# 2021 Controlled Substances Reporting System Annual Report

**NC GS 90-113.75B**
**Amended by Session Law 2017-74, Section 12**

**Report to the**

**Joint Legislative Oversight Committee on Health and Human Services**

**North Carolina Medical Board**

**North Carolina Board of Podiatry Examiners**

**North Carolina Board of Nursing**

**North Carolina Dental Board**

**North Carolina Veterinary Medical Board**

**North Carolina Board of Pharmacy**

**By**

**North Carolina Department of Health and Human Services**

**June 8, 2022**

## INTRODUCTION

G.S. § 90-113.75B *Annually on February 1, beginning February 1, 2019, the Department shall report to the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, and the North Carolina Board of Pharmacy on data reported to the controlled substances reporting system.*

## BACKGROUND

G.S. § 90-113.75B requires an annual report to the General Assembly and licensing boards (as specified in the introduction above) to be delivered on February 1st of each year beginning in 2019. The report must include at least all of the following information about targeted controlled substances reported to the system during the preceding calendar year:

(1) The total number of prescriptions dispensed, broken down by Schedule.
(2) Demographics about the ultimate users to whom prescriptions were dispensed.
(3) Statistics regarding the number of pills dispensed per prescription.
(4) The number of ultimate users who were prescribed a controlled substance by two or more practitioners.
(5) The number of ultimate users to whom a prescription was dispensed in more than one county.
(6) The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner. For the purpose of this subdivision, medical doctors, surgeons, palliative care practitioners, oncologists and other practitioners specializing in oncology, pain management practitioners, practitioners who specialize in hematology, including the treatment of sickle cell disease, and practitioners who specialize in treating substance use disorder shall be treated as distinct categories of practitioners.
(7) Any other data deemed appropriate and requested by the Joint Legislative Oversight Committee on Health and Human Services, the North Carolina Medical Board, the North Carolina Board of Podiatry Examiners, the North Carolina Board of Nursing, the North Carolina Dental Board, the North Carolina Veterinary Medical Board, or the North Carolina Board of Pharmacy.

## DATA COLLECTION AND EXPLANATORY NOTES

Pharmacies in North Carolina are responsible for submitting data on any schedule II-V controlled substances they dispense no later than the close of the next business day after the prescription is delivered. The data comes in a standard American Society for Automation in Pharmacy (ASAP) format, which includes details on the transaction such as the patient, prescriber, and pharmacy.

The quality of the prescription data is dependent on the accuracy of pharmacist submissions. Prescriptions are constantly being added and modified within the system, so the values in this report will change slightly with time. Prescriber specialty (Exhibit 6) is based on self-reported specialties in the National Plan and Provider Enumeration System (NPPES), the Drug Enforcement Agency (DEA), the North Carolina Medical Board, and the Controlled Substances Reporting System (CSRS).

On March 27, 2020 Governor Roy Cooper issued Executive Order 121, a statewide, 30 day Stay at Home order to help stop the spread of the novel coronavirus COVID19. It is after this date that significant decreases in the number of controlled substances dispensed was observed within the Controlled Substances Reporting System indicating a change in health seeking behavior as a result of the COVID19 pandemic.

**EXHIBITS AND NOTES**

## Exhibit 1: Prescriptions by Schedule

In total, 17,100,256 controlled substance prescriptions were dispensed in 2020[1]. In 2019, 18,057,312 prescriptions for controlled substances were dispensed. There has been a decline in the dispensing of all controlled substances for human patients. The largest decline has been seen in the number of Schedule II controlled substances dispensed. Schedule II controlled substances were the most dispensed in 2020, accounting for 45% of all controlled substance dispensing. This is followed by prescription dispenses in Schedule IV, accounting for 42% of all controlled substance prescriptions dispensed. The most common type of drugs in Schedule II and Schedule IV are opioids and benzodiazepines respectively. See Exhibit 6 for further information.

In 2020, the proportion of human prescriptions listed as uncategorized was 1%, the same proportion reported in 2019. The proportion of veterinary prescriptions listed as uncategorized was 17%, this is higher than the proportion reported in 2019 (14%) which is most likely the result of receiving a full year of data from this sector.

