



IN THE DISTRICT COURT OF CLEVELAND COUNTY
STATE OF OKLAHOMA

STATE OF OKLAHOMA, ex rel.,
MIKE HUNTER,
ATTORNEY GENERAL OF OKLAHOMA,

Plaintiff,

vs.

- (1) PURDUE PHARMA L.P.;
- (2) PURDUE PHARMA, INC.;
- (3) THE PURDUE FREDERICK COMPANY;
- (4) TEVA PHARMACEUTICALS USA, INC.;
- (5) CEPHALON, INC.;
- (6) JOHNSON & JOHNSON;
- (7) JANSSEN PHARMACEUTICALS, INC.;
- (8) ORTHO-McNEIL-JANSSEN
PHARMACEUTICALS, INC., n/k/a
JANSSEN PHARMACEUTICALS, INC.;
- (9) JANSSEN PHARMACEUTICA, INC.,
n/k/a JANSSEN PHARMACEUTICALS, INC.;
- (10) ALLERGAN, PLC, f/k/a ACTAVIS PLC,
f/k/a ACTAVIS, INC., f/k/a WATSON
PHARMACEUTICALS, INC.;
- (11) WATSON LABORATORIES, INC.;
- (12) ACTAVIS LLC; and
- (13) ACTAVIS PHARMA, INC.,
f/k/a WATSON PHARMA, INC.,

Defendants.

Case No. CJ-2017-816
Judge Thad Balkman

William C. Hetherington
Special Discovery Master

**NOTICE OF FILING OF THE STATE'S PROPOSED (1) FINAL JUDGMENT &
(2) FINDINGS OF FACT AND CONCLUSIONS OF LAW**

PART 4

are based on comparable State salaries and benefits for similar positions and similar programs. Trial Tr. (6/21/19 a.m., Hawkins) at 35:9-13; S-4734 at 101. K12 prevention requires a full-time program director at a cost of \$98,066 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 35:9-13; S-4734 at 101. It also requires three program managers, who will be placed in management of K12 schools to manage the implementation of these programs in the different geographic regions of the State at a cost of \$250,572 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 35:14-17; S-4734 at 101. It also requires six field representatives for a total cost of \$434,027 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 35:17-25; S-4734 at 101. These field representatives are prevention specialists, who will be placed in the community to work directly with schools to support their implementation of the programs, provide consultation, become trainers in these programs, train schools when necessary, and ensure schools have the necessary materials and are collecting data. Trial Tr. (6/21/19 a.m., Hawkins) at 35:17-25. The program also requires one full-time evaluator at a cost of \$144,676 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 35:25-36:1; S-4734 at 101. And, it requires one quarter time administrative officer at a cost per year of \$16,406. Trial Tr. (6/21/19 a.m., Hawkins) at 36:1-2; S-4734 at 101.

1003. Second, implementation of K12 prevention also requires local travel costs at an annual cost of \$35,400. Trial Tr. (6/21/19 a.m., Hawkins) at 36:2-4; S-4734 at 101. Local travel will be considerable to oversee the implementation of these programs. Trial Tr. (6/21/19 a.m., Hawkins) at 36:2-4. Third, implementation of K12 prevention also requires supplies. Trial Tr. (6/21/19 a.m., Hawkins) at 36:4-5. Supplies to oversee this program cost \$24,120 per year. *Id.*; S-4734 at 101.

1004. The costs for the Good Behavior Game are required to provide training to classroom teachers and school counselors in the first and second grade for children ages 6-7. Trial Tr. (6/21/19 a.m., Hawkins) at 36:6-23; S-4734 at 102, n.3. The program is delivered throughout the State to children aged 6-7 at a cost of \$2,300 per classroom for training, materials, support and evaluation. *Id.* Average classroom size is assumed to be 22 based on National Center for Education Services (“NCES”) data. Trial Tr. (6/21/19 a.m., Hawkins) at 36:6-20; S-4734 at 101-02, n.2 & 3. There are estimated to be 4,926 6-year-old classrooms throughout the State (108369/22). *Id.*⁷⁶ As such, the total cost for year one of the Good Behavior Game in Oklahoma is \$11,329,800. *Id.* at 36:21-23. After the first year, the costs decrease. Trial Tr. (6/21/19 a.m., Hawkins) at 36:24-37:5; S-4734 at 102. The State’s expert, Dr. Christopher Ruhm, estimated an attrition rate at 11.1 percent for teachers who will receive training on the program. Trial Tr. (6/21/19 a.m., Hawkins) at 37:1-5; S-4734 at 102, n.4. For new teachers coming into the State who will require training or new graduates coming into the State education system, the annual costs would decrease to \$1,257,608. *Id.*

1005. Botvin LifeSkills will be provided to all students in elementary (grades 3-5), middle (grades 6-8) and grade nine. Trial Tr. (6/21/19 a.m., Hawkins) at 37:9-19; S-4734 at 102-03. There is a tailored curriculum—lessons that are taught in the program—that is provided at each of these levels as the children develop. Trial Tr. (6/21/19 a.m., Hawkins)

⁷⁶Number of students, student/administrative support staff ratio, student/counselor ratio and average class room size utilized to calculate costs for K12 prevention were calculated using Oklahoma 2015 population data from US Census Factfinder; NCES data and recommendations from the American School Counselor Association. *See* S-4734 at 101, n.2.

at 37:9-19; 38:3-5. The costs for this program are for the different curricula and training sets that are required to implement the program. Trial Tr. (6/21/19 a.m., Hawkins) at 37:9-38:15. The State's expert, Dr. Ruhm, estimated the number of classrooms in Oklahoma for grades three through five to be 7,330 classrooms for curriculum sets. Trial Tr. (6/21/19 a.m., Hawkins) at 37:19-21; S-4734 at 102, n.5. For middle school, Dr. Ruhm estimated 7,213 classrooms and required curriculum sets. Trial Tr. (6/21/19 a.m., Hawkins) at 37:21-22; S-4734 at 102, n.6. And, for grade nine, Dr. Ruhm estimated 2,372 classrooms and curriculum sets. Trial Tr. (6/21/19 a.m., Hawkins) at 37:22-23; S-4734 at 102, n.7. There is a per unit cost for each curriculum level – \$655 per unit at the elementary level totaling \$4,801,150; \$645 per unit at the middle level, totaling \$4,652,385; and \$265 per unit at the grade 9 level, totaling \$628,580. Trial Tr. (6/21/19 a.m., Hawkins) at 37:23-38:2; S-4734 at 102, n.8, 9 & 10. The total annual cost for the Botvin LifeSkills curriculum is \$10,082,115. Trial Tr. (6/21/19 a.m., Hawkins) at 38:1-2; S-4734 at 102.

1006. There is foundational training in Botvin's Lifeskills that is delivered through the school and to teachers. Trial Tr. (6/21/19 a.m., Hawkins) at 38:3-15; S-4734 at 102. The foundational training is at a cost of \$235 per person trained. *Id.* The number of teachers and counselors receiving the foundational training was calculated based on the number of teachers and counselors in the State of Oklahoma assuming a class size of 22 students for grades 3-9. S-4734 at 102, n.11. The total costs for the foundation training in year one is \$4,325,175. S-4734 at 102.

1007. In addition, there is a Training of Trainers Workshop to train ten staff members statewide so they can, in turn, provide training on the program in the future at a

cost of \$1,070 per person. Trial Tr. (6/21/19 a.m., Hawkins) at 38:3-15; S-4734 at 102, n.12. In the first year of the Botvin's LifeSkills program, the training cost is \$4,335,875. Trial Tr. (6/21/19 a.m., Hawkins) at 38:3-15; S-4734 at 102. In later years, an attrition rate of 11.1% is assumed (which represents the fraction of Oklahoma teachers leaving state public schools from 2006-2014), such that the training decreases to \$481,282 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 38:3-15; S-4734 at 102, n.13.

1008. The Penn Resiliency Program is offered for teachers in grades 6 through 12. Trial Tr. (6/21/19 a.m., Hawkins) at 38:18-19; S-4734 at 103, n.14. There is a one-day professional development training in the first year to orient schools to the program at a cost of \$161.11 per person for 75% of teachers/professional staff in middle and high school. Trial Tr. (6/21/19 a.m., Hawkins) at 38:18-39:20; S-4734 at 103, n.15. The total cost of this training is \$3,535,317. Trial Tr. (6/21/19 a.m., Hawkins) at 38:21-22; S-4734 at 103, n.18. The cost decreases in later years because instructors or teachers do not need to be retrained in future years. Trial Tr. (6/21/19 a.m., Hawkins) at 38:22-25. Only new instructors and teachers coming into the State education system require training in future years at a cost of \$392,420 per year. *Id.*; S-4734 at 103, n.19.

1009. In addition, there is a required intensive 5-day resiliency instruction training for 25% of teachers/staff that will be instructors working directly with youth. Trial Tr. (6/21/19 a.m., Hawkins) at 38:25-39:8; S-4734 at 103, n.16. The first-year cost for the instruction training is \$2,666.67 per person trained as an instructor for a total cost of \$19,505,358. Trial Tr. (6/21/19 a.m., Hawkins) at 38:25-39:8; S-4734 at 103, n.20. In

future years, the cost decreases to \$2,165,095 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 39:8; S-4734 at 103, n.21.

1010. In addition, the developers of the program offer ongoing phone support to those providing instruction on the program. Trial Tr. (6/21/19 a.m., Hawkins) at 39:9-20; S-4734 at 103, n.17. This support is essential to ongoing implementation of the program to answer questions that emerge and deal with certain events the instructors are encountering with youth. Trial Tr. (6/21/19 a.m., Hawkins) at 39:9-20. The first-year cost of this expert consultation to support the instructors is \$4,876,333. Trial Tr. (6/21/19 a.m., Hawkins) at 39:9-20; S-4734 at 103. In later years, the cost decreases to \$541,273 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 39:9-20; S-4734 at 103.

1011. The total yearly cost for these services in 2019 dollars is \$55,958,231 for the first year and \$16,298,844 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$317,490,406, \$373,144,910 and \$424,175,223, respectively. *See* S-4734 at 104.

1012. The costs of K12 prevention are reasonable and necessary expenses to implement these prevention programs in Oklahoma schools. Trial Tr. (6/21/19 a.m., Hawkins) at 40:1-5; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

xii. K12 Supplementary Prevention

1013. Discretionary prevention funds to all public and private K-12 schools to plan and implement supplementary and/or additional evidence-based prevention and intervention services are necessary to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins)

at 42:24-43:2; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 34. While these funds are discretionary, they would be used to abate the nuisance. Trial Tr. (6/24/19 a.m., Hawkins) at 93:8-9. K12 Supplementary Prevention has two components: discretionary school funding for evidence-based prevention services and school counselors. S-4734 at 34. The purpose of K12 Supplementary Prevention is to reduce opioid use and misuse and addiction among youth in Oklahoma. Trial Tr. (6/24/19 a.m., Hawkins) at 93:13-15.

1014. First, discretionary funding is necessary to fund essential opioid use, misuse, and abuse prevention programming in Oklahoma schools. Trial Tr. (6/21/19 a.m., Hawkins) at 40:11-41:13. These are interventions that serve as a supplement to the K12 prevention programs in the State's Abatement Plan to further enhance outcomes and provide support for children and their families. *Id.* at 40:13-17. The three evidence-based K12 prevention programs in the State's Abatement Plan are just a small subset of the prevention programs available to prevent Oklahoma youth from becoming addicted to opioids. *See, e.g.*, S-1574 at 42-43.

1015. For example, schools could use the supplemental prevention funds to provide family-based prevention programs. Trial Tr. (6/21/19 a.m., Hawkins) at 40:17-20. One example of such a program is the Strengthening Families Program, which has great evidentiary support in addressing prescription opioid use. Trial Tr. (6/21/19 a.m., Hawkins) at 40:20-22. The U.S. Commission recommends Strengthening Families Program as an effective intervention to reduce risk factors and promote protective factors in youth. S-1574 at 42.

1016. These discretionary prevention funds are critical to abating the nuisance because they enable Oklahoma schools to tailor their prevention programming to the specific students and families they serve that may be at increased risk of developing OUD. Trial Tr. (6/21/19 a.m., Hawkins) at 40:23-41:3.

1017. Second, hiring school counselors is critical to abating the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 41:11-21; S-4734 at 34. This is an unmet need in Oklahoma. *Id.* The Oklahoma State Department of Education has recently defined the need for school counselors as a priority need. *Id.* Due to the nuisance, school counselors in Oklahoma schools are daily encountering severe social and emotional needs of students and their families. *Id.* Schools are currently not equipped with the staff needed to address these issues. *Id.* In addition, these school counselors are counselors who will coordinate and/or implement the gold standard evidence-based K12 prevention programs and supplemental programs proposed in the State's Abatement Plan in Oklahoma schools. Trial Tr. (6/21/19 a.m., Hawkins) at 36:6-23; S-4734, at 102 n. 3-4, 11-12, 103 n. 14-17.

1018. The discretionary prevention funds are \$3.5 million per year. Trial Tr. (6/21/19 a.m., Hawkins) at 41:22-42:9; S-4734 at 34. These funds would be awarded to Oklahoma schools based on a formula derived from enrollment. Trial Tr. (6/21/19 a.m., Hawkins) at 42:2-8. Smaller schools would receive a smaller portion of the funds and larger schools would receive a larger portion of the funds to meet their needs. *Id.* This amount is based on the final year's award to Oklahoma from the Federal Safe and Drug Free Schools and Communities Act state grant program. Trial Tr. (6/21/19 a.m., Hawkins) at 42:6-8; 41:4-8; S-4734 at 34, n.74.

1019. The cost of school counselors totals \$63.085 million. Trial Tr. (6/21/19 a.m., Hawkins) at 42:12; S-4734 at 34. It was calculated using the 2015 population data for five to nineteen-year-olds in Oklahoma and then using national recommendations for student-to-counselor ratios. Trial Tr. (6/21/19 a.m., Hawkins) at 42:12-15. Currently, there is one school counselor for every approximately 427 students. Trial Tr. (6/21/19 a.m., Hawkins) at 42:16-17. The minimum national recommendation is for that ratio to be one counselor for every 250 students. Trial Tr. (6/21/19 a.m., Hawkins) at 42:17-19. The total required number of counselors under this plan is 1,147 new counselors. Trial Tr. (6/21/19 a.m., Hawkins) at 42:19-22; S-4734, S-4734 at 34, n.75. This number was then multiplied by an average salary and benefits for a school counselor in the State of \$55,000 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 42:12-23; S-4734 at 34, n.76.

1020. The total yearly cost for these services in 2019 dollars is \$68,156,406. The net present value of these costs over a 20-year, 25-year and 30-year period is \$1,161,797,963, \$1,394,526,798 and \$1,607,918,784, respectively. See S-4734 at 34.

1021. The costs for K12 Supplementary Prevention are reasonable and necessary expenses to implement this component of the State's Abatement Plan. Trial Tr. (6/21/19 a.m., Hawkins) at 43:4-7; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

xiii. Community Prevention

1022. Resources for every Oklahoma county to implement community-based prevention services for all Oklahomans is necessary to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 49:3-8; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-

7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 35-36. The State's Abatement Plan includes evidence-based prevention interventions across a variety of sectors of the population including the medical community, institutions of higher-education and schools. The community evidence-based prevention services in this component of the Abatement Plan would reach all Oklahomans to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 46:25-47:19; Trial Tr. (6/24/19 p.m., Hawkins) at 6:23-7:7.

1023. In communities at large, community-based prevention coalitions have been an essential part of preventing substance use in this country for many years. Trial Tr. (6/21/19 a.m., Hawkins) at 47:7-19. In Oklahoma, there is a network of health and safety community coalitions that work on priority issues in their neighborhoods and communities that have made significant changes on many public health problems. *Id.* This component of the Abatement Plan funds at least one community-based coalition program for prevention services in every county in Oklahoma, with two in the metro areas. *Id.* These coalitions will utilize public health models and other proven substance use prevention models such as the Communities That Care model, to design local prevention plans and to implement needed opioid-related services in their communities to abate the nuisance. *Id.*; Trial Tr. (6/24/19 p.m., Hawkins) at 6:23-25; S-4734 at 35-36.

1024. The U.S. Commission recognizes the Communities That Care Model as an effective universal intervention that reduces risk factors and increases protective factors to prevent new cases of opioid use disorder. S-1574 at 42-43 ("One advantage of a properly implemented universal prevention program is that it is likely to reach most or all of the population.). While higher-education and school prevention programs in the Abatement

Plan will effectively reduce risk factors and increase protective factors in those populations, community prevention programs will reach all Oklahomans. Trial Tr. (6/21/19 a.m., Hawkins) at 47:7-19.

1025. The cost for Community Prevention Programs is \$150,000 per coalition for 79 communities for a total of \$11.850 million per year. Trial Tr. (6/21/19 a.m., Hawkins) at 47:20-22; S-4734 at 35, n.78.

1026. Personnel is required to oversee operations, training, evaluation and compliance with implementing high-quality community-based prevention services. Trial Tr. (6/21/19 a.m., Hawkins) at 47:22-48:7; S-4734 at 35. The personnel required includes a full-time salary and benefits for a program director at a cost of \$98,066 per year, four field representatives, who will be assigned to work directly with these community coalitions and help them obtain the resources, training, and other support they need to be effective, at a cost of \$289,351 per year, a full-time evaluator at a cost of \$144,705 per year and a quarter-time program officer at \$16,407 per year. *Id.* There also will be local travel required at an annual cost of \$35,400 per year and program supplies at an annual cost of \$24,120. Trial Tr. (6/21/19 a.m., Hawkins) at 48:5-7; S-4734 at 35.

1027. Community Prevention also includes health educator costs. Trial Tr. (6/21/19 a.m., Hawkins) at 48:12-49:2; S-4734 at 35. The purpose of these costs is for health education professionals to address the nuisance in each of the 68 county health departments throughout the State and two at the independent city county health departments in Oklahoma City and Tulsa. *Id.* For 70 health educational professionals throughout the State, it costs \$5,347,160 per year (\$76,388 per project coordinator). *Id.*; see also S-4734 at 35,

n.79 & 80. In addition, a full-time clinical advisor specific to opioid-related epidemiology is required at an annual cost of \$245,742. Trial Tr. (6/21/19 a.m., Hawkins) at 48:23-49:2; S-4734 at 35.

1028. The total yearly cost for these services in 2019 dollars is \$18,476,953. The net present value of these costs over a 20-year, 25-year and 30-year period is \$314,959,189, \$378,051,127 and \$435,900,916, respectively. See S-4734 at 36.

1029. The costs for Community Prevention are necessary and reasonable expenses to implement the community prevention component of the State's Abatement Plan. Trial Tr. (6/21/19 a.m., Hawkins) at 49:3-13; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

xiv. Higher-Education Discretionary Prevention Funds

1030. The planning and implementation of evidence-based substance use prevention services at institutions of higher education are necessary to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 50:19-23; S-4734 at 37; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1031. Higher-Education Discretionary Prevention Funds are necessary on university campuses to abate the nuisance because, according to NSDUH, 18-25-year-olds have the highest rate of misuse of prescription opioids and are thus, disproportionately affected by the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 45:3-7;109:16-22.

1032. Each campus of higher education in Oklahoma requires funding for prevention and intervention programming for college students. Trial Tr. (6/21/19 a.m.,

Hawkins) at 49:20-50:9. They do not have sufficient resources to address prevention on campuses. *Id.* Higher-education discretionary prevention funds would provide discretionary funds for these services to 62 college campuses per year. Trial Tr. (6/21/19 a.m., Hawkins) at 49:20-50:9; S-4734 at 37. Those funds would be allocated in the State based on student population or enrollment size and would cover expenses for evidence-based prevention and intervention programs to address the nuisance. *Id.* The costs for the discretionary funds is \$6.20 million per year. Trial Tr. (6/21/19 a.m., Hawkins) at 50:13-17; S-4734 at 37. Higher education programs contemplated by this component of the Plan are aimed at preventing opioid use and OUD. Trial Tr. (6/24/19 p.m., Hawkins) at 10:17-19; 11:1-4.

1033. This component of the Abatement Plan also includes university health education professionals. Trial Tr. (6/21/19 a.m., Hawkins) at 50:5-9; S-4734 at 37. Specifically, it includes one full-time health education professional at 62 college campuses at salary and benefits of \$60,000 per year for a total cost of \$3.72 million annually. Trial Tr. (6/21/19 a.m., Hawkins) at 50:5-9; S-4734 at 37, n.82.

1034. The total yearly cost for these services in 2019 dollars is \$10,154,112. The net present value of these costs over a 20-year, 25-year and 30-year period is \$173,087,569, \$207,760,094 and \$239,551,766, respectively. *See* S-4734 at 37.

1035. The costs for higher-education discretionary prevention funds are reasonable and necessary expenses to plan and implement evidence-based substance use prevention services at institutions of higher education in Oklahoma. Trial Tr. (6/21/19 a.m., Hawkins)

at 50:24-51:3; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

xv. Public Education

1036. The development and dissemination of (1) a sustained, universal marketing campaign related to: access to prevention and treatment services, stigma reduction, opioid education, skills for preventing or managing pain; (2) a public education campaign to reach specific high risk/high potential populations, including healthcare professionals, pain patients, young people, caring adults, and those at risk for overdose and addiction; (3) a campaign created to inform the public of Good Samaritan protections for people calling for help and staying with a person who has overdosed; (4) print material, including posters and rack cards for distribution by outreach teams, syringe service programs, and other stakeholders and internet ads; and (5) campaigns to utilize social/digital media, television, print, direct mail, outdoor advertising, and news media, is necessary to abate the nuisance. *See, e.g.*, Trial Tr. (6/10/19 p.m., Stone) at 111:9-127:6; Trial Tr. (6/17/19 p.m., Beaman) at 83:21-23; Trial Tr. (6/21/19 p.m., Hawkins) at 47:11-20; Trial Tr. (6/21/19 p.m., Hawkins) at 51:8-15; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 38; S-3923.

1037. There is a stigma associated with OUD that individuals suffering from OUD are weak and immoral addicts. Trial Tr. (5/28/19 p.m., Rojas) at 60:9-24. In today's society, the individual with the disease of addiction, as well as their family members and friends, are often "ashamed of their addiction." Trial Tr. (6/17/19 p.m., Beaman) at 53:10-54:3 ("If I were diagnosed with cancer, I would have an incredible support center around me

immediately. If I tell everyone that I'm suffering from addiction, I would have the exact opposite. My entire support system would scatter.”); *see also, e.g.*, Trial Tr. (6/14/19 a.m., Hoos) at 76:24-77:6 (testifying that the stigma of shame kept Ms. Hoos from talking about her addiction or seeking treatment because she thought she was weak).

