



2021 Annual Report

Iowa Prescription Monitoring Program (PMP)



Authorship – Iowa Board of Pharmacy

February 2022



Protecting and Improving the Health of Iowans

Acknowledgements

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List of Acronyms

API	Application Protocol Interface
BJA.....	Bureau of Justice Assistance
COAP	Comprehensive Opioid Abuse Prevention
COVID-19.....	Coronavirus Disease of 2019
CSA	Controlled Substances Act
DAS.....	Department of Administrative Services
EHR.....	Electronic Health Records
EMR.....	Electronic Medical Records
EMS	Emergency Medical Services
IDPH	Iowa Department of Public Health
MPE	Multiple Provider Episodes
OCIO	Office of the Chief Information Officer
OD2A	Overdose Data to Action
OTC.....	Over the Counter
PDS.....	Pharmacy Dispensing Systems
PMP	Prescription Monitoring Program
RFP	Request for Proposal
SAMHSA	Substance Abuse and Mental Health Services Administration
SOR2.....	State Opioid Response Grant
STR	State Targeted Response to the Opioid Crisis

Annual Report

Introduction

The Iowa Prescription Monitoring Program (PMP) became fully operational on March 25, 2009 and provides authorized prescribers and pharmacists with on-going information regarding their patients' use of controlled substances, and is used as a tool in determining appropriate prescribing and treatment of patients without fear of contributing to a patient's abuse of, or dependence on, addictive drugs or diversion of those drugs to illicit use. Iowa licensed pharmacies, both resident and nonresident, and dispensing prescribers, are required to report to the PMP all Schedule II, III, IV and V controlled substances along with opioid antagonists (e.g., naloxone) dispensed to ambulatory patients.

The Iowa Board of Pharmacy (Board) administers the PMP with the assistance and guidance of an Advisory Council consisting of four physicians, three pharmacists and one non-physician prescriber appointed by the governor. The Advisory Council meets as needed to review the cost and progress of the PMP. The Advisory Council examines the benefits of the program, possible enhancements to the program, and information, comments, and suggestions received from program users and the public.

The Board and the PMP Advisory Council also review statistics regarding the use of the PMP by prescribers, pharmacists, law enforcement and regulatory agents. They may review the number of prescriptions filled each year, the top drugs dispensed in Iowa each year, and indices of excessive pharmacy-shopping or doctor-shopping for controlled substances. Assessment of PMP data collected for the timeframe of January 1, 2021 through December 31, 2021 is included in this report. Historical data since 2013 is also provided in table format as an attachment.

Operations

From March 25, 2009, until April 3, 2018, the PMP ran on a software platform, referred to as Otech, developed by Optimum Technologies. The cost of initial implementation of the PMP was paid by a federal grant and amounted to \$411,250. From 2009 until 2018, the annual cost for the receipt and delivery of pharmacy data and software maintenance amounted to approximately \$112,000— even after Optimum Technologies was acquired by Appriss Health (now DBA Bamboo Health) on April 24, 2015. The Otech platform included limited functionality that did not enable PMP administrators to run many basic statistical reports. That, as a major downfall, along with the aging, server-based software platform that was not able to accommodate any sizable integration of the PMP with Electronic Health Record (EHR) systems, Electronic Medical Record (EMR) systems and Pharmacy Dispensing Systems (PDS), propelled the Board to initiate the Request for Proposal (RFP) process.

On June 2, 2017, the Board, in conjunction with the Office of the Chief Information Officer (OCIO) and the Department of Administrative Services (DAS), submitted the initial draft of the Project Charter for a new contract for the PMP application. The RFP for the project was issued by the state on August 20, 2017, with proposals due on November 13, 2017. On November 30, 2017, the Notice of Intent to Award RFP 0918005004 for the Iowa Board of Pharmacy Prescription Monitoring Program was given to Appriss Health (Bamboo Health) for its PMP AWARe™ solution. The contract was officially executed in January 2018. On March 28, 2018, data from the former Otech platform was successfully migrated into AWARe™ and the upgraded system became fully operational on April 4, 2018. Calendar year 2021 marked the third full year of use with the AWARe™ software platform. The platform and add-on services continue to be well received by the PMP users in Iowa.

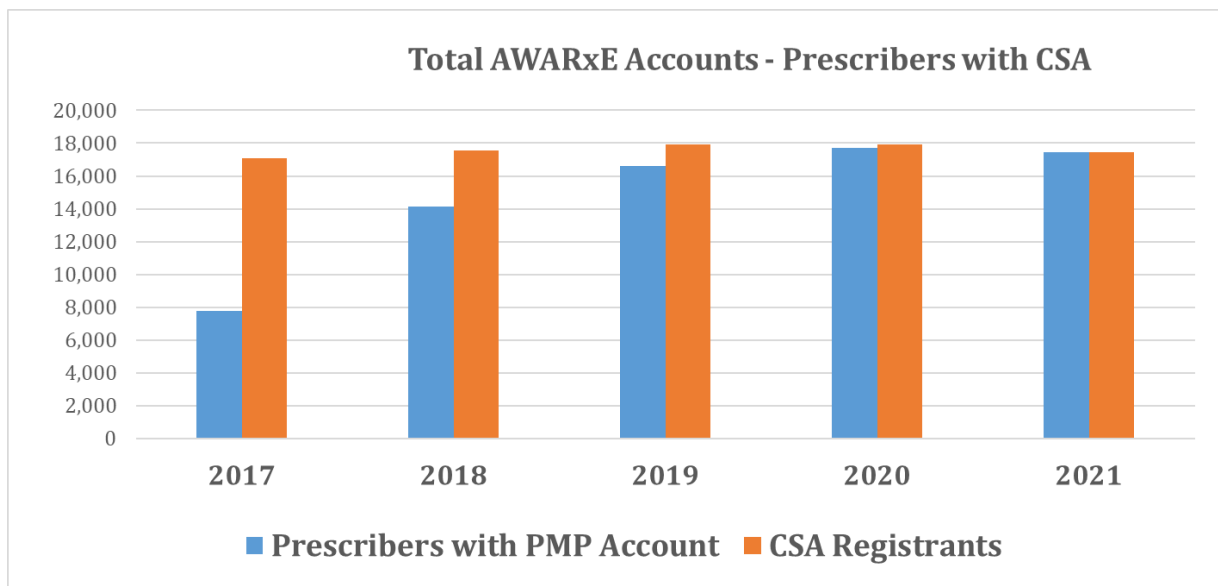
The cost for the AWARe™ solution was \$100,000 per year for the first two years of the contract. For contract years 3, 4, 5, and 6, the annual fees will increase to \$102,000, \$104,040, \$106,120 and \$108,250, respectively. Annual costs are paid from license fees retained by the Board for the support of Board programs and activities. No additional user fees or surcharges have been imposed to pay for the activities or support of the PMP since its inception. The Board has received a few donations, each year, to support the PMP and specific improvements or add-ons to the PMP.

NarxCare™ was selected to be an add-on service to further enhance the AWARe™ software platform. NarxCare™ aids practitioners with their clinical decision making and assists prescribers and dispensers in improving patient safety and bettering patient outcomes. NarxCare™ summarizes and analyzes data collected by the PMP and generates summary information, additional insights, and overdose risk scores related to each patient. The annual fee for NarxCare™ is \$186,000, which previously was paid for using funds from the State Targeted Response to the Opioid Crisis Grant (STR), a grant jointly awarded to IDPH and the Board. The STR grant ran until April 30, 2021. In 2021, NarxCare™ was paid for using funds from the State Opioid Response Grant (SOR2), a grant jointly awarded to the IDPH and the Board through SAMHSA. NarxCare™ will continue to be funded by the SOR2 grant for 2022.

HF 2377/ “The Opioid Bill”

The enactment of HF 2377 into law on July 1, 2018, conferred new requirements on Iowa Controlled Substances Act (CSA) registrants and the PMP. One requirement of note is Iowa Code section 124.551A which mandates that a prescribing practitioner “register for the program at the same time the prescribing practitioner applies to the Board to register or renews registration to prescribe controlled substances as required by the board.” The percent of CSA registrants that had a PMP user account continued to increase throughout 2021, ending the year at 100.0% (Figure 1).

Figure 1: CSA Registrants vs. PMP Prescriber Account Holders



In addition, HF 2377 mandated that Iowa licensing boards adopt rules requiring their respective licensees to utilize the PMP database prior to issuing an opioid prescription. The Iowa Board of Medicine, Board of Nursing, Dental Board, Board of Physician Assistants, Board of Podiatry, Board of Psychology and Board of Optometry all adopted rules relating to such requirements during calendar year 2019 or 2020. Therefore, 2021 represented the second full calendar year since the licensing boards adopted these requirements.