**Table 1.1 - Total Prescriptions by Schedule in 2020**

| Schedule | Human Rx | Veterinary Rx | Total |
|---|---|---|---|
| II | 7,667,537 | 19,786 | 7,687,323 |
| III | 1,374,510 | 2,891 | 1,377,401 |
| IV | 7,063,330 | 119,825 | 7,183,155 |
| V | 704,942 | 1,231 | 706,173 |
| Data Missing | 116,947 | 29,257 | 146,204 |
| Total | 16,927,266 | 172,990 | 17,100,256 |

Schedule II substances are currently recognized for medical use but have a high potential for abuse, which may lead to severe psychological or physical dependence. Examples include Hydrocodone, Oxycodone, Fentanyl, Amphetamine Salts and Cocaine.

Schedule III substances have a potential for abuse that is less than schedule II and may lead to moderate dependence. Examples include: Buprenorphine, Ketamine, Tylenol with codeine, testosterone, and anabolic steroids.

Schedule IV substances have a lower potential for abuse compared to schedule III. Examples include: benzodiazepines such as alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®).

Schedule V substances have lower potential for abuse than Schedule IV and consist of preparations containing limited quantities of certain narcotics and are generally used for antidiarrheal, antitussive, and analgesic (pain relief) purposes. Examples include Robitussin AC, Lomotil, and Lyrica.

[1] This data is accurate as of 03 January 2021. Some variation may occur due to late submissions.

## Exhibit 2: Demographics

The data has been aggregated by two demographic categories: Counties (Table 2.1) and Age Group and Gender (Table 22). These tables contain a combination of human and veterinary prescriptions due to the small numbers in the veterinary category. This count of unique patients may differ from the sum of all categories because patients may have moved between counties during the reporting period causing them to be indicated in more than one county.

It is noted that Mecklenburg and Chowan have the smallest controlled substance prescription per patient ratio of all North Carolina counties (5.04 and 5.05 prescriptions per patient respectively) and Mitchell has the highest (8.05) See Table 2.1 below. Swain has the highest rate of prescriptions per 1,000 residents.

***Table 2.1 - Number of Controlled Substance Prescriptions Dispensed by County of Patient Residence in 2020***

| NC County | Prescriptions | Patients | Rx per Patient | Rx per 1,000 population |
|---|---|---|---|---|
| Alamance | 256,329 | 43,190 | 5.93 | 1,472.69 |
| Alexander | 82,010 | 10,916 | 7.51 | 2,116.11 |
| Alleghany | 19,599 | 3,395 | 5.77 | 1,702.78 |
| Anson | 35,179 | 6,490 | 5.42 | 1,391.08 |
| Ashe | 56,675 | 7,932 | 7.15 | 2,013.32 |
| Avery | 40,363 | 5,594 | 7.22 | 2,238.04 |
| Beaufort | 112,532 | 15,288 | 7.36 | 2,369.59 |
| Bertie | 30,908 | 5,456 | 5.66 | 1,576.86 |
| Bladen | 60,544 | 8,869 | 6.83 | 1,757.75 |
| Brunswick | 286,427 | 43,319 | 6.61 | 1,960.02 |
| Buncombe | 414,337 | 65,365 | 6.34 | 1,551.56 |
| Burke | 187,486 | 24,761 | 7.57 | 2,039.35 |
| Cabarrus | 329,617 | 54,595 | 6.04 | 1,521.72 |
| Caldwell | 194,166 | 26,467 | 7.34 | 2,319.70 |
| Camden | 13,313 | 2,393 | 5.56 | 1,242.23 |
| Carteret | 148,045 | 21,594 | 6.86 | 2,066.51 |
| Caswell | 20,478 | 3,111 | 6.58 | 865.29 |
| Catawba | 344,404 | 50,873 | 6.77 | 2,145.77 |
| Chatham | 67,653 | 11,521 | 5.87 | 870.55 |
| Cherokee | 64,742 | 8,902 | 7.27 | 2,160.08 |
| Chowan | 20,198 | 3,999 | 5.05 | 1,435.13 |
| Clay | 23,638 | 3,491 | 6.77 | 1,960.36 |
| Cleveland | 232,079 | 33,554 | 6.92 | 2,314.10 |
| Columbus | 132,528 | 17,918 | 7.40 | 2,357.31 |
| Craven | 195,823 | 30,330 | 6.46 | 1,883.22 |

