

**Date:** June 10, 2024

**Topics:** Addressing Identified Overlaps in Prescription Practices

Welcome and Introductions; Acting Inspector General David Lovely

4<sup>th</sup> Quarter Data Review

**Date:** Monday September 9, 2024

**Topics:** Compliance with Prescribing Guidelines

Welcome and Introductions; New Acting Inspector General Tricia Steward

3<sup>rd</sup> Quarter Data Review; Stimulants

## Data Subcommittee Workgroup Meetings

*Council Membership:* Jill Lee, Wendy Fletcher, Jessica Estes

*Non-council Support Members:* Dana Quesinberry, Tim Anderson, Jordan Shannon, Misty Rose, Carrie Gentry

**Date:** January 8, 2024

**Topics:** KASPER trend reports, data fields, and data dictionary.

**Date:** February 12, 2024

**Topics:** KASPER trend reports, data fields, and data dictionary (continued).

**Date:** March 4, 2024

**Topics:** Overlapping prescriptions in KASPER.

## 2024 Controlled Substance Prescribing Council Report

**Date:** April 8, 2024

**Topics:** Reviewing/discussing/revising and defining the criteria for the 2+1 parts of overlapping prescriptions in KASPER analyses.

**Date:** May 20, 2024

**Topics:** Overlapping opioid analgesic + benzodiazepine/sedative + benzodiazepine/sedative prescriptions during the 2023 calendar year.

**Date:** June 5, 2024

**Topics:** Overlapping opioid analgesic + benzodiazepine/sedative + benzodiazepine/sedative prescriptions during the 2023 calendar year (finalization of presentation).

**Date:** July 7, 2024

**Topics:** Recent trends in stimulant prescribing in Kentucky, 2018-2023.

**Date:** July 29, 2024

**Topics:** Recent trends in stimulant prescribing in Kentucky, 2018-2023 (continued).

**Date:** August 11, 2024

**Topics:** Reviewing/discussing/revising various parts of Recent trends in stimulant prescribing in Kentucky, 2018-2023 analyses / differences in stimulant prescribing by drug class, prescriber type, etc.

**Date:** October 13, 2024

**Topics:** CSPC Recommendation

**Date:** November 11, 2024

This was a state holiday, as such this meeting was rescheduled.

### Quarterly Review of Controlled Substance Prescribing/Dispensing Concurrent Opioid Prescriptions (Q1 2024)

In the first quarter of 2024, the Office of Inspector General (OIG), in accordance with KRS 218A.025(2)(a), conducted an analysis of concurrent overlapping opioid prescriptions, identified by their reported days' supply<sup>1</sup>. This effort was guided by the advisory council's data workgroup, which provided valuable insights and recommendations throughout the process.

To ensure data integrity and reduce bias, several exclusions were made. All prescription records for buprenorphine, naloxone, and other medication-assisted treatment (MAT) products, as defined by their therapeutic codes, were excluded. Additionally, prescriptions reported to the Kentucky All Schedule Electronic Reporting (KASPER) system as compounds were removed after identifying artificial data inflation caused by inconsistencies in metric quantity reporting. Prescriptions written by providers specialized in hematology, oncology, hospice, palliative care, and veterinary medicine were also excluded to appropriately align with prescribing statutes, regulations, and guidelines in the Commonwealth of Kentucky.

## 2024 Controlled Substance Prescribing Council Report

During the 2023 calendar year, more than 600,000 distinct overlapping opioid prescriptions were prescribed by over 9,000 unique provider DEA numbers and dispensed to approximately 170,000 Kentuckians. Of these, around 70% involved overlaps of three days or fewer, while 12.6% showed overlaps of 10 or more days (Table 1). Licensed physicians specializing in pain management had the highest contributions to overlapping opioid prescriptions which was expected. Family practice/general medicine physicians and family practice registered nurse practitioners accounted for the second and third-largest share across all specialties (Table 1). It is important to note that prescriber specialty is a self-reported metric collected when prescribers create their KASPER account.

Table 1. Number of overlapping opioid prescriptions by days of overlap (CY 2023)