PMP Data

From March 25, 2009, until May 15, 2018, pharmacies were only required to submit data on reportable prescriptions to the PMP on a weekly basis. In an effort to provide more contemporary PMP records, Iowa Administrative Code subrule 657-37.3(3) was amended by the Board to require pharmacies to submit prescription data no later than the next business day following dispensing. The PMP and the Board continue to work in a coordinated effort to monitor and ensure compliance with the updated reporting requirements, including an effort to purge the PMP Clearinghouse of closed pharmacies and updating AWARe™ to accurately reflect pharmacy hours of operation (e.g., identify and flag pharmacies closed Saturday, Sunday, holidays).

Beginning in May of 2021, all Schedule V (CV) prescriptions were required to be reported to the PMP. Common CV prescriptions include promethazine with codeine (Phenergan with Codeine®), atropine/diphenoxylate (Lomotil®) and pregabalin (Lyrica®), among others. This rule change also added the non-prescription sale of codeine-containing cough suppressants (e.g., Robitussin-AC®), to the list of reportable transactions.

However, pseudoephedrine-containing substances dispensed or purchased OTC are excluded from the reporting requirement. The impact of these new regulations on PMP utilization is reflected in the reported “PMP Data” below.

In 2021, the PMP also required all previously exempt pharmacies complete and submit a new exemption request. The new exemption request form reflected the 2021 change in CV reporting and a previous change in opioid antagonist reporting requirements. In addition, the PMP continued an outreach program begun in 2020 to contact pharmacies identified as regularly delinquent in their reporting. Currently, the compliance (includes a two-day grace period) rate for pharmacies hovers around 99.6%, an increase from 93.2% in 2019 and 98.3% in 2020. The compliance rate is expected to increase further in 2022 as pharmacy records continue to be brought up to date, the PMP continues its outreach and education, and newly available compliance toolkits within AWA^Rx^E™ are utilized.

Prescription and PMP user data referenced in this report was collected by the PMP between January 1, 2021, and December 31, 2021. During the 2021 calendar year, not only did the number of pharmacist and prescriber user accounts increase, but the number of patient queries from both provider types (prescriber and pharmacist) also increased, with a 35.8% increase in provider searches seen in 2021 relative to 2020. These increases are in large part due to the rise in the number of integrations between the PMP and electronic health records (EHR), electronic medical records (EMR) and pharmacy dispensing systems (PDS). To date, all integrations have been enabled using an application protocol interface (API) known as Gateway™. Queries that originated in the stand-alone AWA^Rx^E™ web portal and integrated queries that originated through Gateway™ are shown separately for both pharmacist and prescriber provider categories. Both provider categories show a marked increase in total patient searches from 2017 to 2021 (Figures 2 and 3). Daily and active PMP user totals have also increased.

Figure 2: Pharmacist Queries (includes delegate requests)

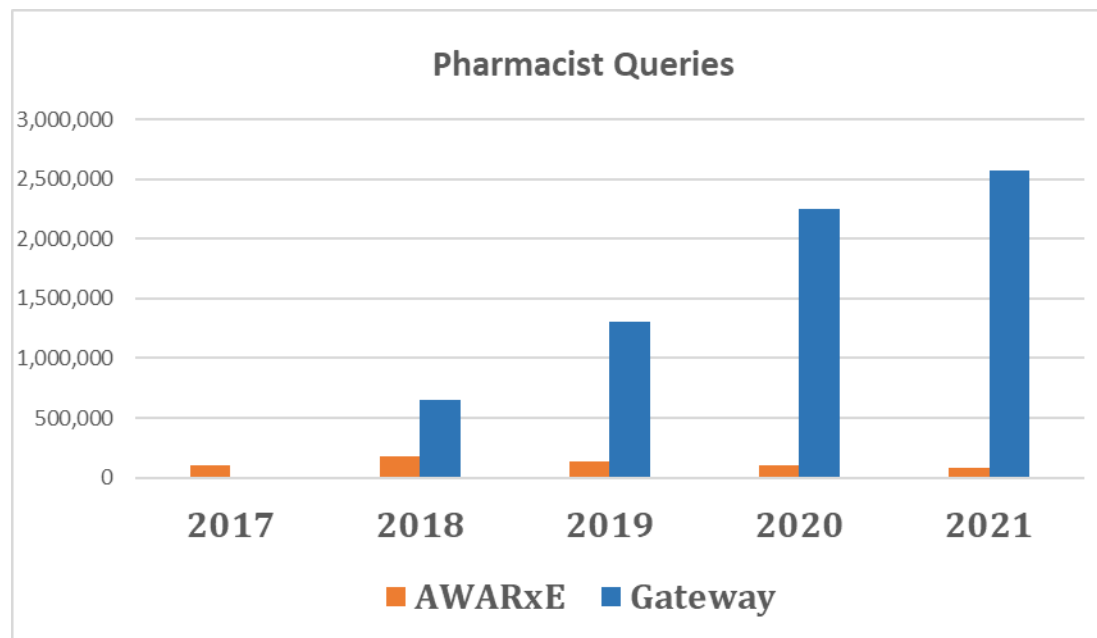
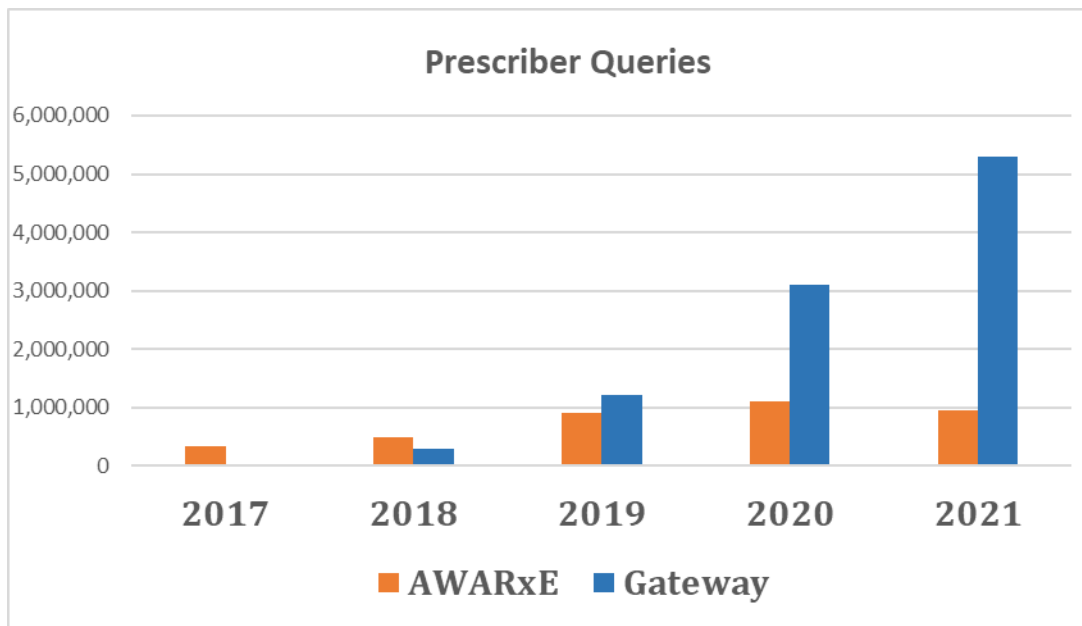


Figure 3: Prescriber Queries (includes delegate requests)



Figures 4 through 6 display the top 10 Schedule II-IV drugs dispensed by number of dosage units for years 2018, 2019 and 2020, respectively, while Figure 7 displays the top ten Schedule II-V drugs dispensed by number of dosage units for year 2021. The drugs that fill those top ten spots were identical in 2018 and 2019, and similar for 2020 and 2021. The exceptions were lisdexamfetamine, which took the place of amphetamines among the top ten in 2020, and the addition of pregabalin and the deletion of lisdexamfetamine in 2021. The changes noted in 2021 reflect the changes in PMP Schedule V reporting requirements. The ranking orders have remained relatively consistent over time. Similar to other states, Iowa has seen a reduction in the relative percentage of opioids dispensed, and a relative increase in the percentages of stimulants and benzodiazepines. It remains unknown how much these more recent trends have been driven by COVID-19.