| NC County | Prescriptions | Patients | Rx per Patient | Rx per 1,000 population |
|---|---|---|---|---|
| Cumberland | 468,394 | 79,257 | 5.91 | 1,405.71 |
| Currituck | 30,598 | 5,098 | 6.00 | 1,094.66 |
| Dare | 69,981 | 10,864 | 6.44 | 1,863.18 |
| Davidson | 277,377 | 41,924 | 6.62 | 1,623.15 |
| Davie | 85,160 | 13,260 | 6.42 | 1,937.00 |
| Duplin | 80,075 | 13,350 | 6.00 | 1,340.03 |
| Durham | 322,870 | 61,232 | 5.27 | 1,007.95 |
| Edgecombe | 76,368 | 13,634 | 5.60 | 1,456.10 |
| Forsyth | 596,853 | 103,378 | 5.77 | 1,557.86 |
| Franklin | 91,972 | 15,470 | 5.95 | 1,309.92 |
| Gaston | 512,528 | 69,640 | 7.36 | 2,289.69 |
| Gates | 9,835 | 1,748 | 5.63 | 808.47 |
| Graham | 18,848 | 2,467 | 7.64 | 2,169.93 |
| Granville | 75,029 | 12,190 | 6.15 | 1,207.28 |
| Greene | 24,855 | 4,030 | 6.17 | 1,180.70 |
| Guilford | 796,578 | 139,205 | 5.72 | 1,460.68 |
| Halifax | 84,371 | 13,923 | 6.06 | 1,659.61 |
| Harnett | 186,054 | 28,068 | 6.63 | 1,354.52 |
| Haywood | 124,874 | 18,193 | 6.86 | 1,956.87 |
| Henderson | 195,903 | 31,682 | 6.18 | 1,636.21 |
| Hertford | 31,354 | 5,408 | 5.80 | 1,305.60 |
| Hoke | 57,394 | 9,842 | 5.83 | 1,028.53 |
| Hyde | 7,634 | 1,142 | 6.68 | 1,480.61 |
| Iredell | 357,159 | 55,737 | 6.41 | 1,940.84 |
| Jackson | 63,453 | 9,178 | 6.91 | 1,414.85 |
| Johnston | 274,122 | 43,861 | 6.25 | 1,290.59 |
| Jones | 21,397 | 3,242 | 6.60 | 2,098.98 |
| Lee | 119,056 | 19,037 | 6.25 | 1,907.06 |
| Lenoir | 101,218 | 16,762 | 6.04 | 1,808.66 |
| Lincoln | 171,277 | 26,535 | 6.45 | 1,943.00 |
| Macon | 54,785 | 9,791 | 5.60 | 1,484.81 |
| Madison | 35,836 | 5,362 | 6.68 | 1,568.80 |
| Martin | 45,912 | 7,011 | 6.55 | 1,992.79 |
| McDowell | 84,397 | 12,828 | 6.58 | 1,799.32 |
| Mecklenburg | 1,236,447 | 245,250 | 5.04 | 1,092.90 |
| Mitchell | 35,896 | 4,458 | 8.05 | 2,352.60 |
| Montgomery | 42,311 | 6,677 | 6.34 | 1,526.81 |