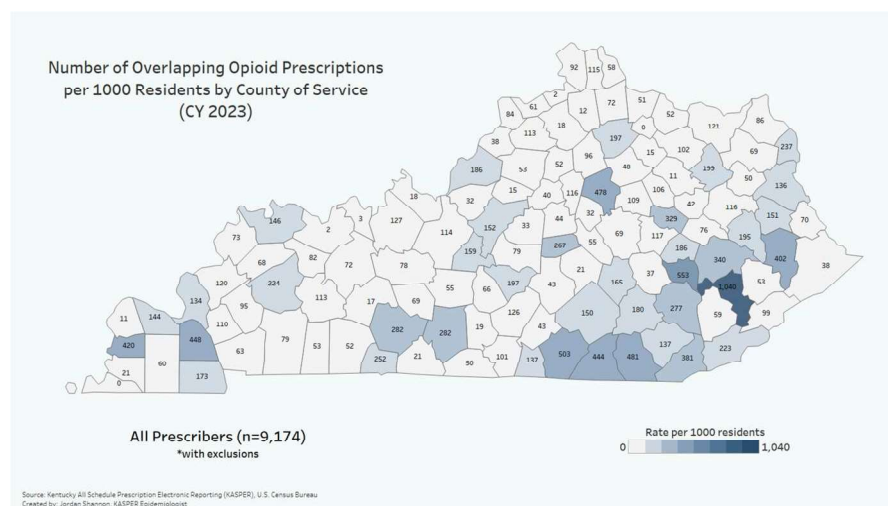
Prescriber Specialty	Days of Overlap (single instance)			Total
	≤ 3 days (row %)	4-9 days (row %)	10+ days (row %)	
Pain Management/Medicine (n=150)	127,459 (69.9)	41,501 (22.8)	13,444 (7.4)	182,404
*Family/General Medicine (n=1256)	125,237 (72.1)	26,031 (15.0)	22,431 (12.9)	173,699
*Family Practice (n=1816)	95,198 (84.5)	8,162 (7.2)	9,309 (8.3)	112,669
Internal Med/Hospitalist (n=997)	54,341 (68.5)	13,153 (16.6)	11,800 (14.9)	79,294
Surgery-Orthopedic (n=359)	13,886 (43.4)	2,507 (7.8)	15,572 (48.7)	31,965
Anesthesiology (n=21)	6,449 (61.5)	3,069 (29.3)	961 (9.2)	10,479
Physical Medicine/Rehabilitation (n=69)	5,649 (57.1)	3,095 (31.3)	1,144 (11.6)	9,888
Adult Gerontology-Primary Care (n=107)	5,515 (83.8)	497 (7.6)	570 (8.7)	6,582
Unknown (n=1156)	21,168 (61.7)	7,423 (21.6)	5,713 (16.7)	34,304
<b>Total</b>	<b>454,902 (71.0)</b>	<b>105,438 (16.4)</b>	<b>80,944 (12.6)</b>	<b>641,284</b>

\*Family Practice specialty is only inclusive of APRN/NP; Family/General Medicine is only inclusive of Physicians/PA. There are a total of 55 different specialties in KASPER. The remaining 46 not listed in this table account for <1% of total o pioid overlaps, respectively.

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County-level geospatial analysis highlighted regional disparities, with higher rates of overlapping prescriptions concentrated in the Appalachian region of the commonwealth. Perry County exhibited a notably high rate of 1,040 distinct overlaps per 1,000 residents, nearly double that of the next highest county, Owsley (553 per 1,000 residents). Wayne County also demonstrated rates exceeding 500 distinct overlaps per 1,000 residents (Figure 1).

Higher rates of overlapping opioid prescriptions may reflect a combination of prescribing practices, community health, and potential challenges related to healthcare access in these areas. This suggests a need for further research into the underlying factors related to concurrent overlapping opioid prescriptions in specific regions of Kentucky.



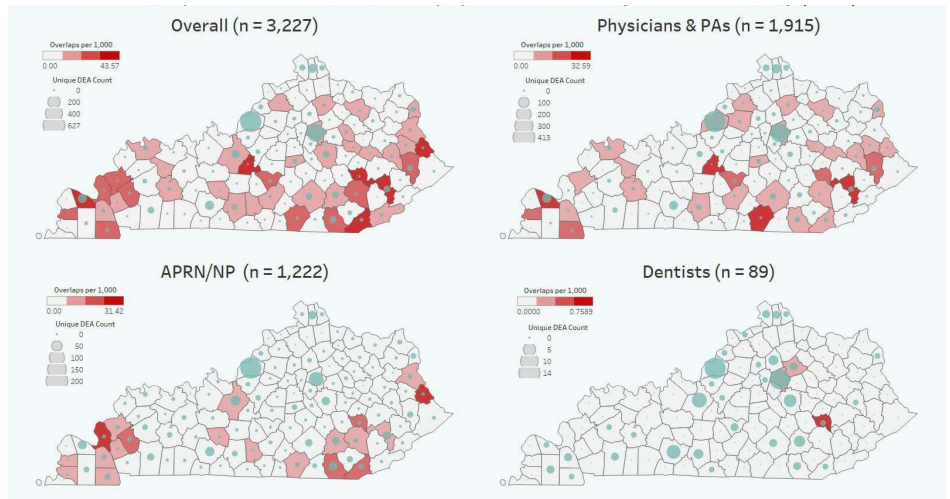
### Concurrent Opioid & Benzodiazepine Prescriptions (Q2 2024)

Building on insights from Q1, the Q2 analysis was expanded by examining overlapping prescription records that included an opioid concurrently prescribed with two additional benzodiazepines (hereinafter “2+1”). This analysis followed the same methodology as Q1 and applied

identical exclusions to reduce bias. During the 2023 calendar year a total of 47,220 distinct instances of overlapping prescriptions involving an opioid plus two additional benzodiazepines were discovered. These instances were attributed to 3,227 unique prescriber DEA numbers and dispensed to roughly 9,700 Kentuckians. Overall, physicians specializing in family/general medicine (n = 730) overwhelmingly contributed to the highest number of distinct “2+1” overlaps (17,069).

County-level analyses revealed patterns in prevalent prescribing and contributions based on prescriber area of work (i.e. physician, nurse, dentist) (Figure 2). Overall, Perry County, which was also identified in the Q1 analysis, had the highest county-level rate at 43.57 distinct “2+1” overlaps per 1,000 residents attributable to 60 unique prescriber DEA numbers. Owsley County (pop. 3,953), despite its population being

Figure 2. Distinct “2+1” overlaps per 1k residents by county of service (CY 2023)



nearly nine times smaller than Perry County (pop. 27,929) showed a similarly high overall rate of 41.49 overlaps per 1,000 residents attributable to seven unique prescriber DEA numbers. In Owsley County, higher rates were consistent across all prescriber categories, reflecting broad contributions regardless of area of work. Martin County followed closely behind with an overall rate of 39.95 distinct overlaps per 1,000 residents merely attributed to only six unique prescriber DEA numbers. In this county specifically, prevalent “2+1” overlaps were most attributable to advanced practice registered nurses/nurse practitioners.