Figure 4: 2018 Top 10 Schedule II-IV Drugs by Dosage Units Dispensed

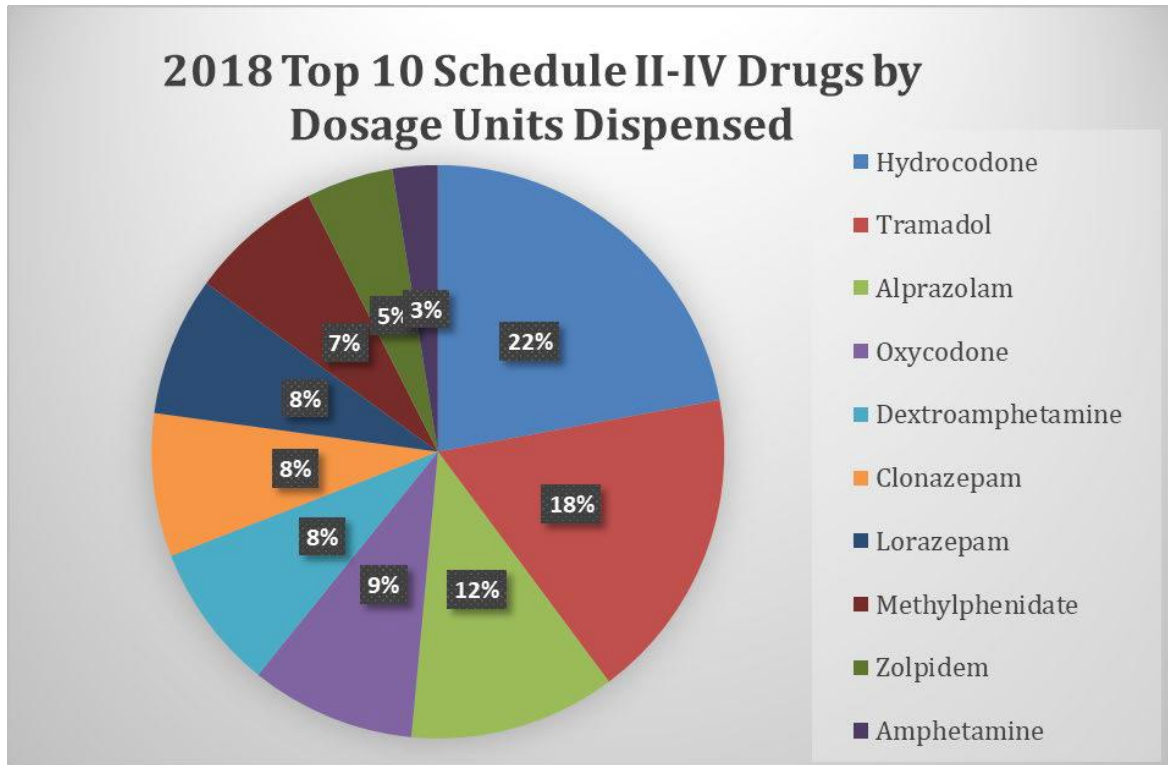


Figure 5: 2019 Top 10 Schedule II-IV Drugs by Dosage Units Dispensed

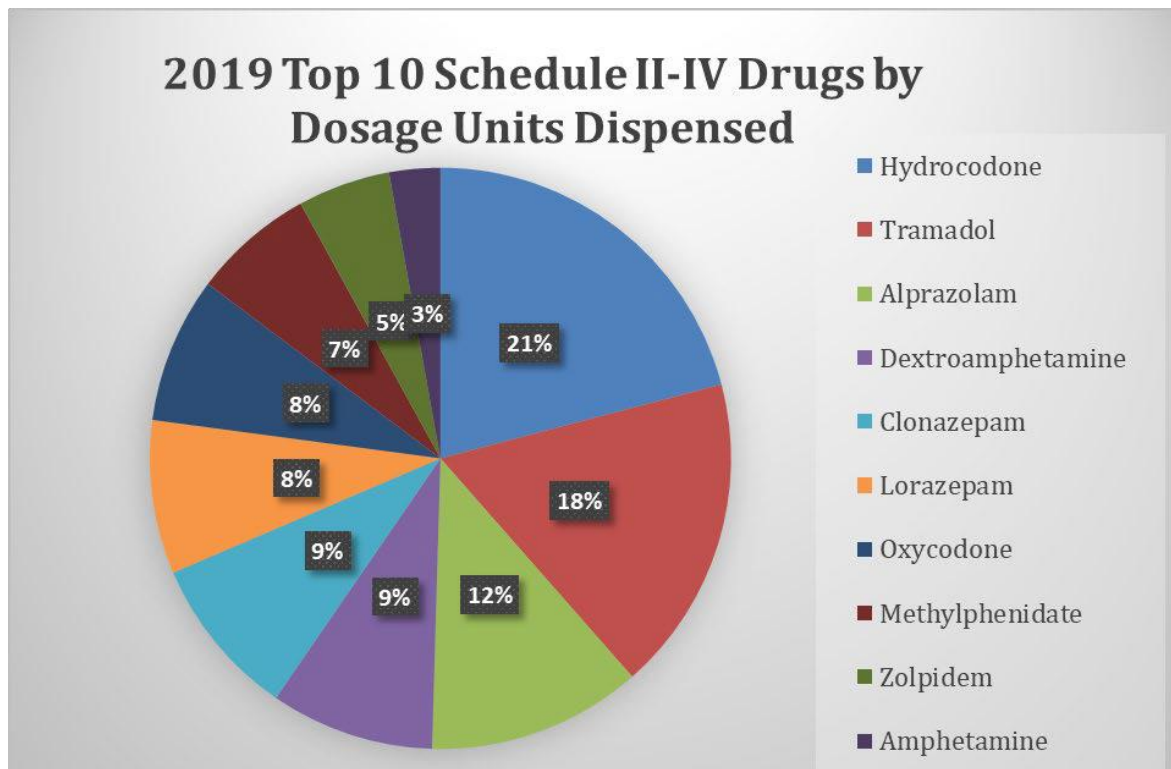


Figure 6: 2020 Top 10 Schedule II-IV Drugs by Dosage Units Dispensed

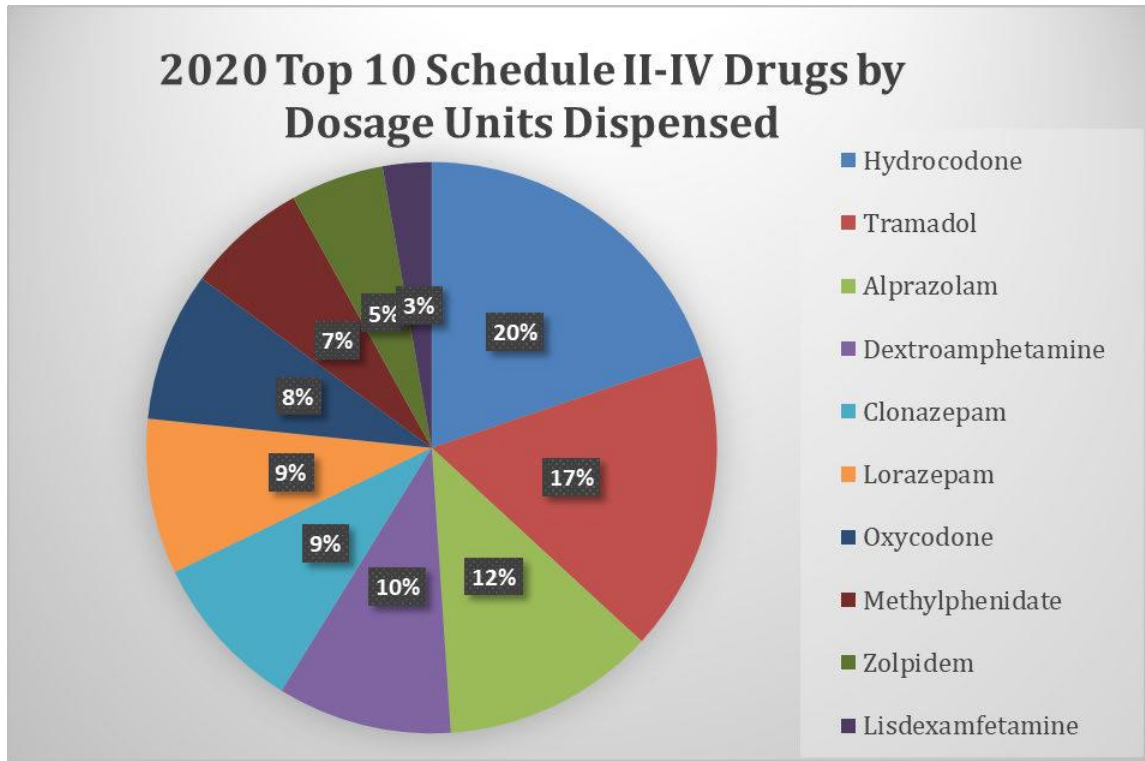
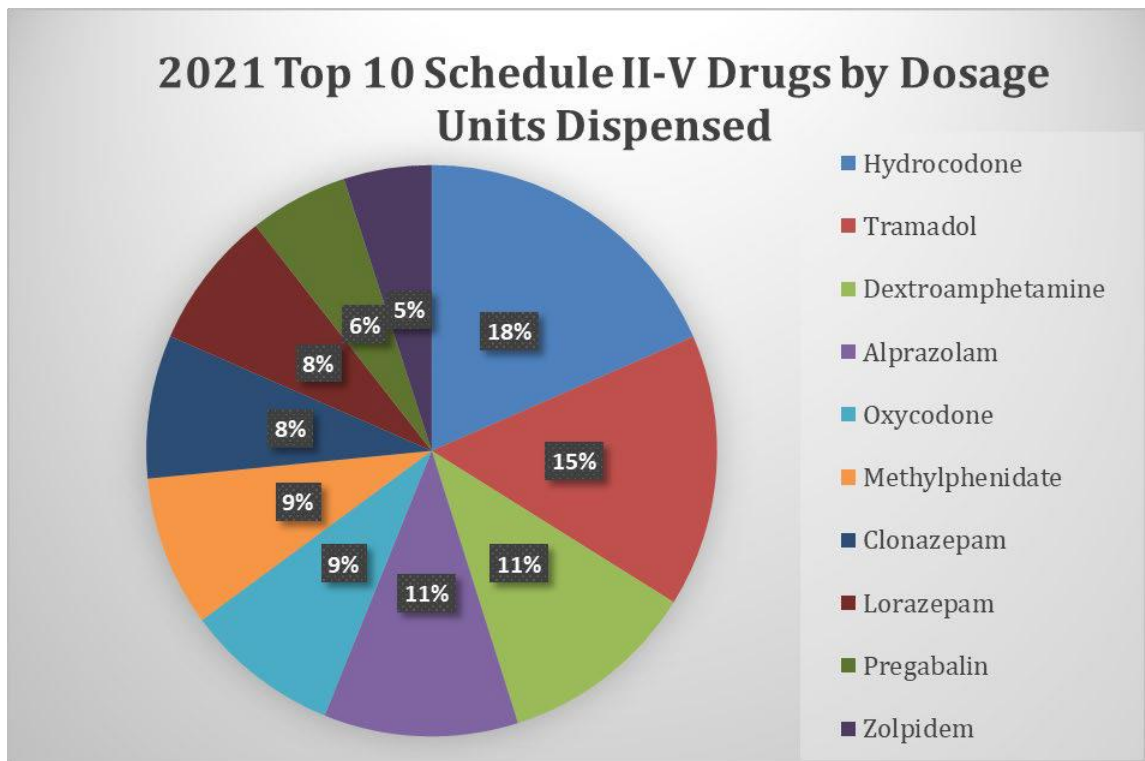
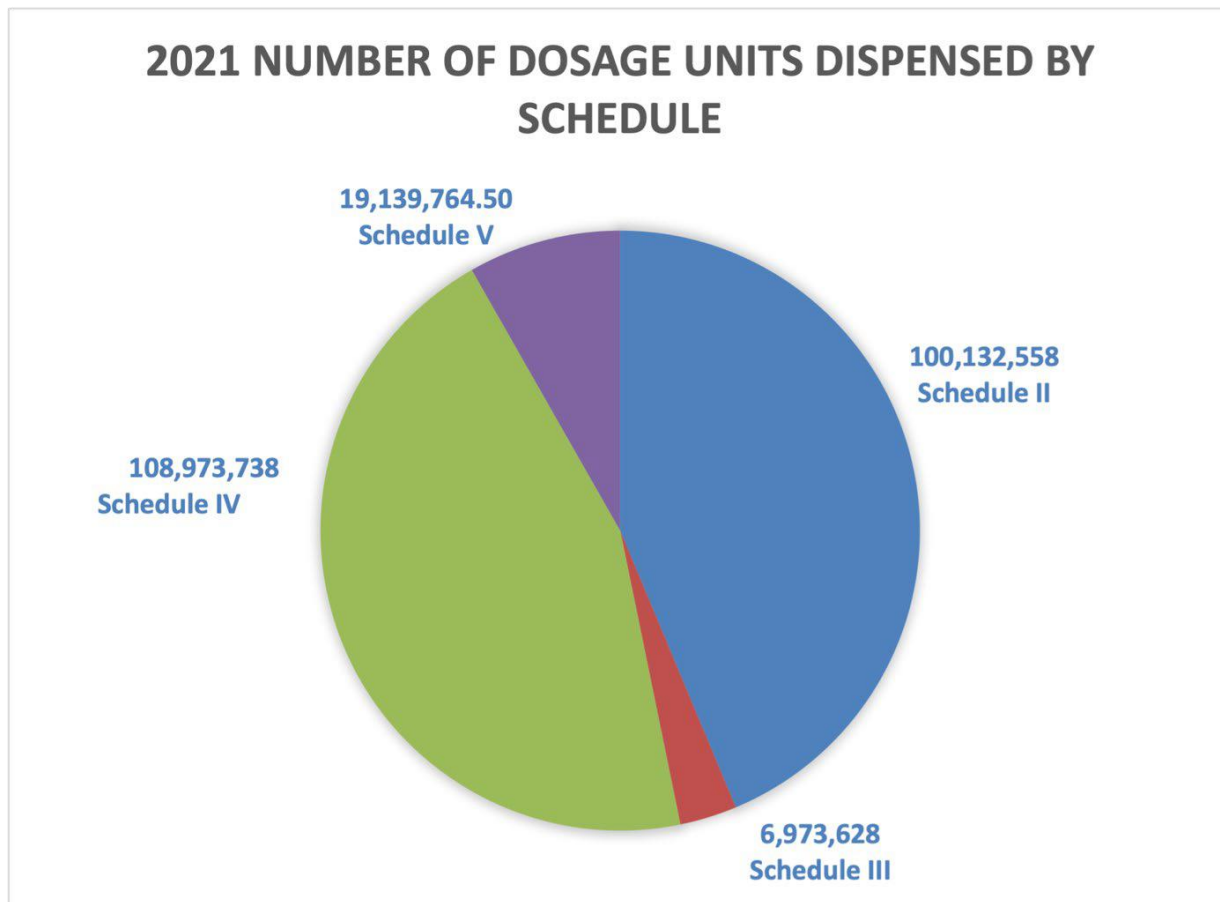


Figure 7: 2021 Top 10 Schedule II-V Drugs by Dosage Units Dispensed



Out of the four drug schedules that comprise prescription data reported to the PMP in 2021, the number of dosage units of Schedule IV drugs slightly surpassed that of Schedule II drugs. Schedule V and III drugs came in a distant third and fourth, respectively, with regards to dosage units dispensed (Figure 8):

Figure 8: 2021 Number of Dosage Units Dispensed by Schedule



In 2021, the total number of reportable prescriptions dispensed increased, relative to 2020, but remained the third lowest on record since 2013 (Figure 9). The total number of dosage units also increased slightly in 2021 in comparison to 2020, but remained the second lowest reported since 2013 (Figure 10). This upward shift in 2021 reflects the reporting of an additional schedule of medications (Schedule Vs) beginning in May of 2021.

Excluding Schedule Vs from 2021 reporting revealed relatively consistent total dispensation numbers and slightly lower dosage unit total numbers for 2021, compared to 2020 (Figures 11 and 12, respectively). This suggests that the recent downward trend seen in the number of Schedule II-IV dosage units has continued during the COVID-19 pandemic in Iowa while the downward trend in dispensations appeared to be leveling off. The apparent contradiction of decreasing yearly total dosage units and increasing yearly total dispensations is reflective of patients receiving smaller quantities per dispensation.