1038. Mr. Mendell explained how the stigma of Addiction impacted his family:

The same time Brian was going through this in high school another young man Brian's age was also in high school in our town. When he was diagnosed with cancer, his family told all of their friends. First of all, before they told their friends, the first thing they did was research and find treatment for their son for his cancer. And as anyone in this room would expect, they found treatment that was based on science, proven research, just like any disease. Doctors who were taught based on science. We looked for care for our son, and as I just mentioned, we couldn't find care that was based on science. Just couldn't find it. His parents told their friends. And our entire community rallied behind Mikey -- that was his name -- and their family, as you would expect. I can remember like it was yesterday, parents coming to their home with cooked meals, driving carpools. Kids at our elementary school held bake sales on the weekends to raise for Mikey's new charity for childhood cancer. But for us it was different. I didn't tell hardly any of my friends what we were dealing with. Why? I was ashamed to. I couldn't understand why my son wasn't trying harder. I couldn't -- I always tried to figure out what I had done wrong as a father, why I had -- I had a son who couldn't resist getting high on drugs. And there was no response in my community; no cooked meals; no carpools. But even worse, the worst, when Mikey came home from treatment from cancer, he saw the bake sales on the weekends. When Brian came home from treatment, he just got silence. I think back and I feel horrible about it.

Trial Tr. (6/18/19 a.m., Mendell) at 19:3-20:5.

1039. But individuals suffering from addiction are not simply bad people—the behaviors they exhibit “are coming from a brain that is fundamentally changed, drastically changed.” Trial Tr. (5/28/19 p.m., Rojas) at 61:3-11; *see also, e.g.*, Trial Tr. (6/17/19 p.m., Beaman) at 54:23-55:4 (“There’s no single appearance of someone suffering from

addiction. And we all have that image of a shady-looking individual in a back alley, but that's just wrong. They look like us: Doctors, lawyers, teachers, our children, our parents, our cousins, and siblings.”). Addiction is a treatable disease that “has nothing to do with the individual’s moral fortitude or moral character, and even the most morally upright individuals can succumb to addiction, and they often do.” Trial Tr. (6/17/19 p.m., Beaman) at 51:24-53:1.

1040. In Oklahoma, the stigma associated with addiction is “one of the biggest barriers to care and to getting these individuals better, because they often wait until advanced stages to seek out help.” Trial Tr. (6/17/19 p.m., Beaman) at 53:14-54:19; *see also, e.g.*, Trial Tr. (6/25/19 a.m., Commissioner White) at 108:4-110:20 (“Stigma is one of the largest barriers to people accessing treatment” for addiction).

1041. In its recommendations to combat the nuisance, the White House acknowledges the importance of public education “to raise awareness that addiction is not a moral failing, but rather a chronic brain disease, and that evidence-based treatment is available.” S-1574 at 40. To address the nuisance, the White House also recommends public prevention campaigns focusing on high risk vulnerable populations such as adolescents, college age students, pregnant women, those with psychiatric disorders and the elderly. *Id.* at 41.

1042. Until it affects someone’s family, it is difficult for individuals to understand that opioid addiction “can happen to anyone. Addiction is a disease that does not care who you are. It does not care who your family is.” Trial Tr. (6/25/19 a.m., Commissioner White) at 116:1-22.

1043. Commissioner White testified about her efforts over the past two decades in attempting to get rid of the stigma of shame associated with addiction, including opioid addiction. Trial Tr. (6/25/19 a.m., Commissioner White) at 112:18-114:3, 115:16-117:10.

1044. Overcoming the stigma associated with addiction is an important step in getting individuals with addiction the help that they need, and in ensuring a positive outcome from addiction treatment. Trial Tr. (5/28/19 p.m., Rojas) at 41:19-42:1; Trial Tr. (6/18/19 a.m., Mendell) at 16:2-5 (“[w]e can -- unless we change the way that we think about this disease, the way we talk about it, the stigma we attach to it, treatment, healthcare systems, laws, policies will only be so effective. Stigma changes everything.”).

1045. This stigma makes abating the nuisance even more difficult. Trial Tr. (6/25/19 a.m., Commissioner White) at 110:14-16. However, the State has presented evidence that this stigma can be overcome through many measures included in the State’s Abatement Plan. *See, e.g.*, Trial Tr. (6/25/19 a.m., Commissioner White) at 110:17-20; *see also, e.g.*, Trial Tr. (7/1/19 p.m., Fong) at 140:10-12 (agreeing that “stigma reduction is a critical component to treatment and prevention”).

1046. The total yearly cost for these services in 2019 dollars is \$26,690,370 for the first year, \$24,464,040 for the second year, \$16,275,240 for each of years 3 through 5, \$9,355,704 for each of years 6 through 10, and \$6,300,258 for each subsequent year. S-4734 at 38. The net present value of these costs over a 20-year, 25-year and 30-year period is \$187,580,467, \$209,093,510 and \$228,819,089, respectively. S-4734 at 38; S-3923.

1047. These numbers are very conservative. Trial Tr. (6/18/19 a.m. Mendell) at 48:10-49:6. Mr. Mendell testified that after a line-by-line review of the Abatement plan,

he agreed 100 percent that each of the services and programs are necessary to abate the nuisance. Trial Tr. (6/18/19 a.m. Mendell) at 46:9-11. However, he also testified that the annual costs of the public education plan are “woefully low.” Trial Tr. (6/18/19 a.m. Mendell) at 48:10-49:6.

1048. To change public perception of the stigma of addiction is a large societal change in patterns of thought. Trial Tr. (6/18/19 a.m. Mendell) at 80:22-24 (“That’s a change in the way we think. And that needs to change and that is not going to happen overnight.”). To the contrary, changing the way the public thinks about addiction takes a long time. Looking at other public health crisis such as HIV-AIDS, it can take decades to change these societal norms. Trial Tr. (6/18/19 a.m. Mendell) at 73:10-15 (“When you look at those societal change movements, they took decades.”); Trial Tr. (6/18/19 a.m. Mendell) at 73:24-74:2 (“Stigma reduction, when you look at the time it took to educate the public about this disease, when it talked about HIV-AIDS and those others that I mentioned, took decades.”).

1049. Mr. Mendell extensively researched stigma reduction and testified that “[t]o change behavior it’s a three-step process. It’s knowledge, it changes attitudes. Change in knowledge, changes attitudes. Changes in attitudes changes behavior.” Trial Tr. (6/18/19 a.m.) at 78:18-21. Mr. Mendel further testified, “The length of time it takes to change knowledge, or to change attitudes...which then changes behavior, it’s sequential. It’s impossible to have that happen in a couple of years.” Trial Tr. (6/18/19 a.m. Mendell) at 77:22-25; *see also* Trial Tr. (6/18/19 a.m. Mendell) at 77:17-25 & 78:7-11.

1050. Indeed, Commissioner White and Ms. Hawkins agree that public education must be in place for thirty years to abate the crisis. Trial Tr. (6/25/19 a.m., Commissioner White) at 101:15-102:4; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:15 & 67:22-68:3; Trial Tr. (6/24/19 a.m., Hawkins) at 61:19-20 & 62:14-18; Trial Tr. (6/24/19 p.m., Hawkins) at 117:24-118:5; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1051. The cost of public education is a necessary and reasonable cost to implement this component of the Abatement Plan. *See* Trial Tr. (6/10/19 p.m., Stone) at 111:9-127:6; *see also* Trial Tr. (6/21/19 p.m., Hawkins) at 47:11-20 & 51:16-52:5; Trial Tr. (6/17/19 p.m., Beaman) at 83:21-23.

b. Overdose Prevention and Response

i. *Naloxone Distribution & Education*

1052. Expanded and targeted naloxone distribution and overdose prevention education to those at high risk of experiencing or witnessing overdose is necessary to abate the nuisance. (Trial Tr. (6/21/19 a.m., Hawkins) at 54:19-22; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; Trial Tr. (6/13/19 a.m., Kolodny) at 125:20-126:02; S-4734 at 39-40.⁷⁷ Overdose education and naloxone distribution is an essential part of any community, state or federal plan to address the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 51:10-12. This provides

⁷⁷ The State's Abatement expert, Ms. Jessica Hawkins, developed the naloxone programming in Oklahoma and is an overdose education naloxone administration instructor. Trial Tr. (6/21/19 a.m., Hawkins) at 54:11-18.

a much-needed safety net in our State for persons who are harmed through the toxicity of opioids. Trial Tr. (6/21/19 a.m., Hawkins) at 51:12-15. The Plan contemplates a continued need for naloxone over the 30-year abatement period as a prevention measure. Trial Tr. (6/24/19 p.m., Hawkins) at 32:18-19, 33:23-24. Also, with the addition of newer guidelines that are leaning towards persons who are getting opioid prescriptions also having a naloxone kit, the need may grow, depending on prescribing rates. Trial Tr. (6/24/19 p.m., Hawkins) at 32:22-33:1. Oklahoma is in the top ten states for opioid prescribing in the Nation. Trial Tr. (6/24/19 p.m., Hawkins) at 33:18-19.

1053. Naloxone programs have been in existence in this country for more than 20 years and have demonstrated effectiveness. Trial Tr. (6/21/19 a.m., Hawkins) at 51:15-17. There are many different models of naloxone programs: law enforcement or first responder, take-home naloxone programs and pharmacy distribution methods. Trial Tr. (6/21/19 a.m., Hawkins) at 51:17-20. Many models have shown to be effective, including those within county jails and state prisons. Trial Tr. (6/21/19 a.m., Hawkins) at 51:21-25. People in institutional settings who have OUD are at very high risk for opioid overdose after release. *Id.*; see also S1574 at 72 (“In the weeks following release from jail or prison, individuals with or in recovery from OUD are at elevated risk of overdose or associated fatality...”).

1054. In emergency department models, people who come into emergency departments due to opioid overdose leave with a naloxone kit. Trial Tr. (6/21/19 a.m., Hawkins) at 51:25-52:3. And then other leave behind models, such as an ambulance service, leave behind naloxone to family members or others who are likely to witness a future overdose. Trial Tr. (6/21/19 a.m., Hawkins) at 52:3-7. These are different models

that are highly effective and have been tested and demonstrated to save lives. Trial Tr. (6/21/19 a.m., Hawkins) at 52:7-9.

1055. There also are models of naloxone distribution in terms of the number of naloxone kits required to be in circulation in the community. Trial Tr. (6/24/19 p.m., Hawkins) at 34:25-35:10. Oklahoma fire, law enforcement, doctors, corrections, substance use treatment, and other resources require naloxone. *Id.* Members of high-risk groups also require naloxone. *Id.* For every person who is getting an opioid prescription who also is using alcohol, or who has OUD and is receiving treatment, or who had OUD and was incarcerated and then released—will require naloxone in the community. *Id.*

1056. This component of the Abatement Plan is twofold: First, it includes continued naloxone programming at ODMHSAS, at \$1.1 million per year. Trial Tr. (6/21/19 a.m., Hawkins) at 52:10-13; S-4734 at 39. The \$1.1 million annual costs are for the cost of the medication, overdose education services, and administrative costs. Trial Tr. (6/21/19 a.m., Hawkins) at 52:13-53:6; S-4734 at 39, n.85. The medication costs are \$675,000 per year. *Id.* Overdose education services cost \$90,000 per year. *Id.* Each time a naloxone kit is distributed, a brief training and education is provided including, how to prevent overdose in the first place, how to recognize emergency overdose signs and symptoms, how to deploy and use naloxone and call 9-1-1, and how to engage loved ones in treatment services. Trial Tr. (6/21/19 a.m., Hawkins) at 52:14-21. Administrative costs of \$335,000 per year are required to oversee the scale of the program and include a program manager and field staff to travel statewide to provide training in overdose education and response and support local contractors and providers such as emergency departments, law

enforcement or any other sector of the community, that needs support to continue the naloxone program. Trial Tr. (6/21/19 a.m., Hawkins) at 52:22-53:3; S-4734 at 39, n.85.

1057. Second, the naloxone distribution/education component of the Abatement Plan includes expanding the naloxone program through OSDH involving emergency medical services, rural fire, and rural EMS services in Oklahoma to include all volunteer and fire departments in the State and continue the emergency medical rural response program. Trial Tr. (6/21/19 a.m., Hawkins) at 53:7-19; S-4734 at 39. This requires personnel including a full-time project coordinator at \$76,388 per year, a full-time epidemiologist at \$85,000 per year, a full-time naloxone training coordinator for these emergency responders at \$80,000 per year and support staff at a cost of \$50,000 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 53:16-23; S-4734 at 39.

1058. The non-personnel costs required to run this program include the naloxone kits for agency vehicles that need to be replenished at a cost of \$53,702 per year. Trial Tr. (6/21/19 a.m., Hawkins) at 53:24-54:1; S-4734 at 39. It also includes naloxone kits in fire department vehicles at a cost of \$39,468 per year. *Id.* at 54:1-2; S-4734 at 39. There also are printing, training and software technology requirements to operate the program at an annual cost of \$7,500, \$5,000 and \$35,000 respectively, which include dissemination of the product, printing instructions for the kits, training supplies and tracking software. Trial Tr. (6/21/19 a.m., Hawkins) at 54:2-7; S-4734 at 39. There also includes a one-time cost for the purchase of training aid manikins for the EMS services at OSDH of \$16,000 (\$1,000 x 16 manikins). Trial Tr. (6/21/19 a.m., Hawkins) at 54:7-10; S-4734 at 39, n.86.

1059. The total yearly cost for these services in 2019 dollars is \$1,594,035 for the first year and \$1,577,560 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$29,498,410, \$36,321,254 and \$42,939,727, respectively. *See* S-4734 at 39-40.

1060. The costs for naloxone distribution/education are reasonable and necessary costs to implement targeted naloxone distribution and overdose prevention education in the State of Oklahoma. Trial Tr. (6/21/19 a.m., Hawkins) at 54:23-55:1; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

ii. Grief Support Services

1061. Grief support services for those impacted by opioid overdose death are necessary to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 56:8-11; Trial Tr. (6/24/19 p.m., Hawkins) at 40:22 & 40:25-41:2; S-4734 at 41; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1. Grief services must be in place for the duration of the Abatement Plan because people are bereaved for life. Trial Tr. (6/24/19 p.m., Hawkins) at 42:20-22. 5,000 Oklahomans have died since 2007. Trial Tr. (6/24/19 p.m., Hawkins) at 43:3. These Oklahomans have loved ones who need these grief services for the next 30 years. Trial Tr. (6/24/19 p.m., Hawkins) at 43:3-4 & 43:10-11.

1062. As a result of the nuisance, family members who survive opioid overdoses of loved ones experience grief symptoms that present psychological distress. Trial Tr. (6/21/19 a.m., Hawkins) at 55:8-13. A report looked at the psychological mental health and

well-being of 500 parents who lost children to overdose and found that their grief symptoms and mental health distress is on par within someone who has lost a loved one to suicide as compared to other types of premature deaths. Trial Tr. (6/21/19 a.m., Hawkins) at 55:14-24. This is likely caused by the stigma associated with opioid overdose death and the lack of social supports including friend and family support that comes after experiencing a family member death due to opioid use. *Id.*

1063. This component of the Abatement Plan is for the community mental health centers in Oklahoma to coordinate and support at least one grief support group in each of the 17 service regions of the state. Trial Tr. (6/21/19 a.m., Hawkins) at 55:25-56:3; S-4734 at 41. These support groups will cost \$70,000 per region per year. Trial Tr. (6/21/19 a.m., Hawkins) at 56:3-4; S-4734 at 41. This funding would support three groups a year and serve between 1,000 to 2,000 grieving people in the State per year at a total cost of \$1.190 million. Trial Tr. (6/21/19 a.m., Hawkins) at 56:4-7; S-4734 at 41.

1064. The total yearly cost for these services in 2019 dollars is \$1,218,084. The net present value of these costs over a 20-year, 25-year and 30-year period is \$20,763,529, \$24,922,834 and \$28,736,553, respectively. *See* S-4734 at 41.

1065. The costs of grief support services are necessary and reasonable costs to implement these services in 17 service regions of the State. Trial Tr. (6/21/19 a.m., Hawkins) at 56:12-16; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

iii. *University Behavioral Health*

1066. Clinical integration of 222 licensed alcohol and drug counselors (“LADCs”) to deliver screening and intervention services in Oklahoma institutions of higher education are necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 45:25-46:7; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; *see also* S-4734 at 42-43.

1067. Collegiate Recovery Communities (“CRCs”) on Oklahoma’s 5 largest universities for individuals recovering with OUD are necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 49:12-15; 51:24-52:6; 53:13-19; Trial Tr. (6/20/19 p.m., Hawkins) at 118:15-21; *see also* S-4734 at 42.

1068. LADCs are mental health counselors with specific training in alcohol and drug counseling. Trial Tr. (6/20/19 a.m., Croff) at 43:15-17; 101:16-18; 101:24-102:1.

1069. LADCs are necessary on university campuses to abate the nuisance because, according to NSDUH, 18-25-year-olds have the highest rate of misuse of prescription opioids and are thus, disproportionately affected by the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 45:3-7;109:16-22.⁷⁸ And, typical counselors cannot do the type of screening and intervention that LADCs are trained specifically to do. Trial Tr. (6/20/19 a.m., Croff) at 44:15-22. Individuals with substance use disorders require different and additional

⁷⁸ While alcohol and marijuana use on college campuses has been relatively constant over the past decade, there has been an increased rate of opioid use. Trial Tr. (6/20/19 a.m., Croff) at 47:14-48:2.

treatment. The LADC process helps specifically train counselors on the necessary skills. Trial Tr. (6/20/19 p.m., Croff) at 58:21-59:10. Typical counselors encounter problems when they try to treat students with substance use disorders, such as OUD, because they do not have the special training or skills. *Id.* LADCs on university campuses in Oklahoma would ensure that there would be counselors on college campuses focused specifically on opioids. Trial Tr. (6/20/19 a.m., Croff) at 108:25-109:1. But for the nuisance, 222 LADCs on college campuses in Oklahoma would not be needed. Trial Tr. (6/20/19 p.m., Croff) at 59:11-14.

1070. LADCs on college campuses are currently an unmet need to confront the nuisance. Trial Tr. (6/20/19 p.m., Croff) at 45:8-12. Based on publicly available information, Dr. Croff was only able to identify two LADCs at institutions of higher education in Oklahoma, both at Oklahoma State University. Trial Tr. (6/20/19 a.m., Croff) at 45:8-12.

1071. The State's Abatement Plan proposes LADCs are available to screen and identify individuals with OUD on college campuses and to intervene with those individuals to help them achieve sobriety. Trial Tr. (6/20/19 a.m., Croff) at 43:18-23. LADCs are able to do counseling and group sessions for individuals with OUD. Trial Tr. (6/20/19 a.m., Croff) at 44:23-45:1.

1072. The recommendation for 222 LADCs on Oklahoma college campuses is based on the National Council of Chemical Dependency Nurses' recommendation that there be 1 counselor for every 1,000 students. Trial Tr. (6/20/19 a.m., Croff) at 44:4-10; 102:12-16; *see also* S-4734 at 42, n.89. Chemical dependency nurses are nurses who are

treating substance abuse specifically and are thus, the best reference available to identify the need for counseling for specific substances. Trial Tr. (6/20/19 a.m., Croff) at 102:12-16. According to the Oklahoma State Regents for Higher Education, there are 222,217 college students at Oklahoma institutions of higher education. Trial Tr. (6/20/19 a.m., Croff) at 44:4-10; S-4734 at 42, n.89. These are sources Dr. Croff typically relies on for this type of information. Trial Tr. (6/20/19 a.m., Croff) at 44:4-14.

1073. The costs for 222 LADCs on college campuses in Oklahoma were calculated using publicly available payroll data for LADCs for the State and adding a benefits rate. Trial Tr. (6/20/19 a.m., Croff) at 45:13-19. A salary and benefits package of \$76,450 would be required for each of the 222 LADCs, totaling annual costs of \$16,971,900. Trial Tr. (6/20/19 a.m., Croff) at 45:20-46:15; *see also* S-4734 at 42, n.90 & 91.

1074. The salary and benefits package of \$76,450 per LADC are necessary and reasonable costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 46:8-15; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1075. LADCs need to be in place for five to seven years before slowly being reduced, ending with the largest institutions 10 to 15 years after implementation in order to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 46:22-47:3; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21 *see also* S-4734 at 42 (assumes phase down starting in year 7 and ending in year 12.). This is because there are other areas of the Abatement Plan that call for training LADCs in communities. Trial Tr. (6/20/19 a.m., Croff) at 46:22-47:3. As such,

as more LADCs are embedded in communities, there will be less need for LADCs on university campuses. Trial Tr. (6/20/19 a.m., Croff) at 46:22-47:3.

1076. CRCs are sober living services and housing to support academic outcomes for individuals with OUD in recovery at institutions of higher learning. Trial Tr. (6/20/19 a.m., Croff) at 48:7-13; 113:18. CRCs help individuals with OUD in recovery obtain employment, a very important marker of success in recovery. Trial Tr. (6/20/19 a.m., Croff) at 48:7-13.

1077. CRCs are an unmet need in Oklahoma. Although Tulsa Community College was one of the test sites for an implementation trial for the Texas Tech model, there are currently no CRCs in existence at any universities in Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 48:14-16; 114:22-24. As the Oklahoma Commission recognized, “sober living dorms on college campuses are lacking.” S-210 at 7.

1078. There are two longstanding models of collegiate recovery – Texas Tech University and Rutgers University. Trial Tr. (6/20/19 a.m., Croff) at 48:17-49:11; *see also* Ct. Ex. 94 at 10 (illustrating success of these two models). These models have existed for over 30 years and have proven successful. Trial Tr. (6/20/19 a.m., Croff) at 48:17-49:11. For example, Texas Tech’s model CRC has a 70 percent graduation rate and individuals in CRCs stay in recovery. *Id.* Both models have very low relapse rates. *Id.* The models demonstrate that having academics and supportive peers going through a similar process is very helpful for individuals to maintain their sobriety and to launch into successful careers. *Id.*

1079. The U.S. Commission recommends CRCs and recognizes their benefits:

Collegiate recovery programs offer support and assistance to students in recovery and those seeking help for substance abuse. These programs are relatively small and inexpensive and encourage degree completion, reduction of drop outs, and promotion of the health and safety of students.