### Rising Trends in Stimulant Prescribing (Q3 2024)

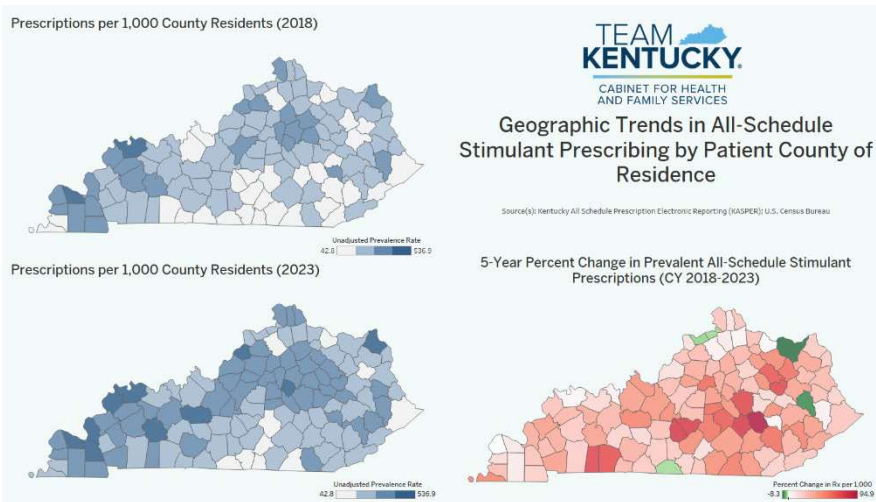
In the third quarter of 2024, OIG shifted its focus to investigate statewide trends in all-schedule stimulant prescribing. This effort was prompted by growing concerns over the substantial rise in stimulant prescribing across the United States. A trend highlighted by the Drug Enforcement Administration (DEA) and supported by various research institutions worldwide<sup>2-9</sup>. Notably, a report prepared by IQVIA for the DEA documented a 57.9% increase in stimulant prescriptions in the U.S. from 2012 to 2022<sup>5</sup>.



## 2024 Controlled Substance Prescribing Council Report

In the Commonwealth of Kentucky, stimulant prescriptions have increased significantly in recent years. From 2018 to 2023, the rate of Schedule II stimulants prescribed increased by 34.8%, far

Figure 3. Changes in prevalent all-schedule stimulant prescribing (2018-2023)



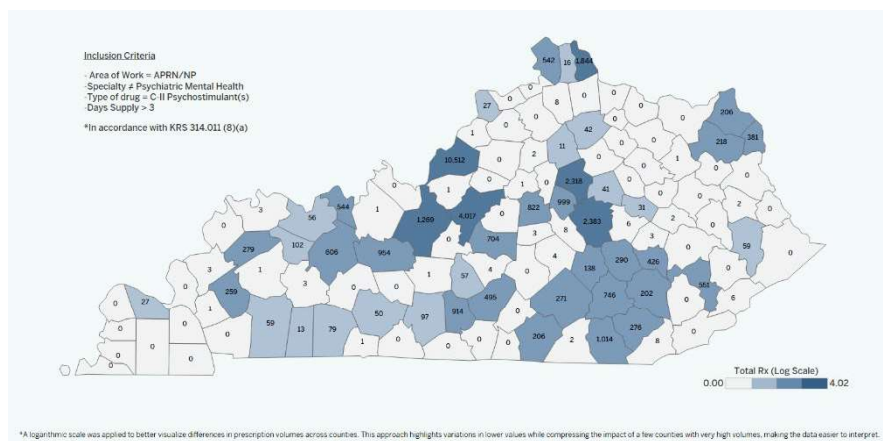
outpacing the 10.5% rise in Schedule III and IV stimulants. The most significant changes occurred among working aged Kentuckians between 25 and 54 years old receiving Schedule II stimulants, such as Adderall or Vyvanse. Geographically, the highest prevalence rates were primarily concentrated in central and western regions of the state (Figure 3). Of Kentucky's 120 counties

only six experienced decreases or no change in prevalent stimulant prescribing dating back to 2018 (Figure 3).

Following a review of trends by drug schedule, patient age, and prescriber type, subject matter experts from the Drug Enforcement and Professional Practices Branch (DEPPB) identified areas of stimulant prescribing that required a more granular assessment.

One key focus was on advanced practice registered nurses (APRNs) and nurse practitioners (NPs), who collectively accounted for one-third of all stimulants prescribed to Kentuckians in 2023. DEPPB specifically examined cases where nurses appeared to prescribe outside the certification requirements outlined in KRS 314.011, Section (8)(a), which limits psychostimulant prescriptions by APRNs to a 30-day supply<sup>10</sup>. This restriction applies only to APRN/NPs certified in psychiatric-mental health nursing and practicing in qualified health facilities or regional mental health programs. Coinciding geospatial analyses are presented in Figure 4. To validate the certifications of these nurses, DEPPB worked in collaboration with the Kentucky Board of Nursing. Joint efforts were aimed to cross-validate professional licensure data to identify dual certifications and confirm potential noncompliance.