Figure 9: Total Schedule II-IV **Prescriptions** Dispensed (*2021 includes reporting of CVs)

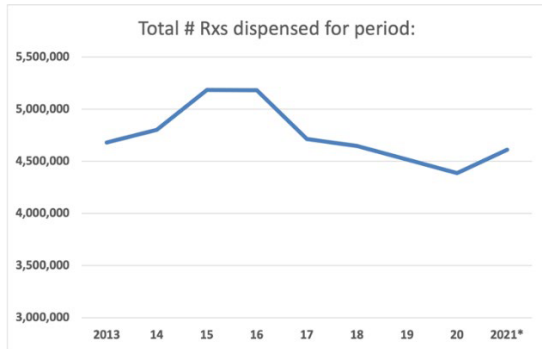


Figure 10: Total Schedule II-IV **Dosage Units** Dispensed (*2021 includes reporting of CVs)

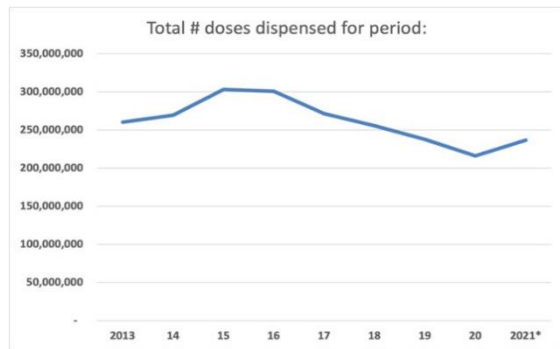


Figure 11: Total Schedule II-IV **Prescriptions** Dispensed Over Previous 5 years (excludes CVs for 2021)

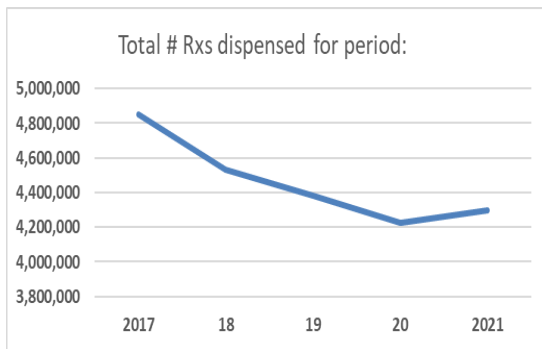
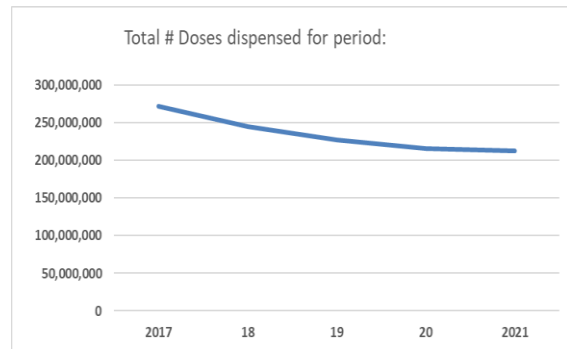


Figure 12: Total Schedule II-IV **Dosage Units** Dispensed Over Previous 5 years (excludes CVs for 2021)



Numbers for individual classes of drugs, (e.g., opioids, benzodiazepines, and stimulants) from 2016 to 2021 are shown in Figures 13 – 18:

Figure 13: Total Opioid **Prescriptions** Dispensed (*2021 includes reporting of CVs)

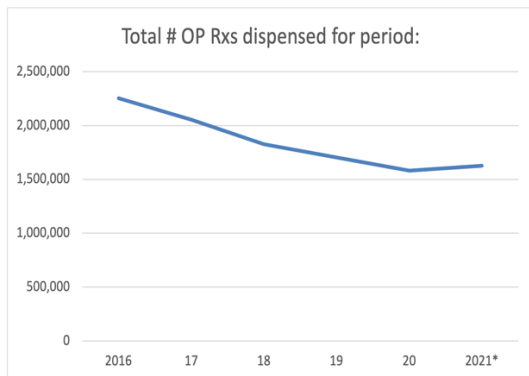


Figure 14: Total Opioid **Dosage Units** Dispensed (*2021 includes reporting of CVs)

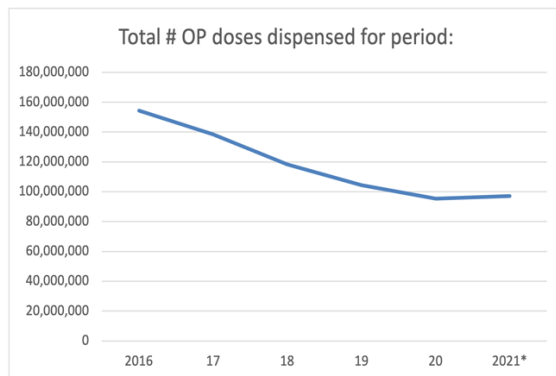


Figure 15: Total Benzodiazepine **Prescriptions** Dispensed (*2021 includes reporting of CVs)

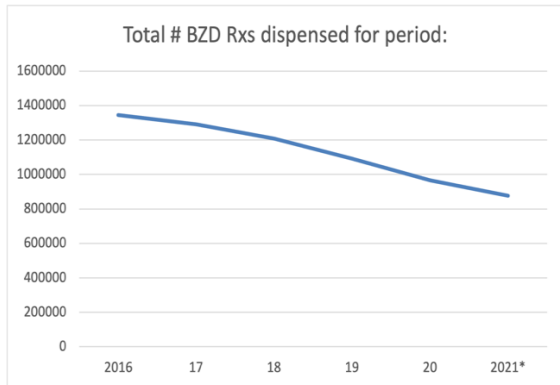


Figure 16: Total Benzodiazepine **Dosage Units** Dispensed (*2021 includes reporting of CVs)

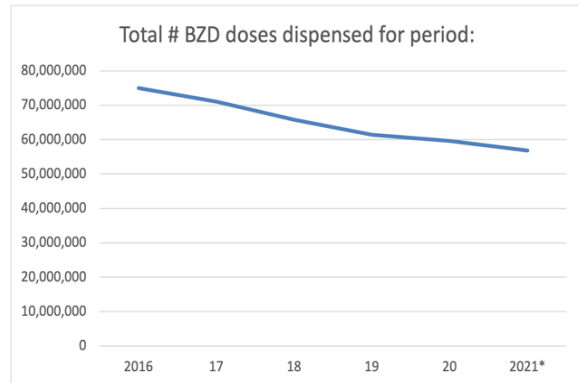


Figure 17: Total Stimulant **Prescriptions** Dispensed (*2021 includes reporting of CVs)

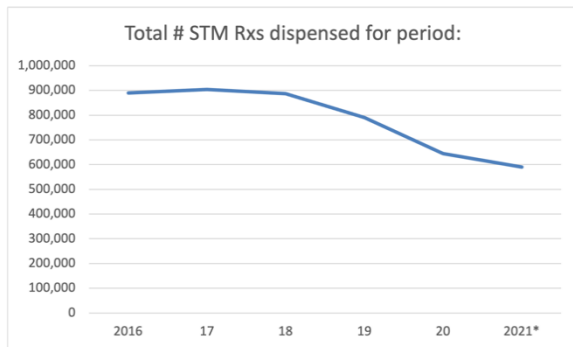
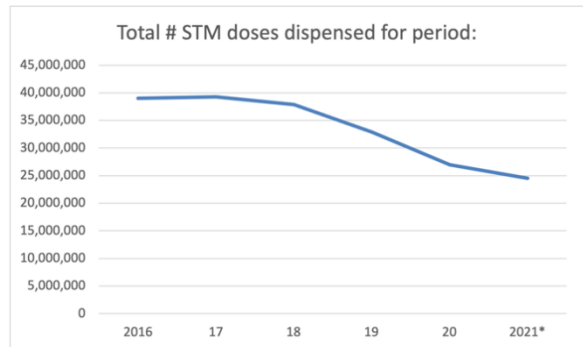


Figure 18: Total Stimulant **Dosage Units** Dispensed (*2021 includes reporting of CVs)



The current AWARxE™ platform incorporates a sophisticated patient matching algorithm and logic to identify and track trends at the individual patient level. While the number of patients receiving prescriptions from multiple prescribers, multiple pharmacies, or patients with multiple provider episodes (MPEs) was determined under the previous vendor’s program, the values likely underestimated the actual number due to the use of a less robust patient matching algorithm. Recalculated MPE estimates, provided by Appriss for 2017, and actual MPE calculations from 2018 to 2021, reflect a significant reduction in Iowa patients with 5, 10 or 15 MPEs across 2017 to 2020 (Figures 19, 20 and 21, respectively). MPEs for 2021 showed an upward trend, relative to 2020. However, MPEs for 2021 included episodes related to the use of Schedule V medications so the upward trend was not surprising.