S1574 at 82.

1080. The State's Abatement Plan limits CRCs to the five largest universities to ensure the universities have the infrastructure in place necessary to support and maintain CRCs for individuals with OUD. Trial Tr. (6/20/19 a.m., Croff) at 49:16-50:10; 113:18; S-4734 at 42, n.92. It is a conservative proposal for CRCs, because, while CRCs would be beneficial for individuals with OUD at smaller institutions of higher learning, the plan limits CRCs to the 5 largest population universities only with already existing infrastructure to support them. *Id.*

1081. There are two service components of CRCs. Trial Tr. (6/20/19 a.m., Croff) at 50:14-21; 52:15-53:12; S-4734 at 42. The first component is a campus recovery program participant housing allowance. Trial Tr. (6/20/19 a.m., Croff) at 50:11-52:14; S-4734 at 42. CRCs are often in housing suites to allow individuals with OUD to have their own sober living space in a residence hall. Trial Tr. (6/20/19 a.m., Croff) at 50:14-21. Housing allowance costs are necessary to support individuals with OUD in recovery. In the course of substance use disorder, such as OUD, individuals may engage in illegal behavior and can be legally prohibited from receiving federal loans, grants and other financial aid. (6/20/19 a.m., Croff) at 115:17-23. The housing allowance ensures that individuals with OUD are supported in their recovery, regardless of any legal problems that occurred during the course of their addiction. *Id.*

1082. The housing allowance costs are an average of costs for a suite rental for a 12-month period at the University of Oklahoma and Oklahoma State University for thirty students per year. Trial Tr. (6/20/19 a.m., Croff) at 50:14-51:4; S-4734 at 42. This equates to \$750 per month per student. *Id.* A 12-month period is necessary because the recovery community becomes the home for these students year-round and they will attend school full time over the course of 12 months. Trial Tr. (6/20/19 a.m., Croff) at 51:5-12. Thirty (30) students per year is the number of students that could reasonably be accommodated by Oklahoma institutions of higher learning and is similar to the number of students in similar programs such as the model at Rutgers University. Trial Tr. (6/20/19 a.m., Croff) at 51:13-20. Thirty (30) students is a conservative number based on the need for individuals with OUD to return to higher education in Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 51:21-23; 116:6-8. Two-Hundred and Seventy Thousand dollars (\$270,000) per campus (\$750 a month housing expenses for a 12-month program x 30 students per year) for on campus recovery program participant housing allowance is a necessary and reasonable cost to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 52:7-14; S-4734 at 42, n.93.

1083. The second service component of CRCs is other substance use counseling and resources/programming on campus totaling \$80,000 per campus. Trial Tr. (6/20/19 a.m., Croff) at 52:15-53:12; S-4734 at 42. This component is comprised of discretionary funds for the CRC to use that would fit the culture and needs for their group of students. Trial Tr. (6/20/19 a.m., Croff) at 52:15-53:12. Such programming may include the costs to hold weekly groups for individuals with OUD in the recovery community, such as the

groups the Texas Tech model utilizes daily for its recovery community. Trial Tr. (6/20/19 a.m., Croff) at 52:15-53:12. Another use for these discretionary funds could be academic scholarships to incentivize focus on academic success. Trial Tr. (6/20/19 a.m., Croff) at 53:5-12. For example, the Texas Tech model provides \$500 scholarships for everyone in the first year and continuing scholarships based on GPA. There are a lot of additional academic hours necessary within CRCs to focus on academic success and ensure individuals in recovery have the support they need to succeed in college. *Id.* The costs of \$80,000 for each of the 5 largest university campuses in Oklahoma are reasonable and necessary costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 53:20-25 & 57:8-13; S-4734 at 42.

1084. There are personnel necessary to implement CRCs. Trial Tr. (6/20/19 a.m., Croff) at 54:1-3; S-4734 at 42. At each of the 5 largest universities in Oklahoma, the personnel necessary to implement CRCs are comprised of a recovery counselor, which would be the lead individual for the CRC, two residence hall advisors, and two lower level recovery counselors. Trial Tr. (6/20/19 a.m., Croff) at 54:4-14; S-4734 at 42. Two residence hall advisors and two lower level recovery counselors are required to ensure gender specific resources are available for women and men with OUD. Trial Tr. (6/20/19 a.m., Croff) at 54:4-14. These personnel were selected based on the Texas Tech and Rutgers models to ensure individuals in the recovery community are receiving adequate support while not draining other resources of the university's residence hall system. Trial Tr. (6/20/19 a.m., Croff) at 54:15-24. This ensures a counselor-student ratio of 10 to 1 and a residence hall advisor-student ratio of 15-1, which is standard in CRCs and appropriate

for running small groups, which should have a ratio of 5-8 students. Trial Tr. (6/20/19 a.m., Croff) at 55:1-11.

1085. The salaries for personnel were calculated using publicly available payroll information. Trial Tr. (6/20/19 a.m., Croff) at 55:12-16. Using this information, a recovery counselor on each campus would require an annual salary and benefits package of \$83,400; \$66,720 per campus would be required for two residence hall advisors; and \$66,720 per campus would be required for two recovery counselors for a total personnel cost of \$566,840 per campus. Trial Tr. (6/20/19 a.m., Croff) at 55:12-24; S-4734 at 42. These personnel costs are necessary and reasonable costs to implement this portion of the State's Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 55:25-56:14; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1086. CRCs need to be in place for 30 years in order to abate the opioid crisis to ensure continued support for individuals with OUD in recovery. Trial Tr. (6/20/19 a.m., Croff) at 56:15-23; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21.

1087. The total yearly cost for these services in 2019 dollars is \$20,273,524 with portions phased down beginning in year 7 and ending in year 12. The net present value of these costs over a 20-year, 25-year and 30-year period is \$187,557,943, \$197,464,079 and \$206,547,139, respectively. See S-4734 at 42-43

iv. Syringe Services Programs

1088. Developing a syringe service program to reduce transmission of blood borne pathogens among persons who inject drugs by providing access to sterile injecting

equipment; substance use referral treatment; and screening for infectious disease, are necessary to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 61:10-14; Trial Tr. (6/24/19 p.m., Hawkins) at 50:6-9; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; Trial Tr. (6/13/19 a.m., Kolodny) at 126:15-127:02; S-4734 at 44-45; *see also* Ct. Ex. 97 at 52 (illustrating why Syringe Service Programs are recommended by the CDC). Abating the nuisance would minimally return the State to re-1996 levels of the transmission of blood borne pathogens. Trial Tr. (6/24/19 p.m., Hawkins) at 49:4.

1089. Oklahomans may administer both prescription and illicit opioids them using syringe injection. Trial Tr. (6/24/19 p.m., Hawkins) at 98:19-24. People may inject prescription opioids. *Id.* For example, people remove the gel from a fentanyl patch and inject it. *Id.*

1090. The nuisance has fueled a rise in viral infections such as HIV and Hepatitis C. Trial Tr. (6/21/19 a.m., Hawkins) at 57:14-16. It also has fueled a rise in heroin use. Trial Tr. (6/21/19 a.m., Hawkins) at 57:17-19. Heroin is highly comorbid to prescription opioids. Trial Tr. (6/24/19 p.m., Hawkins) at 45:5-8; *see also* Ct. Ex. 97 at 52.

1091. Oklahoma is particularly at risk for viral infections such as HIV and Hepatitis C. Trial Tr. (6/21/19 a.m., Hawkins) at 57:19-22. Just recently, Oklahoma was declared second in the nation for Hepatitis C prevalence and first in the nation for Hepatitis C deaths. Trial Tr. (6/21/19 a.m., Hawkins) at 57:19-22; *see also* Ct. Ex. 97 at 52. The CDC issued a report of the top 200 communities in the Nation that were most at risk for an outbreak of Hepatitis C and two counties in Oklahoma were listed in that outbreak prediction. Trial Tr.

(6/21/19 a.m., Hawkins) at 57:22-58:2. Oklahoma requires the syringe service program in order to prevent these future infections. Trial Tr. (6/21/19 a.m., Hawkins) at 58:2-4.

1092. In addition, 80 percent of heroin users started with a prescription opioid. Trial Tr. (6/21/19 a.m., Hawkins) at 57:17-18; *see also* Ct. Ex. 97 at 52. Defendants' expert, Dr. Timothy Fong, relied on this very same statistic in his 2016 presentation to health professionals on the opioid epidemic. (6/24/19 p.m., Hawkins) at 108:20-109:3. And, one in 15 persons who use prescription opioids nonmedically will go on to try heroin. Trial Tr. (6/21/19 a.m., Hawkins) at 57:18-19; Trial Tr. (6/24/19 p.m., Hawkins) at 45:14-18 & 46:3-48:8; *see also* Ct. Ex. 97 at 52. Defendants' expert, Dr. Fong, also relied on this statistic in his 2016 presentation to health professionals on the opioid epidemic. Trial Tr. (6/24/19 p.m., Hawkins) at 109:4-10.

1093. Syringe service programs are evidence-based programs. Trial Tr. (6/21/19 a.m., Hawkins) at 57:7-8. They are recommended by the CDC. Trial Tr. (6/21/19 a.m., Hawkins) at 57:8-9; *see also* Ct. Ex. 97 at 52 (illustrating why CDC recommends these evidence-based programs). They have been tested and demonstrated to have multiple beneficial outcomes for both substance use disorder and for communities at large. Trial Tr. (6/21/19 a.m., Hawkins) at 57:9-11. Thirty years of research on these programs demonstrates they are safe and effective. Trial Tr. (6/21/19 a.m., Hawkins) at 57:11-13. And, these programs are not just used for people that use heroin. Trial Tr. (6/24/19 p.m., Hawkins) at 98:14-99:2. They are also for people who inject prescription opioids. *Id.*

1094. First, syringe service programs allow for disposal of unsterile products and the ability to get sterile products. Trial Tr. (6/21/19 a.m., Hawkins) at 58:15-17; *see also*

Ct. Ex. 97 at 52. A study found that comparing two cities, one with a syringe service program and one that did not have this program, the city with the comprehensive syringe program had 86 percent fewer syringes in places like parks and sidewalks. Trial Tr. (6/21/19 a.m., Hawkins) at 58:25-59:5; *see also* Ct. Ex. 97 at 52. Law enforcement also benefits from these programs in terms of their own risk for infection by coming into contact with unsterile needles. Trial Tr. (6/21/19 a.m., Hawkins) at 59:6-8; *see also* Ct. Ex. 97 at 52.

1095. Second, these programs can reduce HIV and Hepatitis C incidents by 50 to 75 percent. Trial Tr. (6/21/19 a.m., Hawkins) at 58:4-7; *see also* Ct. Ex. 97 at 52. When medication assisted treatment is added to these programs, the syringe service program is perfectly positioned to be able to engage persons who come into the program into treatment referral and induct them into MAT in the same center. Trial Tr. (6/21/19 a.m., Hawkins) at 58:7-12. When combined with MAT, reductions in HIV and Hepatitis C incidents reach up to 75 percent. Trial Tr. (6/21/19 a.m., Hawkins) at 58:7-12.

1096. Third, syringe service programs are often co-located with treatment centers where MAT inductions and referral to treatment can occur. Trial Tr. (6/21/19 a.m., Hawkins) at 58:19-21. There is at least one study demonstrating that syringe service programs increase treatment engagement significantly for people who use these services versus people who do not use these services. Trial Tr. (6/21/19 a.m., Hawkins) at 58:22-25.

1097. Fourth, syringe service programs also are a place where the State can engage in naloxone education and distribution and overdose prevention. Trial Tr. (6/21/19 a.m., Hawkins) at 58:15-19.

1098. Research demonstrates that syringe service programs do not increase illegal drug use or crime in a community. Trial Tr. (6/21/19 a.m., Hawkins) at 58:13-15; *see also* Ct. Ex. 97 at 52.

1099. These programs are well-tested, cost effective and recommended by the CDC as a necessary measure to help abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 59:8-10; *see also* Ct. Ex. 97 at 52.

1100. The costs for the syringe service program are based on a report, Alice Asher, Eyasu Teshale, Ryan Augustine, Eliana Duncan, Patty Dietz, Maria Aslam, John Ward, Jonathan Mermin, Kwame Owusu-Edusei, Estimating the Cost of a Comprehensive Syringe Services Program in the Unites States, and estimates of injection drug users in Oklahoma to determine the quantity and cost of the syringe service programs required to abate the nuisance. Trial Tr. (6/21/19 a.m., Hawkins) at 59:13-19; S-4734 at 44. To estimate the number of injection drug users, OSDH relied on a study from 2014 estimating the number of persons who inject drugs in the United States. Trial Tr. (6/21/19 a.m., Hawkins) at 60:1-9; S-4734 at 44, n.95. It is a meta-analysis of various studies that helps provide guidance on the estimate of the number of people for a population that are likely to be injection drug users. Trial Tr. (6/21/19 a.m., Hawkins) at 61:4-9. Based on population and number of injection drug users in Oklahoma, Oklahoma requires one urban large syringe service program in the Tulsa area, two large urban programs in the Oklahoma City

metro area, one medium urban program in the Lawton area, and nine rural medium programs to serve the number of syringe users in rural parts of the State in nonmetropolitan areas. Trial Tr. (6/21/19 a.m., Hawkins) at 59:20-60:3; S-4734 at 44-45.

1101. There are first year upstart costs for these programs based on the size of the program and ongoing costs to maintain these programs. Trial Tr. (6/21/19 a.m., Hawkins) at 60:4-7; S-4734 at 44-45. In addition, there is a per user cost for maintaining these programs for supplies. Trial Tr. (6/21/19 a.m., Hawkins) at 60:5-9; S-4734 at 44.

1102. The first-year costs for the three large urban programs are \$48,600 in start-up costs and \$5,857,800 in ongoing costs. Trial Tr. (6/21/19 a.m., Hawkins) at 60:13-15; S-4734 at 45. For the one medium urban program, the first-year costs are \$11,000 for start-up costs and \$1,160,560 for ongoing costs. Trial Tr. (6/21/19 a.m., Hawkins) at 60:15-16; S-4734 at 45. The nine rural medium programs require first year costs of \$90,900 and ongoing costs of \$9,343,800. Trial Tr. (6/21/19 a.m., Hawkins) at 60:16-18; S-4734 at 45.

1103. In addition, the per user costs were calculated using estimates of the number of injection drug users in each of the programs, large urban, medium urban, and medium rural. Trial Tr. (6/21/19 a.m., Hawkins) at 60:18-22; S-4734 at 44, n.95. For the urban large program, the per user costs is \$5,137,228. Trial Tr. (6/21/19 a.m., Hawkins) at 60:20-23; S-4734, Ex. P.4. For the medium urban program, the per user cost is \$325,996. Trial Tr. (6/21/19 a.m., Hawkins) at 60:23-24; S-4734 at 45. And, for the medium rural programs, the per user cost is \$8,853,627. Trial Tr. (6/21/19 a.m., Hawkins) at 60:18-25; S-4734 at 45.

1104. The total yearly cost for these services in 2019 dollars is \$30,829,551 for the first year and \$30,678,951 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$492,424,198, \$597,181,431 and \$693,234,652, respectively. See S-4734 at 44-45.

1105. The costs for the syringe service programs are necessary and reasonable expenses to implement the necessary syringe service programs in the State of Oklahoma. Trial Tr. (6/21/19 a.m., Hawkins) at 61:15-19; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

c. Medical Education

1106. There is a need in the State of Oklahoma to educate patients, physicians and the public about the risks and efficacy of opioids, the proper use of opioids, and proper pain treatment. Trial Tr. (6/6/19 a.m., Mazloomdoost) at 73:7-21; Trial Tr. 6/20/19 a.m., Croff) at 58:8-60:19, 64:8-14, 69:2-8; & 77:7-12; Trial Tr. (6/20/19 p.m., Hawkins) at 115:9-19 & 117:22-118:4; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; Trial Tr. (6/17/19 p.m., Beaman) at 67:24-68:21; Trial Tr. (6/13/19 a.m., Kolodny) at 118:10-16; *see also, e.g.*, Trial Tr. (7/1/19 p.m., Fong) at 167:2-5 (agreeing that “we need continuing medical education for screening and identification of addictive disorders and treatment”).

1107. To reconstruct the “dam” of “narcotic conservatism,” medical education about the consequences of “liberally prescribing opioids” represents “one of the most important fights in this epidemic.” Trial Tr. (6/17/19 p.m., Beaman) at 67:24-68:21; *see also, e.g.*, Trial Tr. (6/6/19 a.m., Mazloomdoost) at 42:19-43:9 (testifying that, to end the

current opioid crisis in Oklahoma, the medical community must return to “narcotic conservatism”).⁷⁹

1108. The White House Commission on Combating Opioid Abuse recognizes the importance of medical education in abating the nuisance finding “[t]he level of urgency is greater than ever” to provide guidance to clinicians treating pain. S-1574 at 51; *see also* 49 & 53.

1109. Certain components of the State’s Abatement Plan regarding medical training – addiction medicine courses, residency training programs, continuing medical education, and medical case management/consulting—were developed using curriculum mapping. Trial Tr. (6/20/19 a.m., Croff) at 57:24-58:24; *see also* Ct. Ex. 94, at 11 (illustrating the curriculum map for medical education in the Abatement Plan). When subjects involving pain (including non-pharmacological therapeutic approaches), prescription opioid management, treating OUD and critical appraisal of medical evidence, are introduced in a medical school curriculum through addiction medicine courses, that curriculum is just the emergence of thought for providers in considering these subjects and does not, in and of itself, prepare medical students to treat pain and addiction. *Id.* Through residency training, that expertise is further developed in medical residents. *Id.* Continuing medical education courses further develop this expertise. *Id.* CME is a reinforcer over time for practicing providers on these subjects. Trial Tr. (6/20/19 p.m., Croff) at 51:15-20; 53:7-

⁷⁹ Narcotic conservatism actually enhances compassionate care for pain patients because it encourages physicians “to devise strategies that actually address those underlying causes of pain, not just blind [them] to the effects.” Trial Tr. (6/6/19 a.m., Mazloomdoost) at 43:14-16.

9. Medical case management/consulting leads to proficiency in treating OUD. Trial Tr. (6/20/19 a.m., Croff) at 57:24-58:2; *see also* Ct. Ex. 94, Slide 11. As such, each of these components of the plan is necessary to abate the nuisance in Oklahoma as set forth in detail below.

i. Continuing Medical Education

1110. Evidence-based continuing medical education (“CME”) courses delivered in geographically diverse regions of Oklahoma and free from proprietary and pharmaceutical industry influence on topics including pain prevention, pain management, opioid management, nonpharmacological and nonopioid therapies, addiction and mental health, overdose and critical appraisal of medical evidence are necessary to abate the Oklahoma opioid crisis. Trial Tr. (6/20/19 a.m., Croff) at 59:15-60:4; Trial Tr. (6/20/19 p.m., Croff) at 62:21-63:2; Trial Tr. (6/17/19 p.m., Beaman) at 83:21-23; Trial Tr. (6/20/19 p.m., Hawkins) at 115:9-19, 116:15-21 & 117:22-118:4; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 46. CMEs on these topics are necessary to abate the nuisance. Trial Tr. (6/20/19 p.m., Croff) at 30:12-14. These topics are important from a public health approach which aims to intervene before a problem occurs. Trial Tr. (6/20/19 a.m., Croff) at 17:9-11; *see also* Ct. Ex. 94, Slide 1 (illustrating the development of these CME topics).

1111. The first goal in preventing OUD is to address pain and to intervene upon an individual’s experience in pain by advocating for healthier lifestyles, healthier behaviors, and alternative modalities to addressing pain. Trial Tr. (6/20/19 a.m., Croff) at 17:9-19:2; 59:18-60:4; *see also* Ct. Ex. 94, Slide 1. Once care is being sought, it is important to

consider alternative modalities for pain treatment other than an opioid prescription, including mindfulness, positive psychology, yoga and cognitive behavioral therapy for pain. *Id.*; *see also* Ct. Ex. 94, Slide 1. These are all approaches that are very successful. *Id.* They also are successful in deescalating doses of opioids. *Id.* If opioid prescribing does occur, it is important to understand the recommendation to follow CDC's prescribing guidelines such as a prescription less than a week in duration, patient understanding of the risks of opioid medications, ensuring safe storage and disposal of opioid medications, offering naloxone with an opioid prescription for overdose reversal, and regular screening for signs of OUD to catch OUD early in the trajectory of mild to severe. *Id.*; Ct. Ex. 94, Slide 1. And then if an individual has OUD, it is important to understand addiction, mental health and overdose. Trial Tr. (6/20/19 a.m., Croff) at 59:18-24.

1112. Critical appraisal of scientific literature also is very important. Trial Tr. (6/20/19 a.m., Croff) at 59:25-60:19. Several editors of prestigious medical journals *i.e.*, the New England Journal of Medicine, have recently stated the medical literature is untrustworthy because a large portion of it is paid for by pharmaceutical companies. Trial Tr. (6/20/19 a.m., Croff) at 59:25-60:19.

1113. It is important to continue medical education and to update information over time. Trial Tr. (6/20/19 p.m., Croff) at 13:1-9. CMEs help to develop provider expertise in treatment of pain, non-opioid alternative treatments to opioid therapy, opioid prescribing, and the treatment of OUD. Trial Tr. (6/20/19 p.m., Croff) at 51:15-20; 53:7-9. CMEs are reinforcing knowledge over time for practicing providers on these subjects. Trial Tr. (6/20/19 p.m., Croff) at 51:15-20; 53:7-9. Providers continue to need medical education

beyond medical school and residency training. Trial Tr. (6/20/19 p.m., Croff) at 65:17-66:2. And, the research that is occurring today on topics such as non-pharmacological alternatives to pain treatment, treatments for OUD and NAS and effects of opiate exposure on children, among others, will shape and change CMEs for providers in the future in Oklahoma. Trial Tr. (6/20/19 p.m., Croff) at 66:3-19.