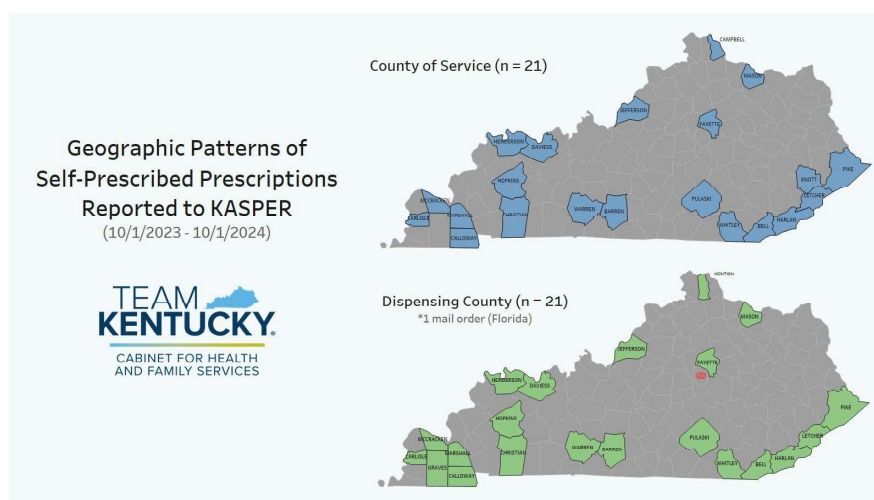
Figure 4. APRN/NP stimulant prescriptions potentially written outside of certification requirement (2023)



**Assessment of Self-Prescribed Records (Q4 2024)**

In the fourth quarter of 2024, OIG conducted an analysis of controlled substance prescriptions suspected to be self-prescribed. This practice is explicitly prohibited by several licensing boards in Kentucky including the Board of Medical Licensure (KRS 311.595(9), KRS 311.597(4)), the Board of Nursing (201 KAR 20:057(11)), the Board of Dentistry (201 KAR

Figure 5. Geospatial analysis of self-prescribed medications reported to KASPER (Oct. 2023 - Oct. 2024)



8:540), and the Board of Optometric Examiners (201 KAR 5:130)<sup>11-15</sup>. The analysis reviewed prescriptions dispensed between October 1, 2023, and October 1, 2024, focusing on key trends by area of work and geographic location (Table 2). A total of 79 self-prescribed controlled substance records were identified, all dispensed or delivered in Kentucky, including one mail-order prescription from Florida. The analysis also identified one prescriber who directly dispensed a controlled substance to themselves and one retired prescriber with an active license valid through 2025. Testosterone products and gabapentin remained the most frequently self-prescribed substances, consistent with previous findings in 2019.

Table 2. Distribution of self-prescribed prescriptions in Kentucky by prescriber area of work (Oct. 2023 – Oct. 2024)

Area of Work	Unique DEAs	Prescriptions Dispensed (%)
Physician	34	65 (82.3)
Dentist	8	8 (10.1)
APRN/NP	3	4 (5.1)
Physician Assistant	1	2 (2.5)
<b>Grand Total</b>	<b>46</b>	<b>79 (100.0)</b>

\*Age of prescribers ranged from 37-88 years old (as of October 2024).

Other controlled substances included tramadol HCl, diphenoxylate HCl, diazepam, zolpidem tartrate, and several more. Although geographic distribution varied widely overall, much of the self-prescribing appeared to occur in counties near Kentucky’s surrounding borders (Figure 5).

### Data Limitations

Throughout each review several limitations were identified in the analysis of controlled substance data reported to KASPER. During the first quarter analysis it became evident that prescription records reported as compounds needed to be excluded due to discrepancies in metric quantity reporting. Compounds with multiple ingredients frequently generated multiple KASPER records that showed metric quantities of zero, leading to an artificial inflation of the data.

Additionally, each analysis included only prescribers licensed and practicing in the Commonwealth of Kentucky to align with licensure board jurisdiction. However, excluding out-of-state prescribers limited the ability to comprehensively assess the overall public health impact on patients receiving controlled substances dispensed in Kentucky. Another limitation involved the reliance on self-reported prescriber specialties to compare trends by provider type. While prescribers are encouraged to review and update their account information annually, ongoing discussions among the data workgroup revealed this may not be widely adopted. The potential impact of inaccurate or outdated self-reported specialties on data integrity should be carefully considered.

KASPER currently collects the dates a prescription was written and filled; however, it does not designate the specific date a prescription was sold and dispensed to the patient. Analyses of concurrent prescriptions relied on a calculated prescription end date based on the reported days' supply. To add, KASPER does not require reporting of diagnosis codes (ICD-10), limiting the ability to assess clinical indications for high-risk controlled substances. In recent years, health care delivery has been transformed by the widespread adoption of telehealth medicine<sup>16</sup>. However, KASPER does not include telehealth indicators restricting the ability to evaluate the impact of virtual care on the prescribing and dispensing of controlled substances in Kentucky.

### Implications for Public Health

Throughout the 2024 calendar year, analyses of KASPER data exposed critical implications for public health intervention. Comprehensive patient counseling, provider education, and enhancements to prescription drug monitoring program (PDMP) tools are essential to improving patient safety and health outcomes for Kentuckians, particularly in regions with high rates of high-risk prescribing. Tailored educational initiatives for prescribers and dispensers can improve the overall understanding of safe prescribing practices and the appropriate use of tools like KASPER. By promoting the routine use of KASPER and its tools such as patient reports and prescriber report cards, this can empower providers to make highly informed clinical decisions leading to better health outcomes.