| NC County | Prescriptions | Patients | Rx per Patient | Rx per 1,000 population |
|---|---|---|---|---|
| Moore | 166,985 | 27,100 | 6.16 | 1,622.00 |
| Nash | 148,458 | 24,723 | 6.00 | 1,547.68 |
| New Hanover | 417,528 | 65,119 | 6.41 | 1,744.99 |
| Northampton | 26,110 | 4,646 | 5.62 | 1,288.87 |
| Onslow | 272,554 | 41,956 | 6.50 | 1,333.72 |
| Orange | 188,619 | 32,692 | 5.77 | 1,269.22 |
| Pamlico | 20,828 | 3,194 | 6.52 | 1,568.02 |
| Pasquotank | 54,192 | 10,496 | 5.16 | 1,365.55 |
| Pender | 111,322 | 16,549 | 6.73 | 1,723.84 |
| Perquimans | 18,946 | 3,720 | 5.09 | 1,389.31 |
| Person | 74,620 | 10,768 | 6.93 | 1,841.15 |
| Pitt | 288,213 | 45,292 | 6.36 | 1,592.29 |
| Polk | 26,927 | 4,281 | 6.29 | 1,232.24 |
| Randolph | 233,412 | 35,130 | 6.64 | 1,600.83 |
| Richmond | 108,755 | 14,012 | 7.76 | 2,417.15 |
| Robeson | 269,578 | 39,341 | 6.85 | 2,065.27 |
| Rockingham | 214,850 | 28,938 | 7.42 | 2,339.65 |
| Rowan | 260,100 | 38,108 | 6.83 | 1,815.59 |
| Rutherford | 143,218 | 19,775 | 7.24 | 2,072.47 |
| Sampson | 101,329 | 16,695 | 6.07 | 1,572.02 |
| Scotland | 70,190 | 10,377 | 6.76 | 1,966.66 |
| Stanly | 116,362 | 18,244 | 6.38 | 1,811.48 |
| Stokes | 105,419 | 14,831 | 7.11 | 2,273.92 |
| Surry | 161,410 | 23,323 | 6.92 | 2,204.12 |
| Swain | 41,117 | 5,422 | 7.58 | 2,914.45 |
| Transylvania | 66,084 | 9,758 | 6.77 | 1,845.61 |
| Tyrrell | 5,047 | 904 | 5.58 | 1,184.74 |
| Union | 328,526 | 58,802 | 5.59 | 1,353.87 |
| Vance | 70,158 | 11,510 | 6.10 | 1,520.48 |
| Wake | 1,410,660 | 263,578 | 5.35 | 1,271.00 |
| Warren | 18,295 | 3,335 | 5.49 | 919.44 |
| Washington | 19,974 | 3,357 | 5.95 | 1,666.31 |
| Watauga | 63,489 | 9,954 | 6.38 | 1,081.01 |
| Wayne | 173,746 | 30,053 | 5.78 | 1,372.34 |
| Wilkes | 148,536 | 20,381 | 7.29 | 2,107.19 |
| Wilson | 125,628 | 20,726 | 6.06 | 1,519.54 |

| NC County | Prescriptions | Patients | Rx per Patient | Rx per 1,000 population |
|---|---|---|---|---|
| Yadkin | 81,317 | 11,795 | 6.89 | 2,126.71 |
| Yancey | 34,672 | 5,087 | 6.82 | 1,844.84 |
| Unspecified | 9,833 | 1,375 | 7.15 | N/A |
| Out-of-State | 666,005 | 146,157 | 4.56 | N/A |
| Total | 17,100,256 | 2,821,480 | 6.06 | 1,608.57 |

***Table 2.2- Summary of North Carolina Dispensing Metrics in 2019 and 2020***

| Dispensing Metrics | 2019 | | | 2020 | | |
|---|---|---|---|---|---|---|
| | Lowest Value | Highest Value | Total | Lowest Value | Highest Value | Total |
| Prescriptions | 5,936 | 1,496,965 | 17,898,179 | 5,047 | 1,410,660 | 16,434,251 |
| Patients | 1,096 | 298,830 | 3,107,167 | 904 | 263,578 | 2,675,404 |
| Rx per patient | 4.75 | 7.74 | 5.76 | 5.04 | 8.05 | 6.14 |

The information in Table 2.2 excludes Out of State prescriptions and patients. There was a decrease in prescribing over-all and the gap in the range of values is getting smaller. There has been a slight increase in the number of prescriptions per patient despite a smaller number of patients. While the significance of these differences is not yet clear, they are being monitored in an effort to further identify and clarify whether this is a one-time occurrence or a developing trend warranting further study.