Figure 19: Patients Filling Prescriptions from 5 or More Prescribers or Pharmacies

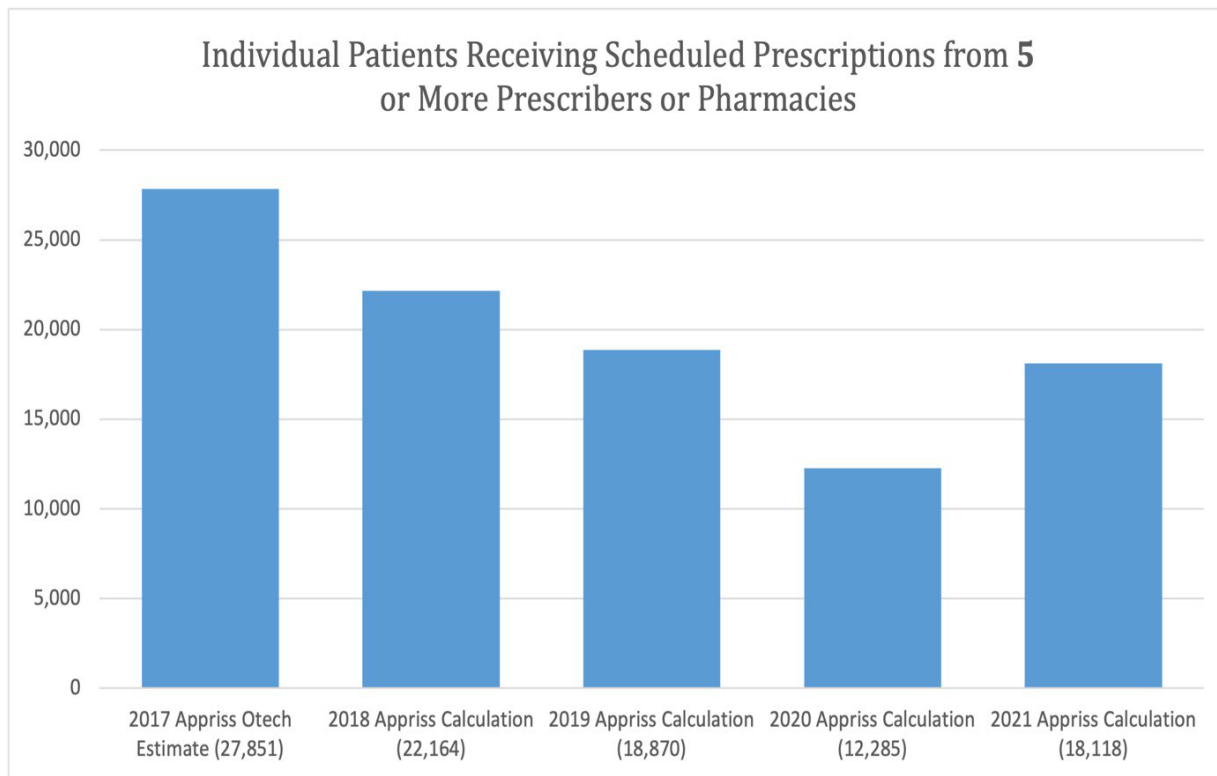


Figure 20: Patients Filling Prescriptions from 10 or More Prescribers or Pharmacies

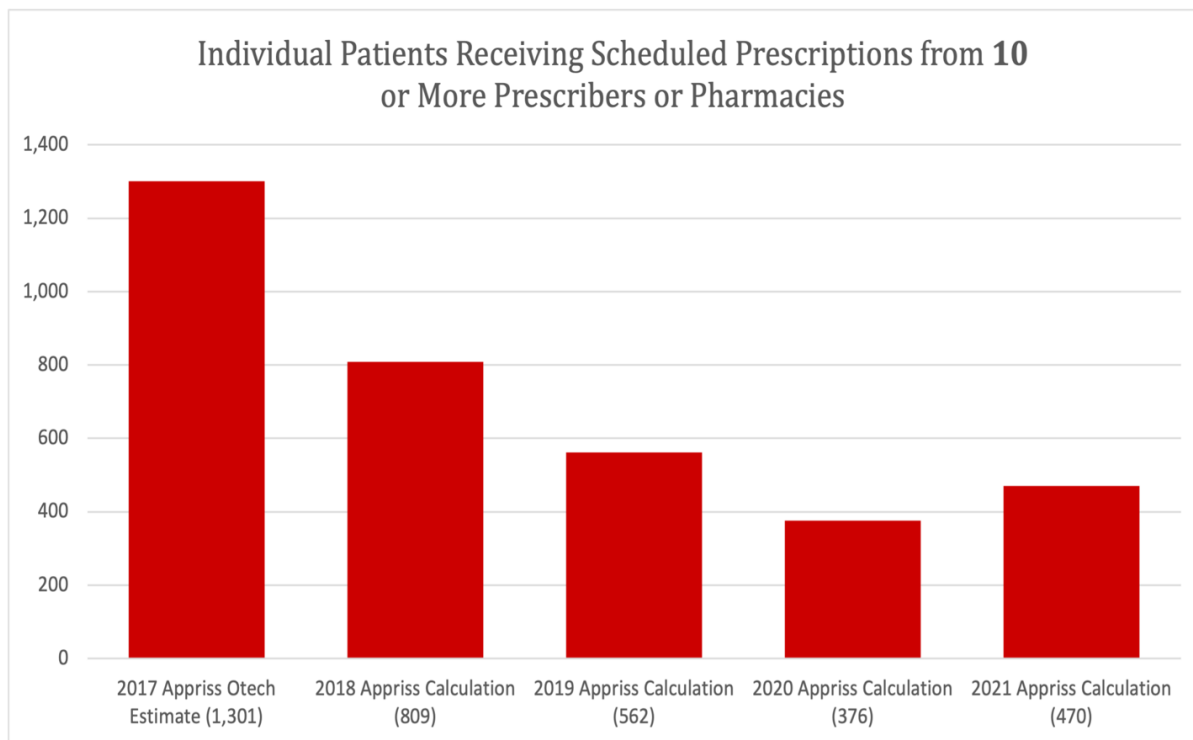
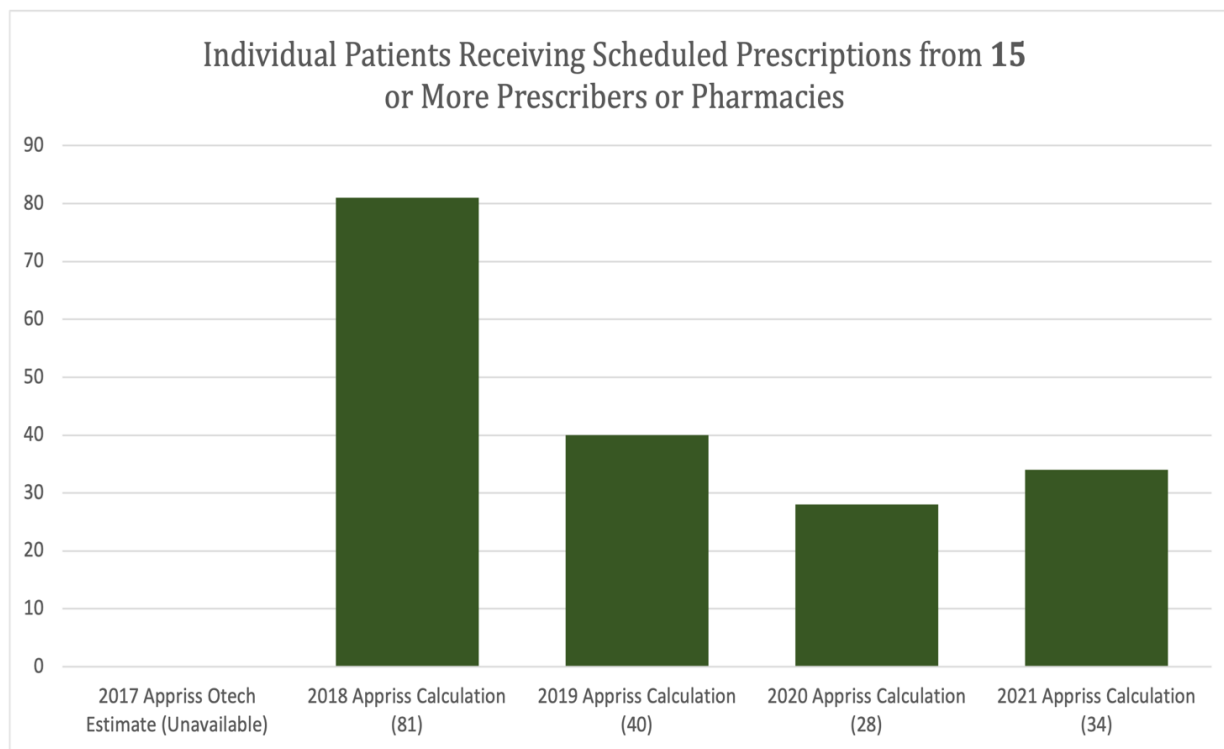


Figure 21: Patients Filling Prescriptions from 15 or More Prescribers or Pharmacies



While the identification of potentially valid MPE estimates prior to 2018 is questionable, it did provide an opportunity for the PMP to better launch the dissemination of provider threshold reports and prescriber activity reports. Threshold reports inform both pharmacists and prescribers of MPE patients under their care. Prescriber activity reports are sent to any Iowa prescriber who issued a Schedule II-V controlled substance prescription reported over the previous six months. The activity reports also provide a summary snapshot along with a benchmark comparison relative to a prescriber’s peers within the prescriber’s specialty practice area.