Enhancing PDMP functionalities such as integrating diagnosis codes, telehealth indicators, and improving prescriber report cards are all ways to strengthen public health monitoring across the state. Furthermore, ongoing collaborations among licensing boards, diverse health agencies, and health systems are critical to improve coordination of care, address regulatory compliance and safeguard public health across the Commonwealth of Kentucky. Further research and surveillance are necessary to continue identifying emerging trends, evaluate state-wide prescribing behaviors, and guide policy surrounding controlled substance prescribing in Kentucky.

## Efforts to Share Information with Licensure Boards

The council made the following recommendation to the Kentucky licensure boards in November 2024.

**Subject:** Recommendation to licensure boards to aid in enforcing, reviewing and correcting prescribing of controlled substances

### Summary and Background of Subject Matter

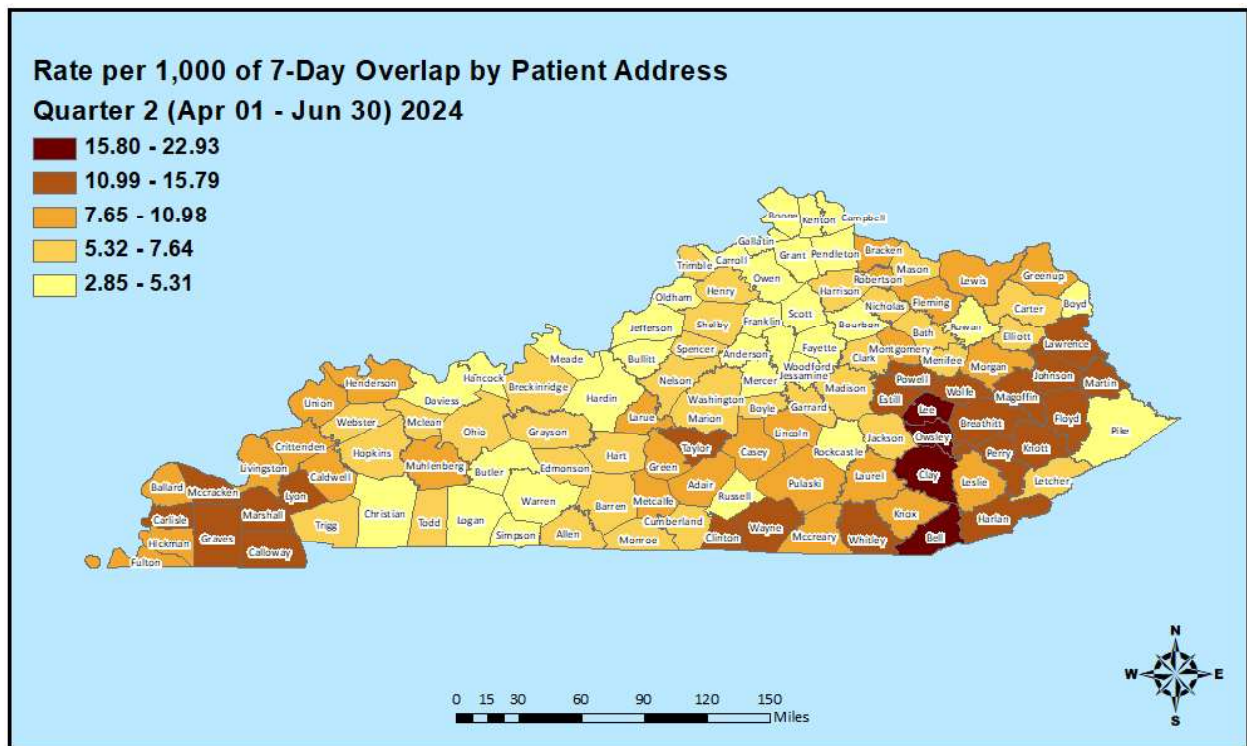
Pursuant to KRS 218A.025 (2)(d) the council recommends sending targeted letters to prescribers with their prescriber report cards to highlight their prescribing patterns compared to their peers.

Council members seek to address a potential lack of coordination among prescribers and utilization of KASPER especially in counties with the highest overlaps of prescriptions.

### Documents Attached

Trend reports related to overlapping opioid and benzodiazepine prescriptions (Figure 6 & Table 3).

Figure 6. Geographic distribution of concurrent opioid/benzodiazepine prescriptions with  $\geq 7$  days of overlap by patient address.





## 2024 Controlled Substance Prescribing Council Report

Table 3. County-level distribution of concurrent opioid/benzodiazepine prescriptions with  $\geq 7$  days of overlap by patient address.