***Table 2.3 - Number of Prescriptions Dispensed by Age and Gender***

| Age Range | Male | Female | Unknown | Total |
|---|---|---|---|---|
| 0-9 | 264,749 | 137,679 | 6,948 | 409,376 |
| 10-19 | 560,753 | 388,587 | 8,200 | 957,540 |
| 20-29 | 434,916 | 681,078 | 4,475 | 1,120,469 |
| 30-39 | 792,932 | 1,329,855 | 7,436 | 2,130,223 |
| 40-49 | 981,710 | 1,709,132 | 9,025 | 2,699,867 |
| 50-59 | 1,369,507 | 2,140,026 | 11,639 | 3,521,172 |
| 60-69 | 1,377,378 | 1,982,828 | 8,658 | 3,368,864 |
| 70-79 | 808,383 | 1,200,074 | 4,136 | 2,012,593 |
| 80+ | 278,881 | 599,540 | 1,486 | 879,907 |
| Unknown | 39 | 46 | 160 | 245 |
| Total | 6,869,248 | 10,168,845 | 62,163 | 17,100,256 |

The number of controlled substance prescriptions dispensed increases significantly between the 0-9 age range and the 0-19 age range. There is another significant increase between the 20-29 age group and the 30-39 age group. The steepest increases are between the 40-49 age group and the 50-59 age group, after which the number of controlled substance prescriptions dispensed starts to decline. By gender, females have a higher number of dispensed prescriptions for controlled substances than males from the 20-29 age group onwards.

## Exhibit 3: Pill Statistics

The classification of controlled substance with the highest number of prescriptions dispensed in 2020 was Opioids followed by a category called No CDC class, and then Benzodiazepines. (Table 3.1 below). No CDC Class denotes that the Center for Disease Control does not have a classification on file for the drug in question. Most controlled substance prescriptions (47%) are dispensed in quantities of 30 pills or less. Opioids remain the most commonly dispensed controlled substance in all quantity ranges.

***Table 3.1 – Pill Quantity by Classification***

| Quantity Range | Benzo | Muscle Relaxant | Opioid | Sedative | Stimulant | ^No CDC Class | Total |
|---|---|---|---|---|---|---|---|
| 1-30 | 1,418,958 | 4,192 | 2,377,907 | 896,843 | 1,594,422 | 1,681,765 | 7,974,087 |
| 31-60 | 906,970 | 3,607 | 1,254,026 | 27,843 | 418,974 | 976,562 | 3,587,982 |
| 61-90 | 510,471 | 5,201 | 964,642 | 80,137 | 144,803 | 553,941 | 2,259,195 |
| 91-120 | 102,253 | 1,972 | 961,938 | 229 | 21,060 | 156,620 | 1,244,072 |
| 121-150 | 12,830 | 63 | 128,360 | 573 | 3,994 | 19,251 | 165,071 |
| 151-180 | 33,078 | 172 | 190,033 | 691 | 11,437 | 70,299 | 305,710 |
| 181+ | 16,427 | 263 | 80,472 | 44 | 3,664 | 37,834 | 138,704 |
| Not Pills | 23,620 | 1 | 389,986 | 184 | 18,581 | 992,912 | 1,425,284 |
| Data Missing | 32 | 0 | 47 | 3 | 5 | 64 | 151 |
| Total | 3,024,639 | 15,471 | 6,347,411 | 1,006,547 | 2,216,940 | 4,489,248 | 17,100,256 |

^No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug

**Exhibit 4: Patients with Multiple Prescribers**

The data indicates that 54.38% of patients saw one prescriber for their dispensed controlled substances. This is similar to the percentage noted in 2019 data (54.83%). Pet and animal owners were more likely to receive controlled substance prescriptions for their animals from one veterinarian.