1114. Specifically, 40 CME trainings per year and 150 providers per training are reasonable and necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 60:20-62:14; 64:8-14; S-4734 at 46. Dividing the State into four quadrants—northwest, northeast, southeast and southwest—ensures initial reach of every quadrant of the State so there are 10 CME events per quadrant. Trial Tr. (6/20/19 a.m., Croff) at 59:20-61:3; Trial Tr. (6/20/19 p.m., Croff) at 14:4-13.

1115. One-Hundred and Fifty (150) providers is a typical capacity level for a CME event in Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 61:4-62:3. It is an average number of physicians for a training i.e., there may be 100 in one quadrant, and 250 in another). Trial Tr. (6/20/19 p.m., Croff) at 14:18-15:3. The purpose is to ensure that the physical locations of the events are accessible for all providers within the State. Trial Tr. (6/20/19 p.m., Croff) at 14:18-22. In addition, there are 9,014 primary care providers currently in the State of Oklahoma including nurse practitioners and physician assistants. Trial Tr. (6/20/19 a.m., Croff) at 61:6-16. Taking into account the 7 distinct CME topics and the phasedown for this portion of the Abatement Plan, 150 providers per CME event allows reach of 6,000 providers per CME topic. *Id.*

1116. This is a conservative number of CME events, as there will be new providers graduating from medical school each year and/or moving into the State from other areas of the country that also will need CME courses on these topics. Trial Tr. (6/20/19 a.m., Croff) at 62:4-14. There also are other specialties other than primary care physicians that would benefit from CME courses on these topics. *Id.*

1117. Personnel and location costs are necessary to provide these CME courses. Trial Tr. (6/20/19 a.m., Croff) at 62:15-18; S-4734 at 46. The cost for an instructor to teach a CME course is \$850.00 per CME. Trial Tr. (6/20/19 a.m., Croff) at 62:19-63:7. That assumes 2.5 hours of preparation for a new CME event which will occur a quarter of the time because the instructor will be presenting in each quadrant of the State. *Id.* It also includes 2.5 hours of travel time per CME event. *Id.*; S-4734 at 46, n.98. This equates to an hourly rate per instructor of \$170.00, including benefits, a reasonable hourly rate for a CME instructor in Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 63:2-7.

1118. The costs also include \$125 per hour per provider to incentivize primary care providers to attend CMEs to ensure providers attend the courses and incorporate the information from these courses into their practices. Trial Tr. (6/20/19 a.m., Croff) at 63:8-21; Trial Tr. (6/20/19 p.m., Croff) at 63:22-64:16; S-4734 at 46, n.99. The \$125 per hour per provider incentivizes the provider for approximately one hour of their time away from their practice. *Id.* One-Hundred and Twenty-Five dollars (\$125) per hour is a typical wage for a physician in the State of Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 63:19-21. Physicians are more likely to attend a CME course if they are incentivized to do so. Trial

Tr. (6/20/19 p.m., Croff) at 64:7-16. Provider time is based on 150 providers/CME at \$125/hour/person for a total cost per CME of \$18,750. S-4734 at 46, n.99.

1119. Providers consist of any potential prescriber of opiates and is not limited to medical doctors. It is critical to include all potential prescribers. Trial Tr. (6/20/19 a.m., Croff) at 65:12-21; Trial Tr. (6/20/19 p.m., Croff) at 64:19-65:4.

1120. Location costs are necessary for rental of space throughout the State to hold the CME events at a cost of \$1,000 per CME event. Trial Tr. (6/20/19 a.m., Croff) at 63:22-64:7; S-4734 at 46. One-Thousand dollars (\$1,000) for rental space is based on the State's experience renting similar space in Oklahoma. *Id.*

1121. The total yearly cost for these services in 2019 dollars is \$843,446 with portions phased down beginning in year 10 and completion of the services in year 20. The net present value of these costs over a 20-year, 25-year and 30-year period is \$5,568,868, \$5,568,868 and \$5,568,868, respectively. *See* S-4734 at 46.

1122. These personnel and location costs are reasonable and necessary costs to implement this component of the State's Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 64:15-21; Trial Tr. (6/17/19 p.m., Beaman) at 83:21-23; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1123. These CME courses need to be in place for approximately 20 years, as set forth in the Abatement Plan in order to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 64:22-65:11; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; S-4734 at 46. There are 40 CME events in the first year, 8 events in year 10 (assume number drops by 3.25 events per

year through year 10 then 0.75 per year through year 20). *Id.*; S-4734 at 46. This period of time is necessary because it takes significant time to train the medical workforce on best practices and standards of care. *Id.* The CME courses phase down over time because there are other areas of the State's Abatement Plan that will help with continuing medical education such as counter-detailing. *Id.*

ii. Addiction Medicine Courses

1124. Addiction Medicine Courses addressing drug use, recovery programs, legal aspects of controlled substances and physician addiction offered to a variety of health professionals such as medical students, dentists, physician assistants, nurses and physicians are necessary to abate the Oklahoma opioid crisis. Trial Tr. (6/20/19 a.m., Croff) at 69:2-8; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:11 S-4734 at 47.

1125. There is an unmet need for Addiction Medicine Courses. Currently very few of the courses are offered at health professional schools in Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 66:5-13. This course was created in response to the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 68:24-69:1.

1126. Addiction medicine courses require personnel to implement them. Specifically, it requires two quarter-time personnel at each school. Trial Tr. (6/20/19 a.m., Croff) at 66:24-68:3; S-4734 at 47. The course time required for the personnel in the State's Abatement Plan is based on the personnel necessary for the addiction medicine course offered at Oklahoma State University. Trial Tr. (6/20/19 a.m., Croff) at 67:2-5; 68:19-23.

The average salaries are based on public salary databases. Trial Tr. (6/20/19 a.m., Croff) at 68:16-18.

1127. There is one dental school in the State. There is a need for two quarter time personnel for a total cost of \$110,026 per year. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3; S-4734 at 47. For physician assistants, there are two schools in the State of Oklahoma. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3. The cost per instructor is \$136,470 per year. *Id.*; S-4734 at 47. The need is for two instructors per school at a quarter time for a total of \$136,470. *Id.* For nurses, there are five nursing programs in the State. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3. Nursing instructors earn \$93,811. *Id.*; S-4734 at 47. There is a need for 10 instructors at a quarter time for a total cost of \$234,528 per year. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3; S-4734 at 47. For physicians, there are two medical schools in the State. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3. There is a need for four quarter time full time equivalent at a cost of \$260,208 per year. Trial Tr. (6/20/19 a.m., Croff) at 67:9-68:3; S-4734 at 47. The total cost for the personnel working at these schools and training these health professionals is \$741,232. *Id.*

1128. The total yearly cost for these services in 2019 dollars is \$758,725. S-4734 at 47. The net present value of these costs over a 20-year, 25-year and 30-year period is \$12,933,269, \$15,524,034 and \$17,899,538, respectively. *See* s4734 at 47

1129. These are reasonable and necessary costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 69:9-13; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21.

1130. Addiction Medicine Courses need to be in place for 30 years in order to abate the opioid crisis because of the time it takes to train the medical workforce. Trial Tr. (6/20/19 a.m., Croff) at 69:20-23; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:7; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

iii. Medical Case Management/Consultation

1131. Medical Case Management/Consulting (Project Echo) is necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 77:7-12; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; *see also* S-4734 at 48.

1132. Medical Case Management Consulting or “Project Echo” is a national model that was developed at the University of New Mexico in the early 2000s. Trial Tr. (6/20/19 a.m., Croff) at 70:13-71:11. It provides consultation/education through regular video conference composed of brief educational sessions on high yield clinical topics followed by case consultation and real-world recommendations, including medications with doses and frequencies provided in written format. S-4734 at 48. It was developed to address a Hepatitis C epidemic. Trial Tr. (6/20/19 a.m., Croff) at 70:13-71:11. An infectious disease physician created Project Echo so he could teach primary care physicians through medical case management to treat patients using his advice and recommendations. *Id.* This had two beneficial effects. *Id.* The patients were getting treatment for Hepatitis C where they were located and where they needed it. *Id.* As such, it was more convenient for the patients. It

also effectively reduced the doctor's wait times so he could apply his expertise to the most critical specialized cases. *Id.*

1133. This model has been applied by OSU to address addiction medicine. Trial Tr. (6/20/19 a.m., Croff) at 71:2-72:3. This offers an opportunity for primary care physicians to do a course of study over an entire year with addiction medicine physicians. Primary care physicians can bring anonymous cases forward, and receive recommendations from providers in addiction medicine to treat their patients. *Id.* Project Echo helps to reach physicians, physician assistants and nurse practitioners in rural communities to treat opioid use disorder as their patients come to them to seek treatment. Trial Tr. (6/20/19 p.m., Croff) at 43:20-44:2.

1134. The scientific literature on addiction medicine for Project Echo shows opioids are the number one topic. Trial Tr. (6/20/19 p.m., Croff) at 42:11-13. The scientific literature also demonstrates that Project Echo has proven successful outcomes in reducing patient wait times and treating patients where they are located. Trial Tr. (6/20/19 p.m., Croff) at 65:11-16.

1135. The Oklahoma Commission recommends supporting "the expansion of OSU's Project ECHO in order to increase the number of doctors trained in addiction medicine and increase their availability to patients in rural areas of Oklahoma." S-210 at 8.

1136. This program is intended to reach 9,014 primary care physicians, OB/GYNs, nurse practitioners and physician assistants based on existing data from the Oklahoma State Department of Health and the boards for physician assistants and nurse practitioners. Trial

Tr. (6/20/19 a.m., Croff) at 72:22-73:11; S-4734 at 48. This number is conservative, and it does not account for additional providers coming into the profession in Oklahoma going forward. *Id.*

1137. Project Echo is an unmet need in the State of Oklahoma. Currently there is only one Project Echo with 25 seats available for addiction medicine in the State. Trial Tr. (6/20/19 p.m., Croff) at 40:11-16.

1138. Medical Case Management Consulting requires services. Trial Tr. (6/20/19 a.m., Croff) at 73:12-75:11; S-4734 at 48. The first is a yearly cost for clinician incentives or stipends based on \$125 per hour per week for 52 weeks at 25 participants per Echo and 20 Echo cohorts per year to reach 500 clinicians, totaling \$3.250 million. *Id.* One-Hundred-Twenty-Five dollars (\$125) per week is the cost for the physician's time to attend Project Echo. *Id.* The clinician stipend for Project Echo is necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 74:23-75:4. The costs for the clinician stipend of \$3.25 million per year are a reasonable and necessary cost to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 75:5-11; 77:25-78:2; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21.

1139. Twenty-Five (25) participants is the maximum capacity for a cohort in Project Echo in order to ensure that every participant's consultation can be accomplished. Trial Tr. (6/20/19 a.m., Croff) at 74:6-10.

1140. Twenty (20) Echo cohorts per year are necessary to ensure that the practitioners working and engaging in Project Echo also are actively working in the field and are practicing and treating addiction. Trial Tr. (6/20/19 a.m., Croff) at 74:11-22.

Twenty (20) Echo cohorts per year ensures half of the practitioners time is spent on Project Echo, not including preparation time. *Id.* In total, an addictionologist is spending 0.625 FTE on Project Echo and the rest of their time would be spent in clinical practice. *Id.*; S-4734 at 48.

1141. Personnel is necessary to implement Project Echo. Trial Tr. (6/20/19 a.m., Croff) at 75:12-76:18; S-4734 at 48. Project Echo is a team for treatment. Trial Tr. (6/20/19 a.m., Croff) at 75:12-76:18. The personnel is based on the current addiction medicine Project Echo in place. *Id.* There is a need for an addictionologist, a pharmacist, personnel to manage/run the IT program, a coordinator, a CME coordinator, a director and an associate dean. Trial Tr. (6/20/19 a.m., Croff) at 75:12-76:18; S-4734 at 48. Each of these personal would allot 0.625 FTE to Project Echo, with the exception of the CME coordinator. (.10 FTE) and the Associate Dean (.20 FTE). Trial Tr. (6/20/19 a.m., Croff) at 75:17-76:1; S-4734 at 48. These time allotments are conservative. *Id.*

1142. The salary and benefits packages are based on existing personnel for Project Echo at OSU. Trial Tr. (6/20/19 a.m., Croff) at 76:2-5. A benefit rate of 39% was applied. S-4734 at 48. The salary and benefits packages are \$258,540 for an addictionologist; \$112,590 for a pharmacist; \$17,522 for IT; \$37,947 for the coordinator; \$4,170 for the CME coordinator; \$106,335 for the director; and \$75,569 for the associate dean, totaling \$612,673 per year for all personnel required. Trial Tr. (6/20/19 a.m., Croff) at 76:6-11; 77:1-3; S-4734 at 48. The salary and benefits packages for personnel to implement Project Echo are necessary and reasonable costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 76:19-25; Trial Tr. (6/20/19 p.m., Hawkins) at

116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1143. The total yearly cost for these services in 2019 dollars is \$3,953,832. The net present value of these costs over a 20-year, 25-year and 30-year period is \$67,397,245, \$80,898,114 and \$93,277,230, respectively. *See* S-4734 at 48.

1144. Medical Case Management/Consulting needs to be in place for 30 years in order to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 77:13-24; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:7; Trial Tr. (6/25/19 a.m., Commissioner White) at 101:19-102:4. This is the amount of time it would take to reach 9,014 clinicians at 500 per year. Trial Tr. (6/20/19 p.m., Croff) at 46:13-16. And, it would allow for training personnel in order to address OUD in Oklahoma communities. Trial Tr. (6/20/19 a.m., Croff) at 77:13-24. It would allow the State to reach additional individuals that may not be a part of the workforce today. *Id.*

iv. Residency Training Programs

1145. Residency Training Programs comprised of an 8-hour Drug Abuse Treatment Act of 2000 (“DATA 2000”) waiver training course for all second-year medical residents in Oklahoma is necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 10:2-15; 83:12-18; 80:8-13; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; *see also* S-4734 at 49.

1146. The DATA 2000 waiver training is a federal requirement for physicians to prescribe medication assisted treatment, including buprenorphine, to individuals with OUD outside of the fields of addiction medicine. Trial Tr. (6/20/19 a.m., Croff) at 10:2-15.

1147. There are randomized controlled studies demonstrating treatment outcomes for individuals with OUD who received medication assisted treatment. Trial Tr. (6/20/19 a.m., Croff) at 79:2-15. In one study, over one year, 75 percent of patients were retained and had negative toxicology screens if they received buprenorphine. *Id.* For the control group who did not receive buprenorphine, zero were retained in treatment. *Id.*; *see also* Ct. Ex. 94, Slide 21 (illustrating results from controlled study on buprenorphine). Everyone in the control group dropped out of treatment and four people died. Using buprenorphine to treat OUD is necessary. *Id.*

1148. One of the recommendations of the Oklahoma Commission was the need for more medical professionals to be trained in addiction treatment and authorized to prescribe buprenorphine. S-210 at 6.

1149. The U.S. Commission also recommends “training and diagnosis and office-based treatment of addictions should [] be implemented for all stages of professional activity” including, but not limited to, residency. S-1574 at 49.

1150. This component of the State’s Abatement Plan will train all medical residents in Oklahoma on medication assisted treatment and the treatment of OUD to allow them to treat OUD identified in clinical settings. Trial Tr. (6/20/19 a.m., Croff) at 78:14-18; 79:20-24. This waiver training is required for there to be enough treatment providers in the State to address the scope of the opioid epidemic. Trial Tr. (6/20/19 a.m., Croff) at 78:24-79:1.

Under federal law, “physicians that have the necessary training and DEA authorization to prescribe buprenorphine are limited in the number of patients they can treat.” S-1574 at 69. By waiver training medical residents, under federal law, these second-year residents will be able to treat 30 patients in the first year, and up to 100 in their second year of being waived. Trial Tr. (6/20/19 p.m., Croff) at 49:10-14; S-1574 at 69.

1151. This program is currently being implemented at OSU. The program is currently funded by a three-year SAMHSA grant of \$150,000. Trial Tr. (6/20/19 a.m., Croff) at 79:25-80:20. The trainings occur at various locations around the State. Trial Tr. (6/20/19 p.m., Croff) at 49:24.

1152. Twelve (12) residency training courses per year at each of the medical schools in the State is necessary. Trial Tr. (6/20/19 a.m., Croff) at 80:21-81:10. Providing multiple opportunities to train allows flexibility for residents and clinical systems that would be impacted when a resident is taking this course. *Id.* It also allows residents to take these courses at the site of their residencies that may be dispersed throughout the State. *Id.* In-person trainings are better and more effective than online trainings. Trial Tr. (6/20/19 p.m., Croff) at 50:3-9.

1153. The residency training programs require personnel and location costs. Trial Tr. (6/20/19 a.m., Croff) at 81:11-13. The personnel costs were calculated based on the current program in place at OSU—\$10,000 per course for instruction and administrative time for 12 courses a year, totaling \$120,000 per year. Trial Tr. (6/20/19 a.m., Croff) at 81:14-21; 82:7-9; S-4734 at 49, n.107. The hiring and retention costs for personnel also were calculated based on the existing program at OSU. Trial Tr. (6/20/19 a.m., Croff) at

81:22-82:1. The salary for personnel is based on the portions of times for a coordinator to run the program and for instructors to deliver the eight-hour waiver training course. Trial Tr. (6/20/19 a.m., Croff) at 82:2-6. These costs are reasonable and necessary to implement this component of the State's Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 82:15-17; 83:19-84:1; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21.

1154. One-Thousand dollars (\$1,000) per location costs is required to hold the residency waiver training courses per training, totaling \$12,000 for rental space per year. Trial Tr. (6/20/19 a.m., Croff) at 82:23-25; S-4734 at 49, n.108. It's an average cost for rental space in Oklahoma for this type of activity. Trial Tr. (6/20/19 a.m., Croff) at 83:1-6.

1155. There also is a reasonable cost for food for the residency training courses of \$8,500 per year. Trial Tr. (6/20/19 a.m., Croff) at 83:7-11; S-4734 at 49, n.109.

1156. The total costs for residency training programs of \$140,500 per year at each of the State's medical schools are necessary and reasonable costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 83:19-84:1; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 49.

1157. The total yearly cost for these services in 2019 dollars is \$287,632. The net present value of these costs over a 20-year, 25-year and 30-year period is \$4,902,991, \$5,885,148 and \$6,785,700, respectively. *See* S-4734 at 49.

1158. Residency Training Programs need to be in place for 30 years in order to abate the nuisance because it requires a retraining and replacement of the medical education in the workforce. Trial Tr. (6/20/19 a.m., Croff) at 84:8-85:4; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:7. This program provides waiver training so clinicians can then treat OUD. Trial Tr. (6/20/19 a.m., Croff) at 84:8-85:4. Because there are limits on the number of patients a physician can treat, in their first year, waived clinicians will only be allowed to treat or maintain 30 individuals on buprenorphine or other medication assisted treatment and only up to 100 patients in their second year. *Id.* OUD is a lifelong chronic disease. *Id.* It is a chronic relapsing brain disorder. *Id.* Individuals need maintained treatment, potentially their entire lives, and need access to providers who can prescribe the medication they need to stay healthy for a lifetime. *Id.*; Trial Tr. (6/20/19 p.m., Croff) at 50:16-23. This plan ensures there is an adequate workforce to maintain treatment for all the individuals with OUD. *Id.*

v. *Academic Medicine*

1159. Establishment of Academic Medicine Departments attending to addiction disorders, providing education, and utilizing comprehensive approach to behavioral health via research, education and treatment at the two Oklahoma medical schools are necessary to abate the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 89:10-17; 86:7-10; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 50. Addiction medicine departments are needed at both medical schools in Oklahoma because education and research are collaborative. Trial Tr. (6/20/19 p.m., Croff) at 56:22-57:7. It

encourages collaboration among researchers, educators and clinicians in coming up with new solutions to address the nuisance and it is beneficial for academic medical centers to interact in this capacity. *Id.* In addition, two academic medicine departments in the State allows for the broadest reach in providing education and treatment to Oklahomans in need. *Id.*

1160. Academic medicine is the integration of clinical practice, training, and research within a single setting. Trial Tr. (6/20/19 a.m., Croff) at 85:8-12.

1161. There is one addiction medicine department in the State of Oklahoma at OSU that opened in September 2018. Trial Tr. (6/20/19 a.m., Croff) at 85:20-86:1.

1162. The establishment of academic medicine departments require both services and personnel. Trial Tr. (6/20/19 a.m., Croff) at 86:11-13; S-4734 at 50. For services, it requires two endowed chairs of \$7 million each, totaling \$14 million. Trial Tr. (6/20/19 a.m., Croff) at 86:14-87:4; S-4734 at 50. Seven-Million dollars (\$7,000,000) would produce approximately \$300,000 in income, which is the equivalent of one federal research grant for a single research study. *Id.* The purpose of the endowed chairs is to accomplish additional evidence-based practice free from proprietary influence including research on nonpharmacological treatments for pain, treatments for OUD and effects of opiate exposure in utero, among other types of research to address the nuisance. Trial Tr. (6/20/19 a.m., Croff) at 86:14-87:10. This is a conservative and reasonable cost. Trial Tr. (6/20/19 a.m., Croff) at 86:17-86:4; 87:11-18. Currently, researchers must expend significant time and resources applying for federal grants to support this research. Trial Tr. (6/20/19 a.m.,

Croff) at 87:19-24. Grant writing is a resource intensive and competitive process. Trial Tr. (6/20/19 a.m., Dr. Croff) at 23:17-24:14.

1163. The costs for two endowed chairs at two medical schools in the State are reasonable and necessary costs to implement this component of the State's Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 89:18-25; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21. Further, other costs to operate an addiction medicine department are not included, including counseling costs and overhead and other costs involved in operating a clinic. Trial Tr. (6/20/19 p.m., Croff) at 54:9-18.

1164. Personnel are required to implement the two Academic Medicine Departments. Trial Tr. (6/20/19 a.m., Croff) at 88:2-16; S-4734 at 50. Five (5) outpatient providers, 5 inpatient providers, 3 consultant providers, and 6 addiction medicine fellows are needed at each academic medicine department to treat Oklahomans with OUD. *Id.* By covering the cost of the providers, a low-cost, easily accessible environment is created for every patient, regardless of payor source. Trial Tr. (6/20/19 p.m., Croff) at 54:16-18.