Rate of Patients With at Least a 7-Day Overlap of Opioids and Benzodiazepines per 1,000 for Quarter 2, 2024							
COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000	COUNTY	PER 1000
ADAIR	9.08	EDMONSON	6.36	KNOX	10.98	NICHOLAS	6.49
ALLEN	5.77	ELLIOTT	6.59	LARUE	10.43	OHIO	6.85
ANDERSON	4.56	ESTILL	13.14	LAUREL	8.13	OLDHAM	3.02
BALLARD	9.56	FAYETTE	3.11	LAWRENCE	11.60	OWEN	3.38
BARREN	6.52	FLEMING	8.00	LEE	18.84	OWSLEY	22.93
BATH	7.06	FLOYD	14.25	LESLIE	8.16	PENDLETON	4.53
BELL	21.76	FRANKLIN	4.45	LETCHER	6.15	PERRY	15.07
BOONE	3.53	FULTON	9.55	LEWIS	8.56	PIKE	4.64
BOURBON	4.69	GALLATIN	4.88	LINCOLN	8.21	POWELL	14.30
BOYD	4.32	GARRARD	5.73	LIVINGSTON	10.79	PULASKI	9.26
BOYLE	6.33	GRANT	3.85	LOGAN	4.66	ROBERTSON	9.74
BRACKEN	9.29	GRAVES	11.94	LYON	13.63	ROCKCASTLE	4.09
BREATHITT	15.58	GRAYSON	7.41	MADISON	5.61	ROWAN	4.83
BRECKINRIDGE	6.61	GREEN	9.13	MAGOFFIN	14.35	RUSSELL	3.50
BULLITT	5.31	GREENUP	10.00	MARION	7.34	SCOTT	4.35
BUTLER	4.52	HANCOCK	4.77	MARSHALL	12.24	SHELBY	6.12
CALDWELL	9.87	HARDIN	4.99	MARTIN	14.08	SIMPSON	4.15
CALLOWAY	11.81	HARLAN	13.03	MASON	6.46	SPENCER	6.51
CAMPBELL	3.82	HARRISON	7.45	MCCRACKEN	11.29	TAYLOR	12.36
CARLISLE	12.77	HART	7.35	MCCREARY	7.99	TODD	5.77
CARROLL	4.78	HENDERSON	8.80	MCLEAN	6.54	TRIGG	7.64
CARTER	6.99	HENRY	6.20	MEADE	4.02	TRIMBLE	5.68
CASEY	9.67	HICKMAN	8.00	MENIFEE	7.49	UNION	9.01
CHRISTIAN	4.23	HOPKINS	5.47	MERCER	4.98	WARREN	4.37
CLARK	6.56	JACKSON	7.11	METCALFE	9.28	WASHINGTON	6.56
CLAY	21.04	JEFFERSON	4.49	MONROE	5.57	WAYNE	13.49
CLINTON	12.18	JESSAMINE	4.43	MONTGOMERY	8.50	WEBSTER	6.38
CRITTENDEN	10.01	JOHNSON	11.88	MORGAN	8.42	WHITLEY	15.79
CUMBERLAND	6.98	KENTON	2.85	MUHLENBERG	8.99	WOLFE	15.37
DAVISS	3.80	KNOTT	11.64	NELSON	6.10	WOODFORD	4.44

### Recommended Motion

The council recommends that licensure boards adopt a comprehensive and strategic educational approach to address and mitigate issues with problematic prescribers. This should include the development of targeted educational modules tailored specifically to the intricacies of prescribing practices, with a focus on the risks and legal implications of self-prescribing and misuse of controlled substances. Furthermore, it is advised that boards work with medical education institutions to incorporate these modules into their curricula, thereby instilling best practices early in the careers of medical students.

Additionally, the council suggests implementing mandatory continuing education requirements for current practitioners. These should concentrate on promoting responsible prescribing behaviors and understanding the ethical aspects involved in self-prescription and the management of substance use. To ensure the ongoing relevance and effectiveness of these educational initiatives, the council also recommends establishing robust feedback mechanisms. These systems would evaluate the impact of the educational content and allow for continual refinement and enhancement of the strategies employed, thereby maximizing their reach and influence.

## Research

*Targeted Educational Interventions:* Studies have shown that educational outreach programs (EO), especially those combined with other interventions, can significantly influence prescriber behavior. A review of educational interventions for general practitioners (GPs) found that such programs are particularly effective when baseline rates of inappropriate prescribing are high. These interventions help reduce over-prescribing by providing prescribers with tailored feedback and education on best practices, ultimately improving their decision-making processes in prescribing controlled substances<sup>17,18</sup>.

*Case-Based Learning and Mentoring:* Another effective strategy includes case-based educational interventions and mentoring, which were shown to improve prescribing confidence and competence. Studies implementing these methods found that prescribers who engaged in case scenarios and mentoring from experienced professionals demonstrated improved clinical judgment and were less likely to over-prescribe medications. These interventions also received positive feedback for enhancing prescribers' skills in real-life applications<sup>18</sup>.

*WHO Guide to Good Prescribing:* Educational programs based on the WHO Guide to Good Prescribing (GGP) have been found effective in improving prescriber competence and reducing inappropriate prescriptions. The guide's structured approach to rational pharmacotherapy, used across various teaching formats (lectures, tutorials, and practical sessions), has consistently demonstrated positive outcomes in reducing prescribing errors and inappropriate medication use<sup>19</sup>.

*Utilizing Established Guidelines:* Incorporating the World Health Organization's Guide to Good Prescribing in educational programs can help structure the learning process around rational pharmacotherapy. This approach uses case-based scenarios to teach prescribers how to make sound clinical decisions, thus potentially reducing inappropriate prescribing practices.

*Multimodal and Multifaceted Interventions:* Education programs that combine multiple teaching methods, such as workshops, seminars, and electronic resources, can address various learning needs and reinforce key concepts. These programs can be particularly effective when they include regular feedback, performance assessments, and follow-ups to ensure that learning translates into practice<sup>20</sup>.