An important update in the format of the prescriber activity reports was seen with the prescriber activity reports sent out in the last quarter of 2021. The new format contained several enhancements, including enhanced security measures and interactive capabilities. The interactive capabilities allow prescribers to “drill down” and identify individual patients from within their report. An example report is shown in Appendix A. Feedback from prescribers regarding the updated format was positive. The most recent round of 2021 prescriber activity reports were sent to 10,993 prescribers. Other initiatives related to prescriber activity reports in 2021 included continued outreach by the PMP to prescribers who were missing a provider specialty code in their PMP profile. The provider specialty code or “practice area” is used for benchmarking purposes and is provided as part of the confidential prescriber activity reports. A valid specialty code is vital in order for the metric to provide meaningful feedback to the prescriber.

The most recent round of threshold reports from 2021 identified 29 patients exhibiting MPE behavior, with reports being sent to 367 prescribers and pharmacies. While it is impossible to prove the direct impact of implementing threshold reports on patient MPE behavior, a strong correlation is observed between the rollout of threshold reports and their continued use and refinement, and the previously mentioned reductions in MPEs since 2018.

Ongoing Improvement Efforts

Calendar year 2021 brought the third full year of integration of the PMP with hospital and clinic EHRs and PDSs. The PMP started the year with 253 integrated hospitals, clinics, and pharmacies in the state and ended the year with 312 integrated Iowa entities. Those hospitals and pharmacies that integrated have continued to express positive feedback, reinforcing the timesaving benefit of having a patient's PMP records within their EHR or PDS clinical workflow. Additional efforts to increase PMP integration with Iowa providers in 2021 involved support and administration of a major grant awarded to IDPH. The Overdose Data to Action (OD2A) grant initiative directly awarded reimbursement toward integration costs to other entities throughout the state. A total of 41 entities received funding covering an estimated additional 4800 providers. The 41 entities had a combined presence in over half of Iowa's 99 counties.

The launch of the enhanced software and analytical platforms (AWARxE™ and NarxCare™) in 2018 positioned the PMP to serve as an even more useful tool in the midst of the opioid crisis. The majority of comments on the upgrades remain positive. However, a frequent suggestion from practitioners is for increased functionality related to communication capabilities from within AWARxE™. Bamboo Health continues to update, enhance and promote the communication capabilities within the AWARxE™ platform. Another continued enhancement to the PMP platform in 2021 included reports of the administration of an opioid rescue medication (e.g., Narcan™) by first-responders or EMS as an additional risk indicator in the patient's PMP profile and NarxCare™ report. Iowa remains one of only two states which currently offer this feature to their providers through NarxCare™.

PMP stakeholders and end users continue to express gratitude for the expediency with which Iowa controlled substance prescription data is now available as a result of the 2018 rule changes. Feedback regarding ongoing efforts by the PMP to promote cost-effective integration solutions and provide support, both financial and logistical, continues to be positive. Iowa's PMP continued to receive needed facelifts and updates in 2021, many made possible by the software platform's capabilities. It is thought that the features and updates planned for 2022 will continue to provide an improved user experience. The PMP will continue to solicit and evaluate feedback from program stakeholders and end users to assist in ongoing monitoring efforts to provide the most cost-effective, user-friendly, and useful system enhancements.

Collaboration with the Iowa Department of Public Health's (IDPH) Bureau of Substance Abuse continues through various grant projects. This includes sharing de-identified PMP data with IDPH, which has proved to be valuable in helping guide the department's statewide prevention and monitoring activities. In addition, IDPH and the PMP continued to make enhancements and provide updates to the public-facing dashboard, which was first made available in 2020.

The dashboard highlights historical PMP data and opioid and controlled substance use trends. Additional dashboard enhancements and more timely rollouts of data are both planned for 2022, including additional metrics related to patients receiving overlapping therapies and stimulant use reporting. The public-facing dashboard is available on both the IDPH and the Iowa Board of Pharmacy's websites. Planned 2022 updates to the Board's website include additional links to useful webpages, resources, education, and support.

In July 2020, the PMP, Board, and IDPH joined efforts to initiate a program to make the opioid rescue medication, Narcan™, available at any community pharmacy in Iowa at no cost to any patient in need. The innovative program includes collaboration with an Iowa-based pharmacy benefits management company, professional groups, and other organizations. The program continues to be a success and garnered regional and national recognition in 2021. To date, a total of 2,113 kits have been dispensed to 2,062 unique Iowa patients, with 1,452 kits being dispensed in 2021. Continued efforts for the PMP to promote the program are planned for 2022.

Building on the success of the Narcan™ project, the PMP, in collaboration with the Iowa Board of Pharmacy and IDPH, helped launch the community pharmacy Drug Disposal Kit Dispensing Program in 2021. The Disposal Kit program built upon relationships established with the Narcan™ program and mimicked it closely in design and implementation. All Iowa community pharmacies were encouraged to participate in the program. A total of 4,917 disposal kits were dispensed to 4,260 unique patients under the program in 2021. Similar to the Narcan™ program, the Disposal Kit program gained regional and national recognition and was very well received by participating pharmacies.

In July 2020, the PMP, in cooperation of the Iowa Board of Pharmacy, began a comprehensive field audit project to validate the information found in the PMP. The origin of the project was the realization that the PMP was moving towards becoming a clinical tool upon which practitioners based clinical decisions. There was, therefore, a need to verify the accuracy of the data along with evaluating the efficacy of the policies and systems that the PMP has implemented. Over 2,000 prescriptions were analyzed in 2021. While the project is ongoing, preliminary findings have resulted in several "positives," including expanded outreach efforts to update the list of exempt pharmacies and education regarding reporting requirements. The audit project was also selected for presentation at the 117th National Association of Boards of Pharmacy annual meeting in 2021. It is hoped that continued effort on the project will increase provider confidence in the validity of the PMP data.

Other notable accomplishments of the PMP for calendar year 2021 include the Associate Director working closely with a PMP Advisory Council subcommittee to create a 2.0 hour on- demand continuing education webinar (made available at no cost for Iowa providers) entitled

“Implementing the CDC Opioid Prescribing Guidelines: Clinical Pearls and Best Practices.” The PMP also worked with the Iowa Board of Pharmacy to update the interactive PMP “Frequently Asked Questions” page found on the Iowa Board of Pharmacy webpage: [PMP FAQ](#).

Summary

The impact of previous and on-going efforts by the PMP can be shown in year-to-year increases in both provider PMP registration and utilization, overall year-to-year decreases in the total numbers of Scheduled dosage units dispensed per capita and continued growth in both the Community Pharmacy Narcan™ and Disposal Project Programs. Goals for the PMP in 2022 include continued efforts to reduce the number and percentage of delinquent reporting pharmacies, continued efforts to promote integration, and exploring funding options to build on the success of the Iowa Pharmacy Narcan™ Dispensing and Drug Disposal Programs by supporting additional pharmacist-provided opioid patient screening, education, and other patient resource tools.


The PMP staff, the Advisory Council, and the Board of Pharmacy look forward to strengthening the program in 2022 and maintaining persistent positive data trends.

Appendix A – Revised Prescriber Activity Report

Appendix A: Prescriber Activity Report

State

**Prescription Monitoring Program
PMP Prescriber Report**



Date: 7/23/2019	Date Covered by this Report: 01/8/2019-6/08/2019	Total Prescribers Within Your Specialty: 91
Name: Sam Smith	DEA #: AA11111	
Role: Physician (MD, DO)	Specialty: Pain Medicine	