1165. Consultant providers will be on-call when a primary care physician telephones and requests consultation regarding a patient the provider believes may have OUD. Trial Tr. (6/20/19 a.m., Croff) at 88:2-16. Consultant providers provide consultation in real-time. *Id.*

1166. The salary and benefits package is the same for outpatient, inpatient and consultant providers because they all require the same expertise and experience in addiction medicine. Trial Tr. (6/20/19 a.m., Croff) at 89:1-4. The salary for outpatient, inpatient and consultant providers of \$387,810 per provider is based on the rate with

benefits for addiction medicine physicians employed by the State. Trial Tr. (6/20/19 a.m., Croff) at 89:1-9; S-4734 at 50. A benefits rate of 39% was applied. S-4734, S-4734 at 50, n.112.

1167. Addiction medicine fellowship is an essential training ground for future addiction medicine physicians who will treat Oklahomans. Trial Tr. (6/20/19 a.m., Croff) at 88:10-16. As of 2012, addiction medicine fellowship is the only pathway to becoming an addiction medicine physician. It is critical for the two State medical schools to train these addiction medicine fellows to serve the treatment needs of Oklahomans in the State. Trial Tr. (6/20/19 a.m., Croff) at 88:2-16. A salary and benefits package of \$139,000 is required per addiction medicine fellow. S-4734 at 50.

1168. The personnel requirements were estimated based on the need to treat up to 10,000 individuals with OUD and to develop new clinical modalities for treatment. Trial Tr. (6/20/19 a.m., Croff) at 88:17-21.

1169. The total cost of \$11,751,060 per year to staff two Academic Medicine Departments at the State's two medical schools are necessary and reasonable costs to implement this component of the Abatement Plan. Trial Tr. (6/20/19 a.m., Croff) at 90:1-9; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 50.

1170. The total yearly cost for these services in 2019 dollars is \$26,358,785 for the first year and \$12,028,385 for each subsequent year. The net present value of these costs

over a 20-year, 25-year and 30-year period is \$219,366,933, \$260,439,404 and \$298,099,268, respectively. *See* S-4734 at 50.

1171. The Academic Medicine Departments need to be in place for 30 years in order to abate the nuisance in Oklahoma and treat the breadth of the opioid addiction in the State. Trial Tr. (6/20/19 a.m., Croff) at 90:16-18; Trial Tr. (6/20/19 p.m., Hawkins) at 116:15-21; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:7.

vi. Counter-detailing

1172. A comprehensive direct-to-medical care professionals and pharmacy detailing program, deploying detailers to all Oklahoma health care professionals, pharmacies and pharmacists, with targeted detailing visits, is necessary to abate the nuisance. *See* Trial Tr. (6/10/19 p.m., Stone) at 125:11-127:6; Trial Tr. (6/13/19 a.m., Kolodny) at 118:10-16; Trial Transcript (6/17/19 p.m., Beaman) at 83:21-23; Trial Tr. (6/20/19 p.m., Hawkins) at 115:9-19 & 117:22-118:4; Trial Tr. (6/21/19 p.m., Hawkins) at 47:11-20 & 51:8-15; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 51. This counter-detailing program must include training and compensating qualified personnel, mileage, visual aids, and patient/staff education material, as well as access to and analysis of medical care professional and pharmacy prescription data. S-4734 at 51.

1173. Based on a deconstruction of the marketing plans Defendants utilized to deliver their messages to the Oklahoma health care professionals, Mr. Stone prepared a counter-detailing program. Trial Tr. (6/10/19 p.m., Stone) at 101:25-102:23, 111:9-112:11, 125:11-127:6; S-4734 at 51; S-3923. This counter-detailing program is intended to reach

Oklahoma health professionals to provide education on appropriate and safe opioid prescribing. *See, e.g.*, Trial Tr. (6/10/19 p.m., Stone) at 111:14-113:20, 115:15-127:13; *see also* S-3923. The program will employ tactics, like “survey research” of physicians in a manner similar “to what was done to create the problem” in order to ensure the campaign’s effectiveness and “undo the marketing” by Defendants over the last two decades. Trial Tr. (6/10/19 p.m., Stone) at 111:14-113:20 & 115:15-127:13.

1174. The counter-detailing program will cost \$4.0 million annually. *See* S-4734 at 51; S-3923. The costs include 15-20 qualified personnel to detail Oklahoma health care professional, with salaries and benefits commensurate with opioid sales representatives in 2018. *Id.*

1175. The total yearly cost for these services in 2019 dollars is \$4,094,400. The net present value of these costs over a 20-year, 25-year and 30-year period is \$69,793,375, \$83,774,231 and \$96,593,454, respectively. *See* S-4734 at 51.

1176. These costs are necessary and reasonable costs to implement this counter-detailing program. Trial Tr. (6/10/19 p.m., Stone) at 125:11-127:6; Trial Tr. at (6/21/19 p.m., Hawkins) at 51:16-52:5; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1177. Mr. Stone prepared a counter-detailing plan for a minimum of a twenty year period. Trial Tr. (6/10/19 p.m., Stone) at 111:14-113:20 & 115:15-127:13; S-4734 at 51; S-3923. Commissioner White and Ms. Hawkins testified that counter-detailing must be in place for thirty years to abate the crisis. Trial Tr. (6/25/19 a.m., Commissioner White) at 101:15-102:4; Trial Tr. (6/21/19 p.m., Hawkins) at 47:21-51:15 & 67:22-68:3; Trial Tr.

(6/24/19 a.m., Hawkins) at 61:19-20; Trial Tr. (6/24/19 a.m., Hawkins) at 62:14-18; Trial Tr. (6/24/19 p.m., Hawkins) at 117:24-118:5.

vii. Behavioral Health Workforce Development

1178. The development of a loan forgiveness and tuition reimbursement program to incentivize mental health professionals, licensed or under supervision, and other practitioners in related disciplines to work in underserved and high-burden communities is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 7:14-18; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 52.

1179. The nuisance has amplified the need for qualified behavioral health providers in communities. Trial Tr. (6/21/19 p.m., Hawkins) at 5:16-6:7. There have been federal and other recommendations to incentivize behavioral health clinicians to work in the field of substance use disorder treatment, specifically to provide medication assisted treatment services. *Id.* It is critical that Oklahoma have providers in rural communities where there are frequently gaps in services and the State's ability to get providers to those areas. *Id.*

1180. The first component of Behavioral Health Workforce Development is student loan reimbursement. Trial Tr. (6/21/19 p.m., Hawkins) at 6:11-20; S-4734 at 52. Indiana has launched a program to incentivize behavioral health providers in high-needs areas for OUD treatment. Trial Tr. (6/21/19 p.m., Hawkins) at 6:11-20. This component of the State's Abatement Plan was modeled after Indiana's program. *Id.* This is an effort to provide student loan reimbursement to at least 100 licensed applicants for \$20,000 per year, totaling \$2,000,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 6:11-20; S-4734 at 52,

n.116. The amount would be determined by the profession or licensure of the individual.
Id.

1181. The second component of Behavioral Health Workforce is tuition assistance. Trial Tr. (6/21/19 p.m., Hawkins) at 6:22-7:5; S-4734 at 52. The purpose of tuition assistance is to develop and grow licensed or masters level clinicians to provide OUD treatment services in certain parts of the State. Trial Tr. (6/21/19 p.m., Hawkins) at 6:22-25. This program would be for State agencies, such as ODMHSAS or others, to provide tuition assistance to approximately 100 applicants enrolled in graduate programs leading towards behavioral health licensure in an amount up to \$5,000 each year. Trial Tr. (6/21/19 p.m., Hawkins) at 6:22-7:5; S-4734 at 52, n.117. The total costs for this component are \$500,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 7:4-5; S-4734 at 52, n.117.

1182. The third component of Behavioral Health Workforce is an administrative cost to oversee this program including, setting up an application process, and monitoring and ensuring that those who are selected to be part of this program are fulfilling their requirements under the program, at a cost of \$75,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 7:6-10; S-4734 at 52.

1183. The total yearly cost for these services in 2019 dollars is \$2,635,770. The net present value of these costs over a 20-year, 25-year and 30-year period is \$44,929,485, \$53,929,661 and \$62,182,036, respectively. *See* S-4734 at 52.

1184. The costs for Behavioral Health Workforce Development are reasonable and necessary expenses to implement this portion of the Abatement Plan. Trial Tr. (6/21/19

p.m., Hawkins) at 7:19-22; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

d. NAS and Child Services

1185. Parents, children and families alike suffer unimaginably as a result of opioid exposure, dependence and addiction. Trial Tr. (6/19/19 p.m., Ratcliff) at 28:17-25, 35:1-37:3, 41:12-43:19, 47:4-49:6, 53:1-19, 54:13-56:5.⁸⁰

1186. In addition to child death, child abandonment and parental overdose, opioid addiction can lead to NAS. *See, e.g.*, Trial Tr. (6/19/19 p.m., Ratcliff) at 28:14-29:7, 35:5-36:8, 38:1-11, 39:2-5, 46:6-15, 54:10-55:21, 64:3-9.

1187. The Number of babies born with NAS has dramatically increased from 1996-2017. Trial Tr. (6/19/19 p.m., Ratcliff) at 24:23-25:12; 46:1-15; S-4054; Ct. Ex. 56 (illustrating increase in NAS births over time based on data in S-4054).

1188. There are many babies being born exposed to or dependent on opioids in Oklahoma. Trial Tr. (6/19/19 p.m., Ratcliff) at 24:23-25:12; 34:6-21; 35:1-37:3; 38:1-11; 39:2-5; 46:6-15, Ct. Ex. 56.

1189. The “vast majority” of NAS is caused by opioid use. Trial Tr. (6/25/19 p.m., Commissioner White) at 85:16-18. It is “very uncommon” for methamphetamine to be involved in NAS. Trial Tr. (6/25/19 p.m., Commissioner White) at 85:13-86:18.

⁸⁰ Tonya Ratcliff is the Executive Director of Peppers Ranch Foster Care Community, a foster care community comprised of two locations, 700 acres, 17 families and 130 children. *See* Trial Tr. (6/19/19 p.m., Ratcliff) at 57:4-59:13.

1190. Tramadol, the API in some of Defendants' branded drugs, was one of the most common opioid medications prescribed to pregnant women in Oklahoma. Trial Tr. (6/26/19 p.m., Commissioner White) at 129:2-13; J1644 at 25.

1191. NAS has been described as "is hell on earth"—the shaking and screaming that a baby endures from withdrawal is unbearable for the infants and their caretakers. Trial Tr. (6/19/19 p.m., Ratcliff) at 35:7-36:8, 41:12-43:20; 45:5-25; *see also, e.g.*, Ct. Ex. 88 (video played to demonstrate withdrawals in a baby born with NAS). Babies born with NAS suffer "tremendous distress" as infants. *See* Trial Tr. (6/11/19 p.m., Kolodny) at 111:18-112:15.

1192. NAS has life-long consequences for the children and families affected. Trial Tr. (6/19/19 p.m., Ratcliff) at 36:3-37:3, 46:24-49:6.

1193. Babies born with NAS tend to need short-term medical treatment for withdrawal and long-term treatment for medical issues and developmental delays as they grow older. *See, e.g.*, Trial Tr. (6/19/19 p.m., Ratcliff) at 41:8-42:19, 47:4-49:6.

1194. The nuisance has caused an influx of children in the foster care system in Oklahoma. Trial Tr. (6/19/19 p.m., Ratcliff) at 60:9-14.

1195. Parental opioid addiction and NAS impacts entire communities in Oklahoma. *See, e.g.*, Trial Tr. (6/19/19 p.m., Ratcliff) at 49:2-19, 53:1-19, 54:10-55:21.

1196. Presently, there is a shortage of foster homes and an overabundance of need for children in foster care as a result of the nuisance in Oklahoma. Trial Tr. (6/19/19 p.m., Ratcliff) at 49:17-19, 53:1-19, 60:9-14, 64:3-9.

i. NAS Evaluation/Assessment

1197. Developing and disseminating NAS treatment evaluation standards, including continuing education courses is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 9:2-5; Trial Tr. (6/24/19 a.m., Hawkins) at 33:4-7 & 36:1-5; S-4734 at 53; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1. The University of Oklahoma Health Sciences' perinatal center agrees these services are essential to abate the nuisance in Oklahoma. Trial Tr. (6/24/19 a.m., Hawkins) at 33:4-7 & 34:18-22.⁸¹

1198. NAS has become a more pressing burden on hospital systems and healthcare providers. Trial Tr. (6/21/19 p.m., Hawkins) at 8:4-9. There needs to be continual standards in place in Oklahoma hospitals so they are capable and competent to recognize NAS, document NAS, and provide services for these infants and their mothers. Trial Tr. (6/21/19 p.m., Hawkins) at 8:4-9. Most cases of NAS are opioid-involved. Trial Tr. (6/24/19 a.m., Hawkins) at 35:8. Birthing hospitals deal with NAS births primarily related to opioids. Trial Tr. (6/24/19 a.m., Hawkins) at 35:22-23. The purpose of this component of the Plan is to cover clinical care for pregnant women to abate the nuisance.

1199. This component of the State's Abatement Plan is based on a high-quality national program of quality improvement, called the Vermont Oxford Network Quality Improvement package. Trial Tr. (6/21/19 p.m., Hawkins) at 8:10-16; 9:9-10; S-4734 at 53, n.119. This program will provide intensive training in and support to Oklahoma birthing

⁸¹ Ms. Hawkins is a member of the University of Oklahoma Health Sciences Center's working group Opioid Use Disorder in pregnancy Neonatal Abstinence Syndrome. 33: 4-14.

hospitals to help certify them or accredit them as centers of excellence in NAS evaluation and assessment. Trial Tr. (6/21/19 p.m., Hawkins) at 8:10-16. The University of Oklahoma Health Sciences Center would oversee this program as part of their perinatal quality improvement project. Trial Tr. (6/21/19 p.m., Hawkins) at 8:17-20.

1200. The purpose of this component of the plan is to have a program in place to teach standards or clinical practices and embed them into a healthcare process. Trial Tr. (6/24/19 a.m., Hawkins) at 31:7-16. It is not merely to create a set of recommendations. *Id.* Rather, it is to utilize a quality improvement process to implement best practice standards. *Id.*; Trial Tr. (6/24/19 a.m., Hawkins) at 31:20-24. When a package of standards or guidelines comes out in clinical care, it can take anywhere between 7 and 11 years for those standards to get into practice. Trial Tr. (6/24/19 a.m., Hawkins) at 32:14-21. These types of quality improvement programs are designed to assist hospitals, practitioners, clinicians in actually operationalizing those standards within their practices. *Id.* This program goes well beyond continuing education. Trial Tr. (6/24/19 a.m., Hawkins) at 34:10-17.

1201. The costs for the program include the costs for obtaining a state license to the Vermont Oxford Network Quality improvement package for NAS for the State of Oklahoma at a cost of \$52,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) 8:20-23; S-4734, Ex. N.1, n.119. The license is to be purchased every ten years. S-4734 at 53, n.119.

1202. There also are costs for personnel to oversee, coordinate, and enroll and recruit sites into this accreditation program at a cost of \$100,000 per year for state-level staff time, salary and benefits to coordinate the program. Trial Tr. (6/21/19 p.m., Hawkins) 8:23-9:1; S-4734, Ex. N.1, n.120. The necessary staff include a director (0.1 FTE), nurse

program manager (0.3 FTE), office manager (0.3 FTE) and data analyst (0.3 FTE). S-4734 at 53, n.120.

1203. The total yearly cost for these services in 2019 dollars is based on a repeating 10-year cycle with costs of \$155,587 for the first year and \$102,360 for each of years 2 through 10 of each cycle. The net present value of these costs over a 20-year, 25-year and 30-year period is \$1,842,811, \$2,229,954 and \$2,550,435, respectively. *See* S-4734 at 53.

1204. The costs for NAS Evaluation/Assessment are necessary and reasonable expenses to develop and disseminate NAS treatment evaluation standards, including continuing education courses in the State of Oklahoma. Trial Tr. (6/21/19 p.m., Hawkins) at 9:6-10; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

ii. Prenatal Screening

1205. Implementing universal substance use screening for pregnant women and enabling all OB/GYN practices and hospitals to enroll in the SBIRT practice dissemination program for academic detailing, continuing education, electronic medical record consultation, and embedded practice facilitation services is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 12:16-21; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 54-55.

1206. The American College of Obstetricians and Gynecologists recommends that universal screening be in place for pregnant women and postpartum women. Trial Tr. (6/21/19 p.m., Hawkins) at 9:24-10:1. This allows for practice dissemination programs to

be offered in the State of Oklahoma to the 150 birthing hospitals and OBGYN offices. Trial Tr. (6/21/19 p.m., Hawkins) at 9:24-10:4. The purpose is to widely disseminate SBIRT to pregnant women. Trial Tr. (6/21/19 p.m., Hawkins) at 9:17-23.

1207. The first component of Prenatal Screening is practice dissemination. Trial Tr. (6/21/19 p.m., Hawkins) at 10:8-11; S-4734 at 54. This program would allow 352 OB/GYNs in Oklahoma and 150 birthing hospitals in Oklahoma to enroll in the program where they would be matched with practice facilitators, they would receive academic detailing and training in clinical guidelines for the recognition of OUD in pregnant women. Trial Tr. (6/21/19 p.m., Hawkins) at 10:13-23; S-4734 at 54, n.122. It would also assist with referrals and managing OUD with pregnant women. Trial Tr. (6/21/19 p.m., Hawkins) at 10:24-25.

1208. In the first year of this practice dissemination program, the per site cost is \$25,000. Trial Tr. (6/21/19 p.m., Hawkins) at 11:6-9; S-4734 at 54. There are 197 sites. Trial Tr. (6/21/19 p.m., Hawkins) at 11:6-9; S-4734 at 54, n.122. As such, the total cost is \$4,925,000 in the first year. Trial Tr. (6/21/19 p.m., Hawkins) at 11:6-9; S-4734 at 54. In years two, three, four and five, the practice dissemination program would decrease in cost to \$6,250 per site at a total cost of \$1,23,125 per site. Trial Tr. (6/21/19 p.m., Hawkins) at 11:9-12; S-4734 at 54. After the fifth year, the cycle repeats. Trial Tr. (6/21/19 p.m., Hawkins) at 11:13-19; S-4734 at 54. This is necessary to ensure the practice dissemination program addresses any changes to clinical guidelines, new research or updates to other clinical practices. Trial Tr. (6/21/19 p.m., Hawkins) at 11:13-19. It also accounts for

turnover in hospitals and practice staff. *Id.* It is necessary that these quality improvement projects continue in the healthcare setting as an ongoing program. *Id.*

1209. The second component of Prenatal Screening is to support universal screening for pregnant SoonerCare members. Trial Tr. (6/21/19 p.m., Hawkins) at 10:8-11; 11:20-21; S-4734 at 54. There are specific guidelines and protocols that are followed for the treatment of OUD with a pregnant woman and these are not simple protocols. Having these supports in the OB/GYN practice and in the hospital are necessary to embed prenatal screening. Trial Tr. (6/21/19 p.m., Hawkins) at 10:25-11:5.

1210. The costs for prenatal screening are based on the CMS rates OHCA pays for alcohol and substance use disorder screening and brief intervention. Trial Tr. (6/21/19 p.m., Hawkins) at 11:20-12:9. For interventions lasting 15-30 minutes, the cost for service is \$30.96. Trial Tr. (6/21/19 p.m., Hawkins) at 11:22-25; S-4734 at 54. The number of eligible SoonerCare members is based on pregnant SoonerCare members during fiscal year 2017, which was 51,812 members. Trial Tr. (6/21/19 p.m., Hawkins) at 11:25-12:2; Trial Tr. (6/24/19 a.m., Hawkins) at 11:10-11; S-4734 at 54. Eligible SoonerCare members would be eligible for one of these 15-30-minute assessments and interventions per year, at a cost of \$1,604,100. Trial Tr. (6/21/19 p.m., Hawkins) at 12:2-4; S-4734 at 54. These SoonerCare members also would be eligible for an additional alcohol and substance use screen and an intervention lasting greater than 30 minutes at a cost of \$60.20 per encounter, for a total annual cost of \$3,119,082. Trial Tr. (6/21/19 p.m., Hawkins) at 12:5-9; S-4734 at 54. These SoonerCare members also would be eligible for two additional screens where, if the outcomes were negative screens, the provider would still be compensated at a rate of

\$3.53 per encounter, for a total annual cost of \$365,793. Trial Tr. (6/21/19 p.m., Hawkins) at 12:10-15; S-4734 at 54.

1211. The costs for prenatal screening are not duplicative of the costs for Universal Screening. Trial Tr. (6/24/19 a.m., Hawkins) at 11:18-25. Pregnant women visit their OB/GYN office and are eligible for screens in the birthing hospital. *Id.* On average, a pregnant woman may be making visits to the doctors anywhere between six and eight times. *Id.* The prenatal screening accounts for four of those encounters. *Id.*

1212. The costs for Prenatal Screening are reasonable and necessary costs to implement practice dissemination to 352 OB/GYNs and 150 hospitals in Oklahoma and universal screening of pregnant women in SoonerCare. Trial Tr. (6/21/19 p.m., Hawkins) at 12:22-13:2; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1. These costs for screening of pregnant SoonerCare members are conservative. Trial Tr. (6/21/19 p.m., Hawkins) at 13:2-10. The Plan only contemplates screening for SoonerCare members, which are just a portion of pregnant women in the State of Oklahoma who would receive this screening. Trial Tr. (6/21/19 p.m., Hawkins) at 13:2-10. In addition, the practice dissemination program is a way in which practices will learn how to implement this model and be able to serve other pregnant women in the State. *Id.*

1213. In the past, Ms. Hawkins expended significant time and resources writing grants to obtain funds from SAHMSA to increase the number of primary and specialty healthcare patients receiving SBIRT. Trial Tr. (6/24/19 a.m., Hawkins) at 14:5-9; 14:21-5. What is necessary to abate the nuisance is an ongoing sustained effort in Universal

Screening and Pregnancy Screening. Trial Tr. (6/24/19 a.m., Hawkins) at 14:21-15:5. These grants are limited in time and duration. *Id.* Significant State resources are expended in applying for these grants and it is a competitive process. *Id.* Oklahoma is never assured of having those funds. *Id.* The funds are re-upped each year. *Id.* So even on a five-year award, for example, the State does not know if it's going to get those resources. *Id.* This does not support the sustained effort needed to abate the nuisance. *Id.* In addition, the taxpayer should not have to pay to abate the nuisance. Trial Tr. (6/24/19 a.m., Hawkins) at 15:6-14. The SAHMSA funds also are dedicated to a certain portion of the population in Oklahoma. *Id.* They do not cover the scope of screening in the Abatement Plan needed to abate the nuisance. *Id.*

1214. The total yearly cost for these services in 2019 dollars is based, in part, on a repeating 5-year cycle with costs of \$10,250,305 for the first year and \$6,469,382 for each of years 2 through 5 of each cycle. The net present value of these costs over a 20-year, 25-year and 30-year period is \$123,618,499, \$148,381,487 and \$171,086,981, respectively. See S-4734 at 54-55.

iii. Neonatal Treatment

1215. Medical treatment for infants born with NAS or suffering from opioid withdrawal is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 14:22-15:2; Trial Tr. (6/24/19 a.m., Hawkins) at 17:18-20; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 56.