*Longitudinal Curricula:* Integrating prescribing education throughout the medical training process, rather than as standalone modules, can provide continuous learning and reinforcement. Programs like the Opioid Conscious Curriculum at the University of Massachusetts Medical School use standardized patient cases, clinical exposure, and interdisciplinary learning opportunities to teach ethical and effective prescribing practices over several years<sup>21</sup>.

*Medical School Curricula:* To integrate prescribing methods into medical school curricula effectively, research emphasizes the importance of collaboration among medical schools, faculties, and local, state, and federal partners. A comprehensive approach involves interactive online modules and various teaching methods such as lectures, clinical experiences, and case-based learning. Assessments often include written tests and simulation cases. Addressing faculty development and curricular time constraints are crucial for enhancing education on safe prescribing practices and opioid use disorder management<sup>22</sup>.

*Addressing Ethical and Practical Realities:* Training should not only focus on technical knowledge but also on the ethical and practical aspects of prescribing, especially for substances with high abuse potential

like opioids. Increasing clinical exposure, providing real-world scenarios, and involving multiple disciplines in education can help prescribers understand and navigate the complexities of pain management and substance abuse<sup>21</sup>.

### Board Responses to Council

Establishing teamwork takes time for a new team to set and work to its full potential. Fully grasping and understanding the role and scope given, through dialog, data review and discussions regarding council statute KRS 218A.025 vs the Drug Enforcement and Professional Practices Branch activities established in KRS 218A.202 has taken time. The process resets when new leadership comes in place as they get up to speed and create their own tempo for leading this group of professionals.

As the council is beginning to fully grasp its full potential, we are excited for the coming year to fully establish processes for recommendations and feedback from the licensure boards.

A recommendation was made to the boards at the end of November regarding targeted education, due to the timeframe, a response has not been received at this time.

### Policy, Statutory & Regulatory Recommendations

Discussions at the council level have involved several ideas to improve prescribing, monitoring and support for commonwealth providers and pharmacists. In anticipation of the council's continued discussions of the ideas, the Office of Inspector General has researched and identified steps for potential implementation that will be presented at the first 2025 quarterly prescribing council meeting.

While this is an optional field in the American Society of Automation in Pharmacy (ASAP) standards, it is data that the Prescription Drug Monitoring Program (PDMP) receives some of the time with the prescription record. Additional details and benefits regarding pharmacist name inclusion follow below.

#### 1. Enhanced Communication Between Providers and Pharmacists

- *Direct Contact for Clarifications:* Identifying the specific pharmacist allows healthcare providers to directly address questions or concerns about a prescription, facilitating timely and accurate information exchange<sup>23</sup>.
- *Collaboration in Patient Care:* Clear identification fosters collaboration between providers and pharmacists, leading to improved medication management and patient outcomes<sup>23</sup>.

#### 2. Accountability and Quality Control

- *Tracking Responsibility:* Including the pharmacist's name adds a layer of accountability, ensuring adherence to professional and legal standards in dispensing medications<sup>24</sup>.
- *Identifying Errors or Trends:* This practice aids in pinpointing errors or patterns in dispensing, allowing for targeted interventions to enhance quality<sup>24</sup>.

#### 3. Enhanced Oversight in Controlled Substance Prescriptions

- *Preventing Misuse or Diversion:* Linking specific pharmacists to prescriptions helps detect and address irregularities, such as filling potentially fraudulent prescriptions<sup>24</sup>.
- *Supporting Investigations:* In cases of suspected abuse or diversion, knowing who dispensed the medication assists in investigations, ensuring compliance with regulations<sup>24</sup>.

4. Education and Feedback for Pharmacists

- *Opportunities for Improvement:* Providers can offer feedback or discuss concerns directly with pharmacists, fostering ongoing education and better adherence to prescribing guidelines<sup>24</sup>.
- *Promoting Best Practices:* Identifying pharmacists associated with prescriptions allows organizations to offer targeted training or resources to enhance dispensing practices<sup>24</sup>.

5. Resolving Discrepancies and Addressing Patient Concerns

- *Resolving Prescription Errors:* If there is a discrepancy in a patient's medication history, providers can quickly identify and communicate with the responsible pharmacist to address the issue<sup>24</sup>.
- *Building Trust with Patients:* Transparency in the prescription process helps build trust among patients, providers, and pharmacists<sup>24</sup>.

6. Supporting Public Health and Safety Initiatives

- *Monitoring Controlled Substances:* Including pharmacists in the reporting process strengthens monitoring systems like KASPER, helping identify patterns that could indicate misuse or overprescription<sup>24</sup>.
- *Reducing Provider-Pharmacist Tension:* Clear identification fosters a collaborative rather than adversarial relationship, benefiting public health goals<sup>24</sup>.