TOP MEDICATIONS PRESCRIBED

hydrocodone bitartrate/acetaminophen	oxycodone HCl	oxycodone HCl/acetaminophen
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<p>OPIOIDS</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 48%;"> <p>Prescriptions per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>1.4</td></tr> <tr><td>Feb</td><td>1.3</td></tr> <tr><td>Mar</td><td>1.3</td></tr> <tr><td>Apr</td><td>1.4</td></tr> <tr><td>May</td><td>1.3</td></tr> <tr><td>Jun</td><td>1.3</td></tr> </table> </div> <div style="width: 48%;"> <p>Average Daily MME per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>89.8</td></tr> <tr><td>Feb</td><td>81.0</td></tr> <tr><td>Mar</td><td>80.7</td></tr> <tr><td>Apr</td><td>82.3</td></tr> <tr><td>May</td><td>79.9</td></tr> <tr><td>Jun</td><td>75.3</td></tr> </table> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="width: 48%;"> <p>Average Quantity per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>135</td></tr> <tr><td>Feb</td><td>133</td></tr> <tr><td>Mar</td><td>131</td></tr> <tr><td>Apr</td><td>133</td></tr> <tr><td>May</td><td>135</td></tr> <tr><td>Jun</td><td>128</td></tr> </table> </div> <div style="width: 48%;"> <p>Average Duration per Patient (Days)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>36.3</td></tr> <tr><td>Feb</td><td>34.8</td></tr> <tr><td>Mar</td><td>35.6</td></tr> <tr><td>Apr</td><td>35.9</td></tr> <tr><td>May</td><td>35.6</td></tr> <tr><td>Jun</td><td>37.0</td></tr> </table> </div> </div> <p style="text-align: center; font-size: small;"># of Patients: 1,284 # of Patients Peer: 314</p>	Month	Value	Jan	1.4	Feb	1.3	Mar	1.3	Apr	1.4	May	1.3	Jun	1.3	Month	Value	Jan	89.8	Feb	81.0	Mar	80.7	Apr	82.3	May	79.9	Jun	75.3	Month	Value	Jan	135	Feb	133	Mar	131	Apr	133	May	135	Jun	128	Month	Value	Jan	36.3	Feb	34.8	Mar	35.6	Apr	35.9	May	35.6	Jun	37.0	<p>BUPRENORPHINE</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 33%;"> <p>Prescriptions per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>1.2</td></tr> <tr><td>Feb</td><td>1.1</td></tr> <tr><td>Mar</td><td>1.0</td></tr> <tr><td>Apr</td><td>1.1</td></tr> <tr><td>May</td><td>1.0</td></tr> <tr><td>Jun</td><td>1.1</td></tr> </table> </div> <div style="width: 33%;"> <p>Average Quantity per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>57</td></tr> <tr><td>Feb</td><td>36</td></tr> <tr><td>Mar</td><td>44</td></tr> <tr><td>Apr</td><td>48</td></tr> <tr><td>May</td><td>48</td></tr> <tr><td>Jun</td><td>32</td></tr> </table> </div> <div style="width: 33%;"> <p>Average Duration per Patient (Days)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>31.1</td></tr> <tr><td>Feb</td><td>27.5</td></tr> <tr><td>Mar</td><td>29.7</td></tr> <tr><td>Apr</td><td>32.5</td></tr> <tr><td>May</td><td>29.7</td></tr> <tr><td>Jun</td><td>30.7</td></tr> </table> </div> </div> <p style="text-align: center; font-size: small;"># of Patients: 35 # of Patients Peer: 11</p>	Month	Value	Jan	1.2	Feb	1.1	Mar	1.0	Apr	1.1	May	1.0	Jun	1.1	Month	Value	Jan	57	Feb	36	Mar	44	Apr	48	May	48	Jun	32	Month	Value	Jan	31.1	Feb	27.5	Mar	29.7	Apr	32.5	May	29.7	Jun	30.7	<p>SEDATIVES</p> <div style="display: flex; justify-content: space-around;"> <div style="width: 33%;"> <p>Prescriptions per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>1.2</td></tr> <tr><td>Feb</td><td>1.2</td></tr> <tr><td>Mar</td><td>1.1</td></tr> <tr><td>Apr</td><td>1.2</td></tr> <tr><td>May</td><td>1.1</td></tr> <tr><td>Jun</td><td>1.1</td></tr> </table> </div> <div style="width: 33%;"> <p>Average Quantity per Patient</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th>Month</th><th>Value</th></tr> <tr><td>Jan</td><td>62</td></tr> <tr><td>Feb</td><td>58</td></tr> <tr><td>Mar</td><td>58</td></tr> <tr><td>Apr</td><td>51</td></tr> <tr><td>May</td><td>56</td></tr> <tr><td>Jun</td><td>31</td></tr> </table> </div> <div style="width: 33%;"> <p>Average Duration per Patient (Days)</p> <table border="1" style="width: 100%; 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<p>AT-RISK PATIENTS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Dangerous Combination</th> <th>Multiple Providers</th> <th>MME Threshold</th> </tr> </thead> <tbody> <tr> <td>Benzo + Opioid You: 104 458 You + Other Prescribers</td> <td>Patients with 5 or more Prescribers 52</td> <td>Patients Receiving Daily MME >= 90 291</td> </tr> <tr> <td>Benzo + Opioid + Carisoprodol You: 1 15 You + Other Prescribers</td> <td>Patients with 5 or more Pharmacies 0</td> <td>Patients Receiving Daily MME >= 120 125</td> </tr> </tbody> </table>	Dangerous Combination	Multiple Providers	MME Threshold	Benzo + Opioid You: 104 458 You + Other Prescribers	Patients with 5 or more Prescribers 52	Patients Receiving Daily MME >= 90 291	Benzo + Opioid + Carisoprodol You: 1 15 You + Other Prescribers	Patients with 5 or more Pharmacies 0	Patients Receiving Daily MME >= 120 125	<p>PDMP USAGE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Patient Searches by You</td> <td style="width: 33%;">Patient Searches by Your Delegate(s)</td> <td style="width: 33%;">Your Total Patient Searches</td> </tr> <tr> <td style="text-align: center;">34</td> <td style="text-align: center;">5,377</td> <td style="text-align: center;">5,411</td> </tr> </table>			Patient Searches by You	Patient Searches by Your Delegate(s)	Your Total Patient Searches	34	5,377	5,411																																																																																																																																																																							
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Appendix B – PMP Historical Data

Appendix B: 2013 to 2021 Historical Data

Period:	1/1/2013 - 12/31/2013	1/1/2014 - 12/31/2014	1/1/2015 - 12/31/2015	1/1/2016 - 12/31/2016	1/1/2017 - 12/31/2017	1/1/2018 - 12/31/2018	1/1/2019 - 12/31/2019	1/1/2020 - 12/31/2020	1/1/2021 - 12/31/2021
CSA Registrant/ Prescribers	14,891	15,491	16,012	16,357	17,091	17,553	17,933	17,937	17,438
Total Iowa Pharmacies	1,520	1,708	1,703	1,728	1,695	1,786	1,635	1,640	1,692
Total Iowa Pharmacists	3,489	3,523	3,568	3,607	3,633	3,755	3,704	3,770	3,736
Prescribers Registered	4,496	5,147	5,909	6,849	7,798	12,630	16,583	17,683	17,438
Pharmacists Registered	2,081	2,390	2,692	2,978	3,200	3,777	4,000	4,246	4,450
Regulators Registered	33	33	32	34	37	37	42	47	50
Law Enforcement Agents Registered	152	162	176	182	196	195	215	227	238
Practitioner Delegates	423	721	1,114	1,696	2,122	3,555	4,531	6,307	6,999
Prescriber Requests via Gateway						360,583	1,223,446	3,101,216	5,301,210
Prescriber Requests Processed via AWARxE	129,702	170,696	236,663	297,876	347,703	487,322	915,206	1,100,229	944,786
Total Prescriber Requests						847,905	2,138,652	4,201,445	6,245,996
Pharmacist Requests via Gateway						648,673	1,305,025	2,249,024	2,572,439
Pharmacist Requests Processed via AWARxE	48,040	68,669	91,174	94,482	99,196	172,827	133,983	102,759	82,771
Total Pharmacist Requests						821,500	1,439,008	2,351,783	2,655,210
LE/Regulator Requests Processed	484	487	459	461	577	517	720	501	513
Total # Requests Processed	178,226	239,852	328,296	392,819	447,476	1,669,922	3,578,380	6,553,729	8,901,719
Filled prescriptions for period:	1/1/2013 - 12/31/2013	1/1/2014 - 12/31/2014	1/1/2015 - 12/31/2015	1/1/2016 - 12/31/2016	1/1/2017 - 12/31/2017	1/1/2018 - 12/31/2018	1/1/2019 - 12/31/2019	1/1/2020 - 12/31/2020	1/1/2021 - 12/31/2021
# patients filling CII Rx's	425,604	769,937	905,146	733,586	679,262	505,808	470,559	433,783	462,875
# patients filling CII or CIII Rx's	1,026,837	821,058	971,460	784,931	727,099	544,076	505,905	466,142	494,873
# patients filling CII-IV Rx's	1,447,418	1,142,768	1,498,700	1,159,368	1,092,481	808,403	768,245	717,446	745,178
# patients filling CII-V Rx's	-	-	-	-	-	-	-	-	771,498

Iowa Prescription Monitoring Program (PMP) 2021 Annual Report

Total # CII-IV Rxs dispensed	4,679,271	4,800,912	5,183,996	5,182,263	4,851,012	4,529,582	4,382,355	4,225,589	4,296,734
Total # CII-V Rxs dispensed	-	-	-	-	-	-	-	-	4,496,036
Total # CII-IV Doses dispensed	260,092,453	269,466,02	303,030,950	300,729,482	271,499,890	255,569,745	237,644,176	216,079,923	212,989,178
Total # CII-V Doses dispensed	-	-	-	-	-	-	-	-	232,128,882