1216. Medical treatment for infants born with NAS and suffering from opioid withdrawal is complex and more expensive than a typical ordinary birth. Trial Tr. (6/21/19 p.m., Hawkins) at 13:16-21. The Oklahoma Commission recognizes Neonatal Abstinence Syndrome babies have hospital stays that are “weeks longer than that of healthy newborns and the medical costs are, on average, more than ten times higher.” S-210 at 6.

1217. This component of the Abatement Plan funds additional costs above and beyond costs for an ordinary birth for infants born with NAS due to the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 13:22-25; (6/24/19 a.m., Hawkins) at 16:21-22.

1218. The costs for neonatal treatment were derived from a study of NAS Medicaid births in the United States that estimated the additional cost of an ordinary NAS birth to be \$63,200. Trial Tr. (6/21/19 p.m., Hawkins) at 14:3-7; Trial Tr. (6/24/19 p.m., Hawkins) at 106:16-25. The cost for an ordinary NAS birth was then multiplied by an average of approximately 300 NAS births per year in Oklahoma. Trial Tr. (6/24/19 p.m., Hawkins) at 106:16-25; 107:1-3. The quantity of approximately 300 NAS births per year was based on a conservative estimate of NAS births in the SoonerCare system. Trial Tr. (6/24/19 p.m., Hawkins) at 120:3-5. To ascertain first year neonatal treatment costs, the State’s expert, Dr. Christopher Ruhm, calculated those first-year costs in 2019 dollars. *Id.*; S-4734 at 56. Dr. Ruhm then costed that in 2020 dollars to ascertain second year neonatal treatment costs. *Id.* Dr. Ruhm then calculated neonatal treatment cost for a 20, 25 and 30-year abatement period using a medical inflation rate. *Id.*

1219. The total yearly cost for these services in 2019 dollars is \$24,212,329 for the first year and \$20,208,460 for each subsequent year. S-4734 at 56. The net present value

of these costs over a 20-year, 25-year and 30-year period is \$360,731,754, \$436,311,648 and \$507,132,248, respectively. *See* S-4734 at 56.

1220. The costs for medical treatment for infants born with NAS are necessary and reasonable costs to provide this medical treatment. Trial Tr. (6/21/19 p.m., Hawkins) at 15:3-8; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1. These costs are very conservative. Trial Tr. (6/21/19 p.m., Hawkins) at 14:8-21; Trial Tr. (6/24/19 a.m., Hawkins) at 17:3-7; Trial Tr. (6/24/19 p.m., Hawkins) at 107:1-6. OHCA reported 498 NAS births to Medicaid members in 2017, which was the last year with complete data. *Id.*; *see also* Trial Tr. (6/24/19 p.m., Hawkins) at 120:16-19, 121:17-18 & 122:20-22; S-4054. The vast majority of NAS births are opioid related. Trial Tr. (6/24/19 p.m., Hawkins) at 122:20-22. Also, the cost of \$63,200 is conservative. Trial Tr. (6/21/19 p.m., Hawkins) at 14:11-18; Trial Tr. (6/24/19 a.m., Hawkins) at 17:3-9. It only includes the cost for an ordinary NAS birth, but not any costs for medication to treat NAS. Trial Tr. (6/21/19 p.m., Hawkins) at 14:11-14. This cost also does not include any treatment for the mother. Trial Tr. (6/21/19 p.m., Hawkins) at 14:15-16. It also does not include ongoing medical expenses and other services required for the child in the first few years of life or even further along in his or her development. Trial Tr. (6/21/19 p.m., Hawkins) at 14:16-18; Trial Tr. (6/24/19 a.m., Hawkins) at 17:3-9.

e. Data Surveillance, Reporting, Research

i. *Opioid Overdose Review Board*

1221. Two full-time professionals to coordinate the Oklahoma Opioid Overdose Fatality Review Board, prepare cases for review, produce reports, and act on

recommendations, is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 16:25-17:3; S-4734 at 57.

1222. Many states have specialty boards that review premature, unusual deaths in order to document the deaths, but also to look closely at individual cases to understand the context of the death. Trial Tr. (6/21/19 p.m., Hawkins) at 15:14-20. The ultimate goal is to monitor trends, produce reports, and recommend interventions. *Id.* The boards look for opportunities to identify ways in which a life could have been saved. *Id.*

1223. In Oklahoma, there is a domestic violence fatality review board and a child death review board. Trial Tr. (6/21/19 p.m., Hawkins) at 15:21-22. This component of the Plan recommends an Opioid Overdose Fatality Review Board. Trial Tr. (6/21/19 p.m., Hawkins) at 15:22-24. This would require two full-time people to coordinate the fatality review board. Trial Tr. (6/21/19 p.m., Hawkins) at 15:24-16:1; S-4734 at 57. Their responsibilities will include obtaining death data, not just from the OCME, but also from multiple indicators including health records, family interviews, prescription histories, military status, correctional status and dozens of other potential indicators to truly understand what led to the death of the decedent. Trial Tr. (6/21/19 p.m., Hawkins) at 16:2-9. Their responsibilities also will include selecting cases and identifying those to elevate to the board. Trial Tr. (6/21/19 p.m., Hawkins) at 16:10-14. This review board will have a significant number of cases to review. *Id.* These coordinators also will produce reports, coordinate with OSDH and OCME and put forward recommendations for actions. Trial Tr. (6/21/19 p.m., Hawkins) at 16:16-19. In some cases, board members also may work on

coordinating interventions that are necessary. Trial Tr. (6/21/19 p.m., Hawkins) at 16:19-21.

1224. The total cost for the two, full-time coordinators for salary and benefits is \$79,795 per person per year at a total cost of \$159,590 per year. Trial Tr. (6/21/19 p.m., Hawkins) at Trial Tr. (6/21/19 p.m., Hawkins) at 16:22-24; S-4734 at 57.

1225. The total yearly cost for these services in 2019 dollars is \$163,356. The net present value of these costs over a 20-year, 25-year and 30-year period is \$2,784,576, \$3,342,376 and \$3,853,830, respectively. See S-4734 at 57

1226. These costs are reasonable and necessary costs for two full-time coordinators for the Oklahoma Opioid Overdose Fatality Review Board. Trial Tr. (6/21/19 p.m., Hawkins) at 17:4-7.

ii. PMP System/Upgrades

1227. Funding the Oklahoma PMP Aware program and the necessary administrative staff, developing needed system enhancements including reports, alerts and other requested features, and employing full-time data professionals to prepare PMP data for analysis, analyze PMP data, develop special reports and analyses, and link data sets such as health outcome data and claims data, are necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 21:17-20; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 58-59. Opioids are the top-prescribed drugs in Oklahoma. Trial Tr. (6/24/19 a.m., Hawkins) at 52:20.

1228. There are two components to the PMP Systems/Upgrades portion of the State's Abatement Plan. S-4734 at 58-59. The first component of The PMP Systems/Upgrades is providing funding for Oklahoma's PMP system (PMP Aware), and the resources necessary to oversee the administration of the PMP System, assist in the data analytics, improve upgrades to the system, develop new upgrades to the system, such as additional proactive alerts, and develop new reporting methods. Trial Tr. (6/21/19 p.m., Hawkins) at 17:23-18:4; S-4734 at 58.

1229. The costs for the first component include costs for the PMP Aware system and any ongoing maintenance of that system at a cost of \$443,227 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 18:20-24; S-4734 at 58.

1230. The costs also include costs for upgrades and integration of the PMP into electronic medical records. Trial Tr. (6/21/19 p.m., Hawkins) at 18:25-19:13; S-4734 at 58. Currently, providers in most cases may be querying the PMP and also working in their local practice's electronic medical records ("EMR") or hospital EMR. Trial Tr. (6/21/19 p.m., Hawkins) at 19:1-3. They also may have a third system in which they're entering data when seeing a patient. Trial Tr. (6/21/19 p.m., Hawkins) at 19:3-5. This integration process assists with improving the provider's workflow. Trial Tr. (6/21/19 p.m., Hawkins) at 19:6-11. It increases the likelihood that the provider will check the PMP and obtain the data in a very timely and efficient manner so he or she can review the data and make a clinical decision about the patient in front of them. *Id.*

1231. The U.S. Commission recommends that “PDMP data integration with electronic health records, overdose episodes, and SUD-related decision support tools for providers is necessary to increase effectiveness.” S-1574 at 55.

1232. The costs to integrate the PMP into EMR systems in Oklahoma is \$600,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 19:11-13; S-4734 at 58.

1233. In addition, costs include data extract fees. Trial Tr. (6/21/19 p.m., Hawkins) at 19:14-20; S-4734 at 58. When OBN or other agencies working in the PMP data require special reports and require the system administrator to pull out data for analysis, particularly, when that is something that is not already packaged in the program license, there are associated costs. Trial Tr. (6/21/19 p.m., Hawkins) at 19:14-20. These costs total \$27,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 19:14-20; S-4734 at 58.

1234. Personnel costs are also included in the costs for this component of PMP System/Upgrades including two, full-time PMP analysts at a total cost of \$147,500 per year who utilize PMP data to assist compliance officers and investigators at OBN. Trial Tr. (6/21/19 p.m., Hawkins) at 19:21-20:12; S-4734 at 58. These analysts are working in the PMP data and providing record or patient or provider or pharmacy level information to OBN investigators and compliance officers. Trial Tr. (6/21/19 p.m., Hawkins) at 19:21-20:12. Personnel also include two, full-time PMP compliance trainers at a total cost of \$120,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 19:21-20:12; S-4734 at 58. These are PMP educators. OBN has approximately 22,000 registrants and these PMP educators visit doctors’ offices, speak with registrants, teach registrants about the PMP system, help registrants query the system, conduct tutorials, do group trainings, and provide phone

consultations to help providers utilize the PMP system. Trial Tr. (6/21/19 p.m., Hawkins) at 19:21-20:12.

1235. There also is a one-time set-up cost. Trial Tr. (6/21/19 p.m., Hawkins) at 20:13-23; S-4734 at 58. This is a cost required by the vendor to set up enhancements to the PMP each time OBN requests a change to the PMP system. Trial Tr. (6/21/19 p.m., Hawkins) at 19:13-23 S-4734 at 58. This one-time setup cost is broken into \$24,000 for additional data extracts that OBN may request, \$36,000 for configurable reports out of the system, and \$20,000 for delegate audit accounts, at a total cost of \$80,000. Trial Tr. (6/21/19 p.m., Hawkins) at 19:13-23; S-4734 at 58, n.127.

1236. The PMP Systems/Upgrades component also includes costs to build a team at OSDH that can use the behavioral measures in the PMP for prevention and intervention purposes. Trial Tr. (6/21/19 p.m., Hawkins) at 18:5-15; S-4734 at 58. Brandeis University identified over 40 measures/indicators of the PMP that could be analyzed in order to use PMP data for prevention services, public health interventions or treatment interventions. Trial Tr. (6/21/19 p.m., Hawkins) at 18:5-15.

1237. In order to accomplish this, staffing is required as is the ability to extract correct data and examine the data to utilize those indicators for these types of prevention and intervention services. *Id.* OSDH is expanding its role in assisting OBN in studying PMP data and looking particularly at population level measures that will be helpful in designing interventions to abate the nuisance, for example, matching data sets or records between PMP and vital records. Trial Tr. (6/21/19 p.m., Hawkins) at 21:2-6.

1238. OSDH requires three epidemiologists to conduct these tasks. Trial Tr. (6/21/19 p.m., Hawkins) at 21:6-7. Two full-time epidemiologist level IIIs at a total cost of \$183,330 per year are necessary. Trial Tr. (6/21/19 p.m., Hawkins) at 21:11-12; S-4734 at 58. And, one epidemiologist level II at a cost of \$76,388 per year also is needed. Trial Tr. (6/21/19 p.m., Hawkins) at 21:12-13; S-4734 at 58. In addition, OSDH requires non-personnel costs for printing supplies affiliated with these projects at a cost of \$10,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 21:13-16; S-4734 at 58.

1239. The total yearly cost for these services in 2019 dollars is \$1,727,269 for the first year and \$1,645,381 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$28,129,146, \$33,747,511 and \$38,899,061, respectively. *See* S-4734 at 58-59.

1240. The costs for PMP System/Upgrades are necessary and reasonable costs to implement this component of the Abatement plan. Trial Tr. (6/21/19 p.m., Hawkins) at 21:21-25; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

1241. The PMP is funded primarily through grants. Trial Tr. (6/24/19 a.m., Hawkins) at 50:13-22. The grants are competitive. Trial Tr. (6/24/19 a.m., Hawkins) at 50:22-51:9. Oklahoma must compete with other states to obtain the funds. *Id.* The grants are short in duration. *Id.* The State does not know from year-to-year if it will have access to those funds. *Id.* The grant applications require a tremendous amount of effort, time and resources. *Id.* This component of the Plan would allow for a well-functioning and

sustainable PMP System that is necessary to abate the nuisance. Trial Tr. (6/24/19 a.m., Hawkins) at 51:13-15.

iii. Program Management Monitoring/Evaluation

1242. Providing program management and coordinating intervention process and outcome evaluation services related to implementation of the State's Abatement Plan and related activities is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) 25:3-8; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 60.

1243. In developing the State's Abatement Plan, the State's experts contemplated the need for oversight of Plan, infrastructure in place to develop evaluation plans and measures for the Plan and to coordinate services that are funded under the Plan, monitoring compliance for any entity that may be providing services under the Plan, coordinating those contracts, and monitoring progress on the Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 22:7-15. This component of the Plan is a conservative estimate of the minimal personnel that would be required to oversee, manage and monitor the Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 22:16-19.

1244. There are two components of program monitoring/evaluation. The first component is program monitoring. Trial Tr. (6/21/19 p.m., Hawkins) at 22:20-22; S-4734 at 60. Based on Ms. Hawkins' and Commissioner White's experience of what is involved to oversee a plan to ensure its effectiveness and that proper infrastructure is in place, the State's abatement experts recommended the following personnel: a director overseeing the Plan at a cost of \$178,900 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-8; S-4734 at

60); a finance director at a cost of \$126,778 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:8-9; S-4734 at 60); an operations director to oversee staffing and contracting at a cost of \$126,778 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:10-12; S-4734 at 60); two full-time senior program managers to oversee the individual aspects of the Plan at a cost of \$111,862.5 for each person per year for a total cost of \$223,725 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:12-15; S-4734 at 60); four program managers at a cost of \$96,947.50 per person per year for a total cost of \$387,790 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:16-21; S-4734 at 60); four program officers to do contract compliance, monitoring, and invoicing at a cost of \$82,032.50 per employee per year for a total cost of \$328,130 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:22-24; S-4734 at 60); two finance officers for budgeting and payments at a cost of \$82,032.50 each per year, for a total cost of \$164,065 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 23:24-24:1; S-4734 at 60); and two administrative assistants at a cost of \$59,660 each per year, for a total cost of \$119,320 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 23:1-4; 24:1-2; S-4734 at 60). These personnel costs are based on comparable salaries and benefits for similar positions within Oklahoma state government. Trial Tr. (6/21/19 p.m., Hawkins) at 24:2-5.

1245. The second component of program monitoring/evaluation is monitoring. Trial Tr. (6/21/19 p.m., Hawkins) at 22:20-22. This is a conservative cost estimate and does not include, for example, efforts to contract for evaluation services. Trial Tr. (6/21/19 p.m., Hawkins) at 24:11-13. This encompasses the team of people to oversee evaluation and monitoring of goals and objectives in the Plan and document those evaluations. Trial Tr.

(6/21/19 p.m., Hawkins) at 24:13-17. They would also work with research or any outside entity that may be assisting in following certain measures that are defined for the Plan. *Id.* These personnel would include five data staff at ODMHSAS at a cost of \$89,490 per year, for a total cost of \$447,450 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 24:18-20; S-4734 at 60); two program evaluators at OSDH, one at a level III at a cost of \$91,665 per year and one at a level II at a cost of \$76,388 per year who are overseeing implementation of the entire Abatement Plan, ensuring services are being delivered as designed, and outcome measures and process measures are being collected and evaluated (Trial Tr. (6/21/19 p.m., Hawkins) at 24:20-22; 26:20-25; S-4734 at 60). In addition, the costs include data costs for OSDH staff for a total cost of \$7,200 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 24:23-24; S-4734 at 60. And, printing costs for those staff of \$10,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 24:25-26:2; S-4734 at 60.

1246. The total yearly cost for these services in 2019 dollars is \$2,334,219. The net present value of these costs over a 20-year, 25-year and 30-year period is \$39,789,229, \$47,759,721 and \$55,067,965, respectively. *See* S-4734 at 60.

1247. The costs for Program Management Monitoring/Evaluation are reasonable and necessary costs to provide program monitoring and coordinate intervention process and outcome evaluation services related to implementation of the State's Abatement Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 25:9-13; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

iv. Health Information Exchange

1248. Purchasing technology and hiring staff to support connectivity among the State agencies' Health Information Exchange ("HIE") and private HIEs and increasing HIE use and adoption by healthcare providers through public education via a contract with a marketing firm, and incentivizing non-meaningful use providers is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 29:17-20; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 61. Oklahoma currently does not have a centralized HIE. (6/24/19 a.m., Hawkins) at 54:14-15; 55:9-11. In order to abate the nuisance, the entire population of Oklahoma would need to enter into the HIE system. Trial Tr. (6/24/19 a.m., Hawkins) at 57:6-11.

1249. HIEs are a centralized way in which EMR and different systems can communicate with a patient record. Trial Tr. (6/21/19 p.m., Hawkins) at 27:23-25. Having a centralized HIE assists tremendously with addressing the nuisance in several ways. Trial Tr. (6/21/19 p.m., Hawkins) at 27:25-28:2. First, it allows for an entire picture of a patient's profile, no matter the number of doctors the patient is visiting and/or prescriptions they may be obtaining. Trial Tr. (6/21/19 p.m., Hawkins) at 28:3-7. It provides a seamless look at a patient record and doctors in different hospitals and primary care offices, and substance abuse treatment are able to get a profile on that patient and can make better clinical judgments about that patient's care. Trial Tr. (6/21/19 p.m., Hawkins) at 28:3-12.

1250. Second, it allows the PMP data to be further integrated into the HIE to help coordinate care for patients. In some cases, especially with OUD treatment, there is a

disconnection between the treatment provider for addiction and the primary care provider. Trial Tr. (6/21/19 p.m., Hawkins) at 28:18-20. More and more primary care providers and other specialists are initiating and inducing patients on buprenorphine and other MAT in their offices. Trial Tr. (6/21/19 p.m., Hawkins) at 28:18-29:3. They then have to coordinate care with a substance use disorder treatment provider. *Id.* These sorts of information superhighways are essential to pass this type of information back and forth between providers. *Id.*

1251. The costs for HIE were derived from work performed by a State committee of experts that looked at the potential for a State centralized HIE and had outside consultation prepare a vision plan for Oklahoma regarding HIEs. Trial Tr. (6/21/19 p.m., Hawkins) at 29:4-11; Trial Tr. (6/24/19 a.m., Hawkins) at 53:11-14. The first-year startup costs for the infrastructure for the HIE system are \$25 million. Trial Tr. (6/21/19 p.m., Hawkins) at 29:12-13; S-4734 at 61. In years two and three, the annual costs for the HIE system would be \$38 million annually. Trial Tr. (6/21/19 p.m., Hawkins) at 29:13-14; S-4734 at 61. For years four and thereafter, the cost for the HIE system would be \$30 million annually. Trial Tr. (6/21/19 p.m., Hawkins) at 29:15-16; S-4734 at 61.

1252. The total yearly cost for these services in 2019 dollars is \$25,590,000 for startup in the first year, \$38,896,800 for each of years 2 and 3, and \$30,708,000 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$534,289,814, \$639,146,239 and \$735,290,410, respectively. *See* S-4734 at 61.

1253. The costs for the HIE system are reasonable and necessary expenses to implement this component of the State's Abatement plan. Trial Tr. (6/21/19 p.m., Hawkins)

at 29:21-25; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

v. *Epidemiological Staffing*

1254. Employing epidemiologists to develop public health surveillance and descriptive studies with fatal/nonfatal injury, addiction, risk/protective factor, health record/claim, and other data and supporting development of web-based data query/reporting systems is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 32:1-4; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 62.⁸²

1255. There are not adequate personnel to study the nuisance and to monitor and surveil data related to the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 30:6-11. Epidemiologists have special training and credentials. Trial Tr. (6/21/19 p.m., Hawkins) at 32:4-5. Federal recommendations to abate the nuisance routinely recommend data collection and continual monitoring as a priority need. Trial Tr. (6/21/19 p.m., Hawkins) at 30:12-14. There are many data projects that are on the list of things that need to be done in order to better understand the nature of the problem in the State and other surveillance projects that have yet to be accomplished. Trial Tr. (6/21/19 p.m., Hawkins) at 30:14-18. For example, in Oklahoma, the State does not have an emergency discharge database. Trial Tr. (6/21/19 p.m., Hawkins) at 30:19-20. That requires staffing in order to examine those

⁸² The State's expert, Ms. Jessica Hawkins, frequently works with epidemiologists to address the opioid crisis in Oklahoma.

discharges and to develop reporting on them and to analyze the meaning of the different surveillance that the State is seeing. Trial Tr. (6/21/19 p.m., Hawkins) at 30:20-23.