## References

1. Kentucky General Assembly. KRS § 218A.025: Administrative Regulations; Restrictions on Controlled Substances. Published online Updated 2024.  
<https://apps.legislature.ky.gov/law/statutes/statute.aspx?id=53816>
2. Board AR, Guy G, Jones CM, Hoots B. Trends in stimulant dispensing by age, sex, state of residence, and prescriber specialty - United States, 2014-2019. *Drug Alcohol Depend.* 2020;217:108297. doi:10.1016/j.drugalcdep.2020.108297
3. Cassidy TA, Varughese S, Russo L, Budman SH, Eaton TA, Butler SF. Nonmedical Use and Diversion of ADHD Stimulants Among U.S. Adults Ages 18-49: A National Internet Survey. *J Atten Disord.* 2015;19(7):630-640. doi:10.1177/1087054712468486
4. Han B, Jones CM, Blanco C, Compton WM. National Trends in and Correlates of Nonmedical Use of Prescription Stimulants, Nonmedical Use Frequency, and Use Disorders. *J Clin Psychiatry.* 2017;78(9):e1250-e1258. doi:10.4088/JCP.17m11760
5. IQVIA Government Solutions, Inc. *Stimulant Prescription Trends in the United States From 2012-2022.*; 2023:1-36.  
[https://deaddiversion.usdoj.gov/drug\\_chem\\_info/stimulants/IQVIA\\_Report\\_on\\_Stimulant\\_Trends\\_from\\_2012-2022.pdf](https://deaddiversion.usdoj.gov/drug_chem_info/stimulants/IQVIA_Report_on_Stimulant_Trends_from_2012-2022.pdf)
6. Safer DJ. Recent Trends in Stimulant Usage. *J Atten Disord.* 2016;20(6):471-477. doi:10.1177/1087054715605915
7. Sibley MH, Faraone SV, Nigg JT, Surman CBH. Sudden Increases in U.S. Stimulant Prescribing: Alarming or Not? *J Atten Disord.* 2023;27(6):571-574. doi:10.1177/10870547231164155
8. Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: results from the 2018 National Survey on Drug Use and Health. Published online 2019. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>
9. Tseregounis IE, Stewart SL, Crawford A, et al. Age- and Sex-Specific Increases in Stimulant Prescribing Rates-California, 2008-2017. *J Atten Disord.* 2020;24(2):205-214. doi:10.1177/1087054719883008
10. Kentucky General Assembly. KRS § 314.011: Definitions for chapter. Published online Updated 2024. <https://apps.legislature.ky.gov/law/statutes/chapter.aspx?id=38813>
11. Kentucky General Assembly. 201 KAR 20:057. Scope and standards of practice of advanced practice registered nurses. Published online Updated 2024.  
file:///C:/Users/jordan.shannon/Downloads/201%20KAR%2020%20057REG.MARKUP.pdf
12. Kentucky General Assembly. 201 KAR 8:540. Dental practices and prescription writing. Published online Updated 2024. <https://apps.legislature.ky.gov/law/kar/titles/201/008/540/>
13. Kentucky General Assembly. 201 KAR 5:130. Controlled substances. Published online Updated 2024. file:///C:/Users/jordan.shannon/Downloads/201%20KAR%205%20130.ENGROSSED.pdf

14. Kentucky General Assembly. KRS § 311.595: Denial, probation, suspension, or revocation of licenses. Published online Updated 2024.  
<https://apps.legislature.ky.gov/law/statutes/statute.aspx?id=52214>
15. Kentucky General Assembly. KRS § 311.597: Acts declared to constitute dishonorable, unethical, or unprofessional conduct. Published online Updated 2024.  
<https://apps.legislature.ky.gov/law/statutes/statute.aspx?id=52966>
16. Zhang T, Mosier J, Subbian V. Identifying Barriers to and Opportunities for Telehealth Implementation Amidst the COVID-19 Pandemic by Using a Human Factors Approach: A Leap Into the Future of Health Care Delivery? *JMIR Hum Factors*. 2021;8(2):e24860. doi:10.2196/24860
17. Kunstler BE, Lennox A, Bragge P. Changing prescribing behaviours with educational outreach: an overview of evidence and practice. *BMC Med Educ*. 2019;19(1):311. doi:10.1186/s12909-019-1735-3
18. Kamarudin G, Penm J, Chaar B, Moles R. Educational interventions to improve prescribing competency: a systematic review. *BMJ Open*. 2013;3(8):e003291. doi:10.1136/bmjopen-2013-003291
19. de Vries TPGM, Henning RH, Hogerzeil HV, Fresle DA. *Guide to Good Prescribing: A Practice Manual*. World Health Organization; 1994.  
[https://iris.who.int/bitstream/handle/10665/59001/WHO\\_DAP\\_94.11.pdf](https://iris.who.int/bitstream/handle/10665/59001/WHO_DAP_94.11.pdf)
20. Hopkins RE, Bui T, Magliano D, Arnold C, Dooley M. Prescriber Education Interventions to Optimize Opioid Prescribing in Acute Care: A Systematic Review. *Pain Physician*. 2019;22(6):E551-E562.
21. Staff News Writer. Untangling the Medical Ethics of Prescribing Opioids. *American Medical Association*. <https://www.ama-assn.org/delivering-care/ethics/untangling-medical-ethics-prescribing-opioids>. August 10, 2018.
22. Howley L, Whelan A, Rasouli T. Addressing the Opioid Epidemic: U.S. Medical School Curricular Approaches. *Assoc Am Med Coll*. 2018;18(1):1-3.
23. Parks T. Helping patients by using prescription drug monitoring programs. *American Medical Association*. <https://www.ama-assn.org/delivering-care/overdose-epidemic/helping-patients-using-prescription-drug-monitoring-programs>. July 10, 2016.
24. Center for Medicare & Medicaid Services. Fact Sheet: The Role of a Prescription Drug Monitoring Program in Reducing Prescription Drug Diversion, Misuse, and Abuse.  
<https://www.cms.gov/files/document/wpdmpfactsheet062614fpdf>