**Table 4.1 Prescriber counts (human patients)**

| Prescribers | Patients | Percentage |
|---|---|---|
| 1 | 1,490,583 | 54.38% |
| 2 | 646,733 | 23.59% |
| 3 | 303,322 | 11.07% |
| 4 | 147,973 | 5.40% |
| 5 | 73,295 | 2.67% |
| 6 | 37,178 | 1.36% |
| 7 | 19,468 | 0.71% |
| 8 | 10,168 | 0.37% |
| 9 | 5,374 | 0.20% |
| 10+ | 7,099 | 0.26% |
| Total | 2,741,193 | |

**Table 4.2 Prescriber counts (Veterinary)**

| Prescribers | Patients | Percentage |
|---|---|---|
| 1 | 72,451 | 88.62% |
| 2 | 7,417 | 9.07% |
| 3 | 1,506 | 1.84% |
| 4 | 299 | 0.37% |
| 5 | 58 | 0.07% |
| 6 | 15 | 0.02% |
| 7 | 5 | 0.01% |
| 8 | 1 | 0.00% |
| 9 | 0 | 0.00% |
| 10+ | 0 | 0.00% |
| Total | 81,752 | |

## Exhibit 5: Patients with Multiple County Dispensing

The largest percentage of patients had controlled substance prescriptions dispensed in only one county (Tables 5.1 and 5.2 below). There is little change in this pattern compared to 2019.

**Table 5.1 - Dispenser Counties (Human patients)**

| Counties | Patients | Percentage |
|---|---|---|
| 1 | 2,488,713 | 90.79% |
| 2 | 221,540 | 8.08% |
| 3 | 27,321 | 1.00% |
| 4 | 3,185 | 0.12% |
| 5 | 380 | 0.01% |
| 6 | 40 | 0.00% |
| 7 | 8 | 0.00% |
| 8 | 5 | 0.00% |
| 9 | 1 | 0.00% |
| 10+ | 0 | 0.00% |
| Total | 2,741,193 | |

**Table 5.2 - Dispenser Counties (Veterinary patients)**

| Counties | Patients | Percentage |
|---|---|---|
| 1 | 81,464 | 99.65% |
| 2 | 284 | 0.35% |
| 3 | 4 | 0.00% |
| 4 | 0 | 0.00% |
| 5 | 0 | 0.00% |
| 6 | 0 | 0.00% |
| 7 | 0 | 0.00% |
| 8 | 0 | 0.00% |
| 9 | 0 | 0.00% |
| 10+ | 0 | 0.00% |
| Total | 81,752 | |

## Exhibit 6: The categories of practitioners prescribing controlled substances and the number of prescriptions authorized by each category of practitioner

Of the identified specialties, the largest categories for both controlled substance prescriptions and patients are Other followed by Medical Doctor (Table 6.1 below). These two specialties account for 51% and 44% of all controlled substances prescribed and dispensed. Dentists are the third most frequent prescribers of controlled substances.

Of the identified specialties, Substance Use Disorder[2] and Pain Management provide the highest prescription rate per patient compared to other specialties. Dentists have the lowest rate of prescriptions per patient.

***Table 6.1 – Number of controlled substance prescriptions dispensed by prescriber specialty***

| Specialty | Prescriptions | Patients | Rx per Patient |
|---|---|---|---|
| Dentist | 354,551 | 276,227 | 1.28 |
| Hematology | 7,506 | 2,062 | 3.64 |
| Medical Doctor | 7,460,614 | 1,460,710 | 5.11 |
| Oncology | 85,029 | 23,286 | 3.65 |
| Pain Management | 230,746 | 39,679 | 5.82 |
| Palliative Care | 12,830 | 4,121 | 3.11 |
| Substance Use Disorder | 23,493 | 3,085 | 7.62 |
| Veterinary | 170,157 | 80,665 | 2.11 |
| +Other | 8,703,265 | 1,596,133 | 5.45 |
| Unspecified | 52,065 | 15,550 | 3.35 |
| ***Total** | **17,100,256** | **2,821,480** | **6.06** |

+Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)
*This is the total of unique patients and differs from the sum of all categories because unique patients may see more than one practitioner specialty.

[2] The classification of Substance Use Disorder specialty contains data from prescriptions dispensed at a pharmacy to a patient and does not include data from Substance Use Treatment services that dispense medications on site or less than 48 hours supply.

Opioids remain the most prescribed and dispensed controlled substance across all specialties except Veterinary. Controlled substances with no CDC class and benzodiazepines and are the second and third most prescribed and dispensed controlled substances.