1256. In addition, there are gaps in surveillance of the nuisance and data on the nuisance that need to be documented. Trial Tr. (6/24/19 p.m., Hawkins) at 98:3-13. This component of the Plan is to increase the number of data professionals that are dedicated to addressing the nuisance and expanding the State's ability to collect and utilize this data. Trial Tr. (6/21/19 p.m., Hawkins) at 30:24-31:2. There have been many discussions about the types of descriptive studies this additional epidemiological staffing could develop. Trial Tr. (6/24/19 a.m., Hawkins) at 57:24-58:7. There have been studies that have been started or initiated in other states that Oklahoma could replicate. *Id.*

1257. The costs for this component of the Plan are based on the needs of the State. Trial Tr. (6/21/19 p.m., Hawkins) at 31:7-16. For example, ODMHSAS has an epidemiologist on staff that is funded under a grant. Trial Tr. (6/21/19 p.m., Hawkins) at 31:7-11. In order to be fully responsive and to meet the demands of the projects that are proposed and that are necessary, ODMHSAS needs to hire five staff at a cost of \$89,490 per year for a total of \$447,450 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 31:12-16; S-4734 at 62. These staff would include epidemiologists and data analysts which are support staff for epidemiologists. Trial Tr. (6/21/19 p.m., Hawkins) at 32:4-11.

1258. OSDH, which, through their Injury Prevention Service, is the hub that is using epidemiology to understand the nuisance, requires one epidemiologist level III at a cost of \$91,665 per year, two epidemiologist level IIs at a cost of \$76,388 per employee per year, for a total of \$152,776 per year, and one epidemiologist level I for a cost of

\$63,672 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 31:17-22; S-4734 at 62. In addition, OSDH requires additional per employee data costs at \$14,400 per year (\$3,600 x 4) and printing and supplies costs of \$10,000 per year to support this program. Trial Tr. (6/21/19 p.m., Hawkins) at 31:23-25; S-4734 at 62.

1259. The total yearly cost for these services in 2019 dollars is \$798,370. The net present value of these costs over a 20-year, 25-year and 30-year period is \$13,609,060, \$16,335,198 and \$18,834,827, respectively. *See* S-4734 at 62.

1260. The costs for epidemiological staffing are reasonable and necessary costs to implement this component of the State's Abatement Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 32:15-19; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

vi. Data Collection

1261. This portion of the Plan supports costs of added indicators in existing surveys and the development of new sources of data collection for key measures related to monitoring trends and measuring change is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 35:25-36:3; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 63.

1262. Data collection is the cost of implementing surveys, developing surveys and adding items to surveys. Trial Tr. (6/21/19 p.m., Hawkins) at 33:21-23. Data collection is critical to address the nuisance and one of the reasons Oklahoma has been able to organize and implement interventions wisely thus far with very few resources. Trial Tr. (6/21/19 p.m., Hawkins) at 32:25-33:3. In Oklahoma, there are existing surveys that ask questions

about health behaviors and health outcomes. Trial Tr. (6/21/19 p.m., Hawkins) at 33:3-4. There are different data sets that State agencies monitor. Trial Tr. (6/21/19 p.m., Hawkins) at 33:4-5. But prior to and during the nuisance, not every single one of those surveys had items on them measuring, with specificity, some of the problems related to this nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 33:6-8. In some cases, State staff has had to write and obtain grants to add items to surveys. Trial Tr. (6/21/19 p.m., Hawkins) at 33:8-10. The State also has had to figure out ways to collect data by partnering onto other projects and trying to collect at minimum what the State needs in order to understand the nature of the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 33:10-13. The data collection component of the State's Abatement Plan addresses developing methods to obtain data State personnel can access and utilize related to opioids. Trial Tr. (6/21/19 p.m., Hawkins) at 33:14-18. In addition, there are personnel needs where there are gaps in State agencies around the ability to work in the data. *Id.*

1263. There are three services included in Data Collection. S-4734 at 63. The first is new data collection and surveys. Trial Tr. (6/21/19 p.m., Hawkins) at 34:2-12; S-4734 at 63. This is the cost of developing new surveys and new methods of collecting opioid-related data that don't currently exist. Trial Tr. (6/21/19 p.m., Hawkins) at 33:25-34:3; S-4734 at 63, n.132. ODMHSAS and OSDH, together, require \$200,000 annually to develop new survey instruments and to continue to measure those over time. Trial Tr. (6/21/19 p.m., Hawkins) at 34:8-12; S-4734 at 63.

1264. The second service is to cover the cost of a youth survey in Oklahoma entitled the Prevention Needs Assessment Survey. Trial Tr. (6/21/19 p.m., Hawkins) at 34:13-14;

S-4734, S-4734 at 63, n.133. This is a Risk/Protective Factor Survey that is conducted among 6th, 8th, 10th and 12th graders every other year in the State. Trial Tr. (6/21/19 p.m., Hawkins) at 34:14-15; S-4734 at 63, n.133. It measures substance use consumption patterns, and risks and protective factors that predict future use and non-use. Trial Tr. (6/21/19 p.m., Hawkins) at 34:16-19. In addition to indicators related to opioids, the survey collects substance use indicators and risk and protection for the development of substance use problems including marijuana and alcohol. Trial Tr. (6/24/19 a.m., Hawkins) at 69:6-17. These are indicators of substance use that are highly comorbid with OUD. *Id.* This data is collected at a local level, so the State is able to look, for example, schoolhouse by schoolhouse, grade by grade, in different populations and understand what is impacting young people in Oklahoma and allow communities and schools to design plans that will be responsive to those needs at a cost of \$399,244 every other year beginning in 2020. Trial Tr. (6/21/19 p.m., Hawkins) at 34:20-25; S-4734 at 63, n.133. The basis of that cost is to ensure that this survey can be provided to every school in Oklahoma. Trial Tr. (6/21/19 p.m., Hawkins) at 34:25-35:1; S-4734 at 63, n.133.

1265. The third service is the addition of survey indicators. Trial Tr. (6/21/19 p.m., Hawkins) at 35:2-14; S-4734 at 63. This involves adding questions to a survey. Trial Tr. (6/21/19 p.m., Hawkins) at 35:3-4. In this case, this would be for the behavioral risk factor surveillance system (“BRFSS”), which is a CDC survey conducted across the country and in Oklahoma. Trial Tr. (6/21/19 p.m., Hawkins) at 35:4-7. It allows Oklahoma to compare behaviors of adults in Oklahoma to the behavior of adults in other states. Trial Tr. (6/21/19 p.m., Hawkins) at 35:7-8. It is incredibly valuable. Trial Tr. (6/21/19 p.m., Hawkins) at

35:8-9. Currently, there are very few measures on the survey regarding prescription opioid use. Trial Tr. (6/21/19 p.m., Hawkins) at 35:9-11. To add items to that survey, it costs \$1,900 per indicator. Trial Tr. (6/21/19 p.m., Hawkins) at 35:11-12; S-4734 at 63, n.134. The total cost for this third service to add five additional opioid-related indicators to this survey is \$9,500 per year to continually survey adults in Oklahoma using this particular survey. Trial Tr. (6/21/19 p.m., Hawkins) at 35:2-14; S-4734 at 63, n.134. It is required to pay the costs of these indicators for each administration. Trial Tr. (6/24/19 a.m., Hawkins) at 67:17-68:3.

1266. Another component of Data Collection is personnel. OJA and OSDH require additional analysts for these surveys to collect and utilize this opioid-related information. Trial Tr. (6/21/19 p.m., Hawkins) at 35:15-17; S-4734 at 63. Currently, OJA has client or youth offender level data, and it does not have the capacity to analyze that data. OJA has been impacted by the nuisance in the State and require staffing in order to help work within its own agency data. Trial Tr. (6/21/19 p.m., Hawkins) at 35:17-21. An OJA analyst costs \$104,405 per year. S-4734 at 63. OSDH, where the BRFSS survey is collected, also requires a full-time analyst at a cost of \$100,000 per year. Trial Tr. (6/21/19 p.m., Hawkins) at 35:22-24; S-4734 at 63.

1267. The total yearly costs for these services in 2019 dollars is \$832,339 for even numbered years and \$423,673 for odd numbered years. The net present value of these costs over a 20-year, 25-year and 30-year period is \$10,735,238, \$13,019,274 and \$14,857,481, respectively. *See* S-4734 at 63.

1268. The costs for Data Collection are necessary and reasonable costs to implement this component of the State's Abatement Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 36:4-7; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

vii. NAS Reporting

1269. Funding the development of NAS as a required reportable condition, including OSDH and hospital-level management and infrastructure costs, is necessary to abate the nuisance. Trial Tr. (6/21/19 p.m., Hawkins) at 37:11-14; Trial Tr. (6/24/19 a.m., Hawkins) at 37:19-22, 38:6-9 & 38:19-24; S-4734 at 64; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1. The purpose of this component is to fund the costs for the oversight of NAS birth documentation and reporting. Trial Tr. (6/24/19 a.m., Hawkins) at 37:9-10.

1270. The CDC and others recommend that states have NAS as a required reportable condition. Trial Tr. (6/21/19 p.m., Hawkins) at 36:13-18. In order to do this, there are costs involved with maintaining that database and requiring hospitals to report this data. Trial Tr. (6/21/19 p.m., Hawkins) at 36:18-20. This component of the Abatement Plan would fund the infrastructure, systems and personnel that are necessary to oversee a NAS database or surveillance system in the State of Oklahoma. Trial Tr. (6/21/19 p.m., Hawkins) at 36:21-24.

1271. First is the need to develop a database. The costs associated with developing and maintaining this database are \$85,000 in the first year and \$80,000 per year in subsequent years. Trial Tr. (6/21/19 p.m., Hawkins) at 36:25-37:3; S-4734 at 64.

1272. In addition, personnel is required to oversee the NAS surveillance database. Trial Tr. (6/21/19 p.m., Hawkins) at 37:4-6. A full-time analyst is required at a cost of \$92,187 per year for salary and benefits. Trial Tr. (6/21/19 p.m., Hawkins) at 37:4-6; S-4734 at 64. There also are employee costs for a workstation and equipment to run that database at a cost of \$5,000 for yearly computer software and \$3,000 for the laptop and docking station for the first year and then every 5 years. Trial Tr. (6/21/19 p.m., Hawkins) at 37:6-10; S-4734 at 64.

1273. The total yearly cost for these services in 2019 dollars is \$189,557 for the first year, \$181,369 for each of years 2 through 4, \$184,439 for year 5, and thereafter on a repeating 5-year cycle at \$181,369 for each of the 1st through 4th years and \$184,439 for each 5th year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$3,107,578, \$3,729,056 and \$4,298,896, respectively. See S-4734 at 64.

1274. The costs for NAS Reporting are necessary and reasonable costs to develop NAS as a required reportable condition in the State of Oklahoma. Trial Tr. (6/21/19 p.m., Hawkins) at 37:15-19; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

f. Enforcement and Regulatory Services and Programs

1275. Funding for investigatory and regulatory actions related to the nuisance are necessary to abate it. Trial Tr. (6/21/19, p.m., Hawkins) at 51:8-15; Trial Tr. (6/24/19 p.m., Hawkins) at 22:3-23; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1; S-4734 at 65-70.

1276. Oklahoma law enforcement agencies, licensure boards and the Oklahoma Office of the Chief Medical Examiners (“OCME”) have been overwhelmed by cases related to opioids and the need to conduct investigations and do not have the necessary staffing and resources in place to respond to this nuisance. Trial Tr. (6/21/19, p.m., Hawkins) at 38:2-14. This component of the plan allows these agencies, offices and boards to meet the massive demands on their time from heavy caseloads due to the nuisance. Trial Tr. (6/21/19, p.m., Hawkins) at 38:11-14.

1277. The first component of Enforcement/Regulatory relates to the ODMHSAS. Trial Tr. (6/21/19 p.m., Hawkins) at 38:15-20; S-4734 at 65. Crisis Intervention Team Training (CIT) is an activity that is performed with law enforcement agencies. Trial Tr. (6/21/19 p.m., Hawkins) at 38:20-22. The cost of \$500,000 per year allows ODMHSAS to bring this training statewide for all law enforcement officers in the State. Trial Tr. (6/21/19 p.m., Hawkins) at 38:24-39:2; S-4734 at 65. CIT is training in recognizing addiction and addiction crises, intervening, deescalating situations, assisting those in the community with finding referrals and resources and improving overall law enforcement and community relations with regard to what these officers are seeing in the community with addictive behaviors. Trial Tr. (6/21/19, p.m., Hawkins) at 39:2-8.

1278. The second component of Enforcement/Regulatory relates to OBN. Trial Tr. (6/21/19 p.m., Hawkins) at 39:9-14; S-4734 at 65. OBN needs additional staff to deal with the burdensome caseload resulting from the nuisance. Trial Tr. (6/21/19, p.m., Hawkins) at 38:2-10.

1279. There are personnel and non-personnel costs. The personnel costs are based on comparable salaries and benefits for positions within OBN. Trial Tr. (6/21/19 p.m., Hawkins) at 39:39:14-16. This personnel includes a criminal/civil analyst at a cost of \$109,998 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 39:16-17; S-4734 at 65); two and a half compliance inspectors who are going out and working with registrants on their necessary paperwork and regulations around their OBN registration at a cost of \$45,192.45 per agent per year, for a total annual cost of \$112,981 (Trial Tr. (6/21/19 p.m., Hawkins) at 39:18-22; S-4734 at 65); 10 compliance agents in the first year at a cost of \$223,725 each for a total annual cost of \$2,237,250; and at a cost per agent of \$149,150, in later years for a total annual cost of \$1,491,500 (Trial Tr. (6/21/19 p.m., Hawkins) at 39:23-40:1; S-4734 at 65) (the difference in cost for the first and subsequent years is the cost of equipment for new agents in the first year (Trial Tr. (6/21/19 p.m., Hawkins) at 40:2-7)); five certified agents at a cost of \$223,725 per agent for 5 agents in the first year, totaling \$1,118,625 and at a cost per agent of \$149,150 in subsequent years at an annual cost totaling \$745,750 (Trial Tr. (6/21/19 p.m., Hawkins) at 40:9-12; S-4734 at 65); a full-time staff attorney at an annual cost of \$155,854 (Trial Tr. (6/21/19 p.m., Hawkins) at 40:13-14; S-4734 at 65); and an expert witness evaluator at a cost of \$149,150 per year (Trial Tr. (6/21/19 p.m., Hawkins) at 40:14-15; S-4734 at 65).

1280. The non-personnel costs include the cost to cover OBN's registration system technology at an annual cost of \$206,000 and its collaborative work with local law enforcement for a heroin and opioid task force at an annual cost of \$450,000. Trial Tr. (6/21/19, p.m. Hawkins) at 40:15-19; S-4734 at 65.

1281. The Oklahoma licensure boards also are overwhelmed by the nuisance in terms of their capacity to investigate each case and the number of complaints they are receiving. Trial Tr. (6/21/19 p.m., Hawkins) at 43:16-44:7. They require additional staff to deal with their high caseloads as a result of this nuisance. *Id.*

1282. In addition, many of the boards participate in peer-assistance programs, where they are working with their licensees who are affected with addiction. *Id.* Opioids are lately the number one driver of their licensees needing these peer-assistance programs. *Id.* The nuisance has placed an undue burden on these boards and their ability to process cases and serve their licensees effectively. *Id.* To adequately address the nuisance, the boards need additional personnel and training. Trial Tr. (6/21/19 p.m., Hawkins) at 41:1-3.

1283. The Oklahoma Veterinary Board requires an investigator at an annual cost of \$77,558. Trial Tr. (6/21/19 p.m., Hawkins) at 41:3-5; S-4734 at 66. The Board also requires non-personnel costs including a car expense and training for this additional investigator at a cost of \$6,000 and \$3,600 annually, respectively. Trial Tr. (6/21/19 p.m., Hawkins) at 41:5-10; S-4734 at 66. This additional investigator also requires equipment at \$5,000 in the first year and \$3,600 in later years. *Id.* The Veterinary Board also requires annual training costs for two investigators, the executive director, board counsel and one board member at a cost of \$18,000 per year. *Id.*

1284. The Oklahoma State Osteopathic Board requires a full-time prosecutor at an annual cost of \$119,608, two full-time support staff to assist the prosecutor at an annual total cost of \$59,804, two full-time investigators at an annual total cost of \$178,980 and

two investigator support staff at a total annual cost of \$199,320. Trial Tr. (6/21/19 p.m., Hawkins) at 41:14-18; S-4734 at 66. To accommodate these additional staff members, the Board requires rent for additional office space at an annual cost of \$12,000. Trial Tr. (6/21/19 p.m., Hawkins) at 41:19-21; S-4734 at 66.

1285. The Oklahoma Board of Nursing requires a full-time prosecutor at an annual cost of \$136,188, nurse investigators at an annual cost of \$234,864, a legal secretary at an annual cost of \$61,454, and a nurse case manager for the Peer Assistance Program at an annual cost of \$117,432. Trial Tr. (6/21/19 p.m., Hawkins) at 41:25-42:6; S-4734 at 67. The Peer Assistance Program is to assist their licensees who are struggling with substance use disorder. Trial Tr. (6/21/19 p.m., Hawkins) at 41:25-42:9; S-4734 at 67. The Board also requires an educator for the Board at an annual cost of \$117,432 that will work with licensees through the State. *Id.*

1286. In addition, the Nursing Board requires administrative costs for these new personnel such as rent, payroll and insurance supplies at an annual cost of \$15,660. Trial Tr. (6/21/19 p.m., Hawkins) at 42:9-11; S-4734 at 67.

1287. The Board also has one-time costs for these new personnel, including computers, phones, and furniture at an annual cost of \$45,200 and IT development costs for education materials at an annual cost of \$60,000. Trial Tr. (6/21/19 p.m., Hawkins) at 42:11-13; S-4734 at 67.

1288. The Oklahoma Board of Medical Licensure and Supervision requires additional personnel to address the nuisance including, three full-times investigators at a total annual cost of \$335,588, an assistant for these investigators at an annual cost of

\$74,575, and a support services administrator at an annual cost of \$74,575. Trial Tr. (6/21/19 p.m., Hawkins) at 42:17-20; S-4734 at 67. The Board also requires specialized training and professional development for eight investigators at an annual cost of \$32,000. Trial Tr. (6/21/19 p.m., Hawkins) at 42:21-23; S-4734 at 67. It also requires 50 additional expert medical reviews to help with the Board's heavy caseload of prescription opioid complaints against licensees, costing \$7,000 each at an annual cost of \$350,000. Trial Tr. (6/21/19 p.m., Hawkins) at 42:23-43:1; S-4734 at 67. Finally, it requires one-time costs in surveillance equipment for an annual cost of \$5,000. Trial Tr. (6/21/19 p.m., Hawkins) at 43:1-2; S-4734 at 67.

1289. The Oklahoma Board of Dentistry requires 5 additional full-time experienced investigators at a total annual cost of \$671,175. Trial Tr. (6/21/19 p.m., Hawkins) at 43:3-7; S-4734 at 67. The Board also requires training for the first five years of the Abatement Plan only for Board members, Board staff, investigators and attorneys at a total cost of \$50,000. Trial Tr. (6/21/19, p.m., Hawkins) at 43:7-9; S-4734 at 67. Finally, the Board requires training in the first five years of the Abatement Plan only for its 11,500 licensees at \$500 each for a total cost of \$1,150,000. Trial Tr. (6/21/19, p.m., Hawkins) at 43:9-12; S-4734 at 67.

1290. The OCME also has been overburdened with heavy caseloads due to the nuisance. Trial Tr. (6/21/19, p.m., Hawkins) at 44:9-45:3. In order to keep up with this heavy caseload, the OCME requires additional equipment for autopsies and toxicology tests and personnel. *Id.*

1291. First, OCME requires additional salary for their medical examiner physicians to encourage retention. Trial Tr. (6/21/19, p.m., Hawkins) at 44:14-45:6; S-4734 at 68. Nationally, the opioid crisis has created a shortage of medical examiners and physicians working in medical examiner offices across the country. Trial Tr. (6/21/19, p.m., Hawkins) at 44:14-45:6. This has hit Oklahoma hard. It has created an overwhelming volume of cases and a high demand for a small pool qualified medical examiner physicians, limiting OCME's ability to hire and retain physicians. *Id.* To alleviate this problem, OCME needs additional support for the cost of competitive salaries to retain these physicians at a cost of \$969,475 per year. *Id.*; S-4734 at 68. OCME also requires forensic pathologists, at an annual total cost of \$894,900, a full-time forensic chemist at an annual cost of \$149,150 and two full-time medicolegal death scene investigators at an annual cost of \$238,640. Trial Tr. (6/21/19, p.m., Hawkins) at 45:7-11; S-4734 at 68. These salaries are inclusive of benefits. Trial Tr. (6/21/19, p.m., Hawkins) at 45:11.

1292. In addition, OCME requires costs for maintenance on instruments it purchased in order to address the heavy caseload in the toxicology lab due to the nuisance. Trial Tr. (6/21/19, p.m., Hawkins) at 45:12-18; S-4734 at 68. OCME needs to perform toxicology tests as quickly as possible due to their heavy caseload. Trial Tr. (6/21/19, p.m., Hawkins) at 45:12-18. Maintenance of this equipment is required to increase the analytical capacity of the toxicology laboratory, facilitate the speed of drug screening and ease workload by obviating the need for a traditional surgical autopsy in some cases. S-4734 at 68, n.139. The maintenance for this equipment costs \$250,000 per year. Trial Tr. (6/21/19, p.m., Hawkins) at 45:16-18; S-4734 at 68.

1293. In addition, OCME needs to purchase a new CT scanner. Trial Tr. (6/21/19, p.m., Hawkins) at 45-19-25. In some cases, OCME is unable to do a full-body autopsy when workloads are high. *Id.* The CT scanner allows OCME to process these cases quickly. *Id.* The CT scanner is a one-time cost of \$450,000. *Id.*; S-4734 at 68.

1294. The Office of the Attorney General also requires services, programs and personnel to abate the nuisance. S-4734 at 69. The criminal justice division requires salary and benefits for two assistant attorneys general, two investigators and one support staff as well as non-personnel costs for these employees in the form of equipment and training, for a total annual cost of \$460,965. Trial Tr. (6/21/19, p.m., Hawkins) at 46:2-16; S-4734 at 69.

1295. The Medicaid Fraud Control division requires salary and benefits for additional personnel including one assistant attorney general and two investigators as well as non-personnel costs for these employees in the form of equipment and training for a total annual cost of \$73,468. Trial Tr. (6/21/19, p.m., Hawkins) at 46:17-23; S-4734 at 69.