***Table 6.2 – Number of prescriptions dispensed by prescriber specialty and drug class***

| Specialty | Benzo | Opioid | Muscle Relaxant | Stimulant | Sedative | ^No CDC Class | Total |
|---|---|---|---|---|---|---|---|
| Dentist | 45,844 | 284,913 | 83 | 245 | 148 | 23,318 | 354,551 |
| Hematology | 968 | 5,084 | 4 | 38 | 233 | 1,179 | 7,506 |
| Medical Doctor | 1,465,608 | 2,427,820 | 8,531 | 921,679 | 590,445 | 2,046,531 | 7,460,614 |
| Oncology | 12,903 | 52,329 | 6 | 1,981 | 2,952 | 14,858 | 85,029 |
| Pain Management | 6,129 | 185,280 | 283 | 968 | 2,129 | 35,957 | 230,746 |
| Palliative Care | 2,397 | 6,146 | 2 | 104 | 74 | 4,107 | 12,830 |
| Substance Use Disorder | 779 | 15,855 | 2 | 1,204 | 82 | 5,571 | 23,493 |
| Veterinary | 17,420 | 35,667 | 0 | 56 | 26 | 116,988 | 170,157 |
| +Other | 1,464,531 | 3,319,085 | 6,538 | 1,287,035 | 408,613 | 2,217,463 | 8,703,265 |
| Unspecified | 8,060 | 15,232 | 22 | 3,630 | 1,845 | 23,276 | 52,065 |
| Total | 3,024,639 | 6,347,411 | 15,471 | 2,216,940 | 1,006,547 | 4,489,248 | 17,100,256 |

^No CDC Class – The Center for Disease Control (CDC) does not have a classification on file for the drug
+Specialty other than those in this list (e.g., Nurse Practitioner, Prescribing Pharmacist, et. al.)

**Summary and Discussion**

In 2020, 17 million dispensed controlled substance prescriptions were entered into the North Carolina Controlled Substances Reporting System. This is a significant decline from previous years and may be indicative of a change in health seeking behavior in 2020 due to the COVID19 pandemic. Typically, the CSRS shows a steady but small decrease in the number of dispensed controlled substances by quarter and year. Although not shown here, the CSRS shows that in Quarter 2, 2020, there were 332,391 fewer dispensed controlled substance prescriptions compared to Quarter 1. In 2019, the difference between the quarters was 48,556 fewer dispensed prescriptions. The significant decrease observed between April and June of 2020 coincides with the timing of the Governor's Stay at Home orders and is consistent with observations nationwide. Survey results published by the CDC found that 40.9% of adults in the US had avoided medical care, both urgent and routine, because of concerns about COVID-19. The survey was conducted in June 2020[3].

The North Carolina Controlled Substances Reporting System was accessed by 46,268 practitioners and pharmacists in 2020. This is slightly lower compared to 2019, when just over 46,300 practitioners and pharmacists accessed prescription histories and other clinical diagnosis tools to assist in prescribing and dispensing decisions.

DHHS will continue to work toward increasing the number of practitioners and pharmacists accessing the system, with a focus on increasing technical integrations into clinical workflows and targeted engagement activities to keep the sector informed of resources and updates.

The decline in the total number of prescribed substances dispensed in 2020 compared to 2019 indicates some progress in achieving goals established in the *North Carolina Department of Health and Human Services 2021-2023 Strategic Plan*. Goal #4 *Turn the tide on North Carolina's opioid and substance use crisis*, measures the number of people receiving prescribed opioids as a metric for success. This position is supported by the decrease in the number of patients that received prescription opioids. The challenge for the State is to ensure that the behavioral and health related crisis emerging from the COVID19 pandemic does not reverse these trends. The CSRS plays a key role in providing the medical community with accurate and up to date information on prescribing trends to encourage clinical decision making that will ultimately result in fewer targeted controlled substances circulating in the community. Future reports will continue to measure the reduction expected in the total number of opioid prescriptions dispensed.

[3] Czeisler MÉ, Marynak K, Clarke KEN, et al. Delay or Avoidance of Medical Care Because of COVID-19-Related Concerns - United States, June 2020. MMWR Morb Mortal Wkly Rep. 2020;69(36):1250-1257. Published 2020 Sep 11. doi:10.15585/mmwr.mm6936a4