1296. The Legal/Agency Counsel division requires salary and benefits and non-personnel costs of equipment and training for two assistant attorneys general at a total annual cost of \$203,910. Trial Tr. (6/21/19, p.m., Hawkins) at 46:24-47:6; S-4734 at 69.

1297. Victim Services requires addiction and substance abuse training and travel for 7 individuals at a cost of \$2,000 each for a total annual cost of \$14,000. Trial Tr. (6/21/19, p.m., Hawkins) at 47:1-3; S-4734 at 69.

1298. The Policy & Legislative Development and Tracking division requires salary and benefits and non-personnel costs in the form of equipment and training for one assistant

attorney general at a total annual cost of \$101,955. Trial Tr. (6/21/19, p.m., Hawkins) at 47:4-6; S-4734 at 69.

1299. The total yearly costs for these services in 2019 dollars is \$13,283,599 for the first year, \$11,512,541 for each of years 2 through 5, and \$10,335,401 for each subsequent year. The net present value of these costs over a 20-year, 25-year and 30-year period is \$183,635,585, \$218,927,145 and \$251,286,418, respectively. See S-4734 at 65-70.

1300. The costs of Enforcement/Regulatory are reasonable and necessary expenses to implement this component of the Abatement Plan. Trial Tr. (6/21/19 p.m., Hawkins) at 51:16-22; Trial Tr. (6/25/19 a.m., Commissioner White) at 100:3-7; Trial Tr. (6/26/19 p.m., Commissioner White) at 129:21-130:1.

g. Professor Christopher Ruhm's Calculation

1301. Professor Christopher Ruhm,⁸³ an expert in the field of health economics, testified that he performed minor mathematical calculations for components of the plan and calculations regarding conversion to 2019 dollars, general and/or specific inflation rates and discounts to net present value pursuant to a methodology generally accepted and

⁸³ Dr. Ruhm is a health economist and an expert in the health economics field. Trial Tr. (6/24/19 p.m., Ruhm) at 127:21, Ct. Ex. 109 at 282:18-20; 285:21-23. Much of his work has been focused on the production of health broadly—the components that go into making good health or poor health. Ct. Ex. 109 at 282:24-283:11. Dr. Ruhm has studied and conducted research on a variety of health issues including smoking, excess drinking, drugs and drug deaths. Ct. Ex. 109 at 283:8-20. Dr. Ruhm has worked in the field of health economics for more than 25 years. Ct. Ex. 109 at 283:21-25. Dr. Ruhm is a professor at the University of Virginia in the Frank Batten School of Leadership and Public Policy. Ct. Ex. 109 at 284:5-15. He has a second appointment in the economics department where he teaches masters of public policy students and economics. Ct. Ex. 109 at 284:11-22. Dr. Ruhm has published articles and conducted academic seminars related to health economics all over the world. Ct. Ex. 109 at 284:24-285:20.

used by experts in Professor Ruhm's area of expertise. *See* S-4734 at 12, 15, 99-100; Ct. Ex. 0109 (Ruhm) at 282:18-22; 282:24-284:2; 284:4-287:7. Dr. Ruhm was offered and accepted as an expert in the field of health economics. Trial Tr. (6/24/19 p.m., Ruhm) 127:23-128:8. Defendants do not contest Dr. Ruhm's qualifications, methodology or results.

1302. Applying the foregoing methodology and expertise, Dr. Ruhm calculated the net present value of the cost of the State's proposed abatement plan over a 20-year period, a 25-year period, and a 30-year period. *See* S-4734 at 100; Ct. Ex. 0109 (Ruhm) at 287:11-288:6.⁸⁴

1303. Dr. Ruhm calculated the net present value of the total cost of the State's proposed abatement plan over a 20-year period—from 2019 to 2038—is \$12,667,819,392. S-4734 at 100; Ct. Ex. 0109 (Ruhm) at 287:19-22.

1304. The net present value of the total cost of the State's proposed abatement plan over a 25-year period—from 2019 to 2043—is \$15,193,102,533. S-4734 at 100; Ct. Ex. 0109 (Ruhm) at 287:23-25.

1305. The net present value of the total cost of the State's proposed abatement plan over a 30-year period—from 2019 to 2048—is \$17,527,761,537. S-4734 at 100; Ct. Ex. 0109 (Ruhm) at 288:1-6.

⁸⁴ Excerpts of the videotaped deposition testimony of Dr. Christopher Ruhm, taken on March 28, 2019, were played on June 24, 2019. *See* Trial Tr. (6/24/19 p.m.) at 127:17-21. A transcript of the excerpts of the videotaped deposition testimony of Dr. Ruhm was marked, provided to and accepted by the Court as Court Exhibit 109 ("Ct. Ex. 0109").

1306. As set forth and found above, the Defendants did not offer a competing or alternative abatement plan.

IV. Conclusions of Law

2. There is one claim and one requested remedy before the Court. The claim is the State's public nuisance claim under Oklahoma law.⁸⁵ The remedy it seeks is abatement.⁸⁶

3. The law of nuisance and the equitable power to abate it is deeply rooted in the history and tradition of both Oklahoma and the United States. Oklahoma's nuisance law has existed since before it was a state.⁸⁷ Nuisance law generally has existed in the United States since before the Constitution. As the United States Supreme Court explained in 1878 in response to a "flagrant nuisance" found in the state court below:

We cannot doubt that the police power of the State was applicable and adequate to give an effectual remedy. That power belonged to the States when the Federal Constitution was adopted. They did not surrender it, and they all have it now. It extends to the entire property and business within their local jurisdiction. Both are subject to it in all proper cases. It rests upon the fundamental principle that every one shall so use his own as not to wrong and injure another. To regulate and abate nuisances is one of its ordinary

⁸⁵ See Notice of Voluntary Dismissal of Certain Claims Without Prejudice (April 4, 2019) ("Pursuant to Okla. Stat. tit. 12, §§ 683 and 684, the State of Oklahoma hereby voluntarily dismisses the following causes of action without prejudice to refile: (1) violation of the Oklahoma Medicaid False Claims Act, (2) violation of the Oklahoma Medicaid Program Integrity Act, (3) Fraud (Actual and Constructive) and Deceit, (4) Unjust Enrichment, and (5) compensatory damages, including past damages stemming from its public nuisance claim. The State does not dismiss, and will continue to pursue, its cause of action for public nuisance and remedy of abatement under Okla. Stat. tit. 50, §§ 1-2, 8, 11, as well as all further equitable relief deemed just and proper.").

⁸⁶ *Id.*

⁸⁷ See The Statutes of Oklahoma, 1890 (the laws passed by the First Legislative Assembly of the Territory), § 3697, 1890 O.S.L. 716.

functions. The adjudged cases showing its exercise where corporate franchises were involved are numerous.⁸⁸

And as the Oklahoma Supreme Court has recognized: “The suppression of nuisances injurious to public health and morals is among the most important duties of government.” *Reaves v. Territory*, 1903 OK 92, ¶ 25, 74 P. 951, 953-54 (quoting *Phalen v. Virginia*, 49 U.S. 163, 168 (1850)). As is discussed further below, it is of note that from its earliest nuisance jurisprudence, the Supreme Court relied heavily on a United States Supreme Court nuisance case about conduct—conducting a lottery—that had nothing to do with property.

4. A suit brought by a state to abate a public nuisance is a classic exercise of *parens patriae* authority. In *Alfred L. Snapp & Son v. Puerto Rico*, 458 U.S. 592, 607 (1982), the United States Supreme Court recounted the history of the *parens patriae* doctrine in this country, starting with two early public nuisance cases brought by the states of Missouri and Georgia:

Both the Missouri case and the Georgia case involved the State’s interest in the abatement of public nuisances, instances in which the injury to the public health and comfort was graphic and direct. Although there are numerous examples of such *parens patriae* suits..., *parens patriae* interests extend well beyond the prevention of such traditional public nuisances.

Id. at 604-05 (citations omitted). The Court explained that *parens patriae* authority extends to protecting the economic wellbeing of state citizens, which overlaps with the public nuisance jurisprudence:

The public nuisance and economic well-being lines of cases were specifically brought together in *Georgia v. Pennsylvania R. Co.*, 324 U.S.

⁸⁸ *Fertilizing Co. v. Hyde Park*, 97 U.S. 659, 667 (1878).

439 (1945), in which Georgia alleged that some 20 railroads had conspired to fix freight rates in a manner that discriminated against Georgia shippers in violation of the federal antitrust laws:

If the allegations of the bill are taken as true, the economy of Georgia and the welfare of her citizens have seriously suffered as the result of this alleged conspiracy. . . . [Trade barriers] may cause a blight no less serious than the spread of noxious gas over the land or the deposit of sewage in the streams. They may affect the prosperity and welfare of a State as profoundly as any diversion of waters from the rivers. . . . Georgia was a representative of the public is complaining of a wrong which, if proven, limits the opportunities of her people, shackles her industries, retards her development, and relegates her to an inferior economic position among her sister States. These are matters of grave public concern in which Georgia has an interest apart from that of particular individuals who may be affected.' *Id.*, at 450-451.

Alfred L. Snapp & Son, 458 U.S. at 605-06. Based on this jurisprudence, the Supreme Court has held that to maintain an action as *parens patriae*, “the State must articulate an interest apart from the interests of particular private parties” and “must express a quasi-sovereign interest.” *Id.* at 607. The Court expressly stated that “a State has a quasi-sovereign interest in the health and well-being—both physical and economic—of its residents.” *Id.* There are no “definitive limits on the proportion of the population of the State that must be adversely affected by the challenged behavior.” *Id.* However, “[o]ne helpful indication in determining whether an alleged injury to the health and welfare of its citizens suffices to give the State standing to sue as *parens patriae* is whether the injury is one that the State if it could, would likely attempt to address through its sovereign lawmaking powers.” *Id.*

5. While the State of Oklahoma’s authority and standing to bring this lawsuit derives from Oklahoma’s public nuisance statutes, the State has clearly articulated (to the extent required) the kind of quasi-sovereign interest contemplated for a *parens patriae* action: the protection of “the health and well-being—both physical and economic—of its residents.” *Id.*

6. In Oklahoma, nuisance law is defined by statute. Title 50, Section 1, defines a nuisance as follows:

A nuisance consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either:

First. Annoys, injures or endangers the comfort, repose, health, or safety of others; or

Second. Offends decency; or

Third. Unlawfully interferes with, obstructs or tends to obstruct, or renders dangerous for passage, any lake or navigable river, stream, canal or basin, or any public park, square, street or highway; or

Fourth. In any way renders other persons insecure in life, or in the use of property, provided, this section shall not apply to preexisting agricultural activities.⁸⁹

A public nuisance “is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal.”⁹⁰

⁸⁹ 50 O.S. § 1.

⁹⁰ 50 O.S. § 2.

7. Based on the evidence presented and the facts found above, it is clear that Defendants engaged in a decades-long campaign, built on the aggressive dissemination of deceptive marketing and misinformation, to rapidly and dramatically expand the market for opioids, that the campaign worked, and that it did so to the immense and ongoing detriment of the State of Oklahoma.

8. According to the laws of this State, Defendants, therefore, are responsible for causing a public nuisance. As discussed below, Oklahoma law describes a nuisance as an injurious condition created as a result of Defendants acts or omissions. The public nuisance here is the opioid crisis existing in the State of Oklahoma, which consists of, among other things, an artificially inflated demand for prescription opioids, an oversupply of prescription opioids, the overprescribing of prescription opioids, and the pervasive misinformation regarding the health risks and purported benefits of opioids; as well as the public health and societal conditions arising from that inflated demand, oversupply and misinformation including, but not limited to: opioid use disorder; accidental non-fatal and fatal opioid overdoses; neonatal-abstinence-syndrome births; youth misuse of prescription opioids; child removals within the child welfare system due to parental opioid use or death; prescribing patterns caused by misinformation about the health risks and purported benefits of opioids that expose patients to an unjustified risk of addiction, overdose, or death; and diversion of prescription opioids and related criminality. Thus, from this point forward, when I refer to “the crisis,” “the opioid crisis,” or “Oklahoma’s opioid crisis,” I am referring to the public nuisance Defendants caused.

9. Further, based on the established principles of law and equity in this State, Defendants should be compelled to abate that nuisance.

A. The State has Proven a Claim for Public Nuisance

1. Oklahoma’s Nuisance Law Extends Beyond the Regulation of Real Property

10. As a threshold matter, Defendants have argued their conduct in marketing opioid drugs is beyond the reach of Oklahoma’s public nuisance law. Defendants base their argument on the notion that Oklahoma’s nuisance statute “regulates real property—not product sales.”⁹¹ Defendants are wrong. Oklahoma’s nuisance law plainly applies beyond the regulation of property and, as such, applies to the circumstances at issue here.

11. Pursuant to the Supreme Court’s instruction, analysis of Oklahoma’s nuisance statute begins with its text. *See Hall v. Galmor*, 2018 OK 59, ¶ 45, 427 P.3d 1052, 1070; *Rogers v. QuickTrip Corp.*, 2010 OK 3, ¶ 11, 230 P.3d 853 (“The fundamental rule of statutory construction is to ascertain and give effect to legislative intent. That intent is first divined from the language of a statute.”). That text, as discussed above, provides:

A nuisance consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either:

First. Annoys, injures or endangers the comfort, repose, health, or safety of others; or

Second. Offends decency; or

Third. Unlawfully interferes with, obstructs or tends to obstruct, or renders dangerous for passage, any lake or navigable river, stream, canal or basin, or any public park, square, street or highway; or

⁹¹ Defs.’ Trial Brief at 60.

Fourth. In any way renders other persons insecure in life, or in the use of property, provided, this section shall not apply to preexisting agricultural activities.⁹²

The statute in no way limits its application to conduct involving property or the impact upon property.

12. First, as to the conduct, the plain text does not limit public nuisances to those that affect property. Unlike other states' statutes that limit nuisances to the "habitual use or the threatened or contemplated habitual use of *any place*,"⁹³ Oklahoma's statute simply says "unlawfully doing an act, or omitting to perform a duty." There is nothing in this text that suggests an actionable nuisance requires the use of or a connection to real or personal property. See *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. 160, 161 ("Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be *any act* which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property." (emphasis added)); see also *Hall v. Galmor*, 2018 OK 59, ¶ 45, 427 P.3d at 1070 ("Our task is to determine the ordinary meaning of the words that the Legislature chose in the provisions of law at issue."); *Cox v. State ex rel. Oklahoma Dep't of Human Servs.*, 2004 OK 17, ¶ 26, 87 P.3d 607, 617 ("This Court does not read exceptions into a statute nor may we impose requirements not mandated by the Legislature.").

13. Second, as to the impact, the statute plainly goes beyond property. The statute is designed to address wrongs that threaten "comfort, repose, health, or safety";

⁹² 50 O.S. § 1.

⁹³ Tex. Civ. Prac. & Rem. Code § 125.021 (1995) (repealed 2003).

wrongs that “offend[] decency”; and wrongs that “render persons insecure in life”—*in addition* to wrongs that interfere with the use of “property.” Indeed, the fact that the Oklahoma Legislature explicitly included the word “property” and listed specific examples of land in the Third and Fourth subparts is proof that the Legislature knew how to invoke notions of property when it intended. The fact that the Legislature did not include those words in the First, Second, or preliminary parts of this statute is proof that the Legislature did not intend to limit the statute’s application to property disputes. See *In re 2005 Tax Assessment of Real Prop.*, 2008 OK 7, ¶ 13, 187 P.3d 196 (“Where a word or phrase is absent from a statute, we must presume that its absence is intentional.”); see also *Russello v. United States*, 464 U.S. 16, 23 (1983) (“Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion.” (internal marks and citation omitted)).

14. Recognizing that the text of Oklahoma’s nuisance statute is “broadly worded,”⁹⁴ Defendants argue that the Oklahoma Supreme Court has read-in a property-based limitation in its cases interpreting that law.⁹⁵ I find no such limitation in those cases. Defendants’ argument relies heavily on a single sentence from *Briscoe v. Harper Oil Co.*, which involved a private-nuisance claim of harm to the plaintiffs’ farmland. In this

⁹⁴ Defs.’ Trial Br. at 61.

⁹⁵ In addition to being divorced for the text of Oklahoma’s public nuisance statute, Defendants’ suggestion runs counter to the Restatement 2d of Torts § 821B, cmt. h., which notes that “a public nuisance does not necessarily involve interference with use and enjoyment of land.”

property-oriented nuisance case, the Court stated: “[Nuisance] is a class of wrongs which arises from an unreasonable, unwarranted, or unlawful use by a person or entity of property lawfully possessed, but which works an obstruction or injury to the right of another.” 1985 OK 43, ¶ 9, 702 P.2d 33, 36. However, the sentences immediately preceding that statement make clear:

Nuisance, as defined at 50 O.S. 1981 § 1, consists in unlawfully doing an act, or omitting to perform a duty, which act or omission annoys, injures or endangers the comfort, repose, health or safety of others; or, in any way renders other persons insecure in life, or in the use of property. Thus, the term “nuisance” signifies in law such a use of property *or such a course of conduct* irrespective of actual trespass against others, or of malicious or actual criminal intent, which transgresses the just restrictions upon use *or conduct* which the proximity of other persons *or* property imposes.⁹⁶

This case explicitly recognizes that a nuisance can occur from the “use of property *or* a course of conduct.”

15. I similarly find no such limitation from the other examples of nuisances Defendants cite. Those cases simply show that a nuisance can “arise[] where a person uses his own property in such a manner as to cause injury to the property of another.” *Fairlawn Cemetery Ass’n v. First Presbyterian Church, U.S.A. of Okla. City*, 1972 OK 66, ¶ 14, 496 P.2d 1185, 1187 (distinguishing the use of property that constitutes a nuisance from the use of property that constitutes a trespass); *see also McCormick v. Halliburton Co.*, No. 11-1272-M, 2014 WL 1328352, at *3 (W.D. Okla. Mar. 31, 2014) (“It is clear under Oklahoma law that a nuisance claim *may* be stated based upon wrongful interference with the use or enjoyment of a person’s rights or interest in land.” (emphasis added)). But I find no holding

⁹⁶ *Id.* (emphasis added).

from cases cited by Defendants involving property-oriented nuisances that forecloses an action for nuisance based on the many other types of conduct contemplated or the kinds of interests protected under Oklahoma's nuisance statute. *See, e.g., Laubenstein v. BoDe Tower, L.L.C.*, 2016 OK 118, ¶10, 392 P.3d 706, 709 (affirming that an actionable nuisance must "substantially interfere with the ordinary comforts of human existence" and will not lie where the injury is purely to the "aesthetic taste of the aggrieved party"); *Nichols v. Mid-Continent Pipe Line Co.*, 1996 OK 118, ¶¶ 8-11, 933 P.2d 727 (holding that common law private nuisance "allow[s] a claimant "to recover for *personal harm*, inconvenience and annoyance incidental to another's interference with the possessory interest in land"); *Morain v. City of Norman*, 1993 OK 149, ¶ 14, 863 P.2d 1246 (holding, on grounds including the OGTCA, that a city was "not liable for nuisance because it did not commit any acts or neglect any duties which created or permitted a nuisance," and noting that "no evidence was presented to show that City constructed any of the drainage channels of which the plaintiffs complain"); *Dobbs v. City of Durant*, 1949 OK 72, ¶ 5, 206 P.2d 180, 182 ("No principle is better settled than that where a business is conducted in such a manner as to interfere with the reasonable and comfortable enjoyment by other of their property, or which occasions material injury to the property, a wrong is done to the neighboring owners for which an action will lie, although the business may be a lawful one and one useful to the public and although the best and most approved methods may be used in the conduct and management of the business."); *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. 160, 161 ("Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be *any act* which annoys, injures, or endangers the comfort, repose, health, or

safety of others, or in any way renders other persons insecure in life or in the use of property.” (emphasis added)). Rather, I find that these cases demonstrate Oklahoma courts have faithfully applied those portions of the nuisance statute that relate to “the use of property.” I do not find these cases require any less respect for those parts of the statute protecting “comfort, repose, health . . . safety . . . decency . . . [and] life.” 50 O.S. § 1.

16. Indeed, Supreme Court precedent clearly supports the conclusion that Oklahoma’s nuisance law extends beyond the regulation of real property and encompasses the corporate activity complained of here. That support includes the statements of the Supreme Court acknowledging the breadth of Oklahoma’s nuisance law:

- “Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be *any act* which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property.” *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. at 161.
- “Nuisance, as defined at 50 O.S. 1981 § 1, consists in unlawfully doing an act, or omitting to perform a duty, which act or omission annoys, injures or endangers the comfort, repose, health or safety of others; or, in any way renders other persons insecure in life, or in the use of property. Thus, the term “nuisance” signifies in law such a use of property *or such a course of conduct* irrespective of actual trespass against others, or of malicious or actual criminal intent, which transgresses the just restrictions upon use *or conduct* which the proximity of other persons *or* property imposes. *Briscoe*, 1985 OK 43, ¶ 9, 702 P.2d 33 at 36.

17. And that support includes examples of nuisances like that in *Reaves v. Territory*, 1903 OK 92, 74 P. 951, which show Oklahoma’s nuisance law has been historically aimed at policing the kinds of business conduct at issue here. In that case, a county attorney brought an action on behalf of the Territory to abate a nuisance that had arisen from the operation of a theatre in Guthrie. *Id.* ¶1. The district court held a bench

trial, found in favor of the Territory, and ordered the nuisance be abated by injunction. *Id.* In affirming that decision, the Supreme Court held that nuisance liability was properly imposed on a business licensed to sell a product when the “manner of running the business, the permitting of unlawful practices and violations of law, and the obligation to the public” created a nuisance. *Id.* at ¶27 (“It is not the sale of intoxicating liquors in a lawful manner which is authorized by their license, nor the conducting of a theatre in a lawful and peaceful manner, that is complained of, but it is the manner of running the business, the permitting of unlawful practices and violations of law, and the obligation to the public, that are complained of; therefore a license or licenses to operate and engage in a business so long as conducted in a lawful manner would not protect them in maintaining a public nuisance, which is in violation of the laws of the territory.”). And the Supreme Court was explicit in *Reaves* that “*no claim of damages to property rights*” existed. *Id.* at ¶29. Rather, *Reaves* was brought “only by reason of the injury to good morals and public decency, to refuse to enforce which rights would be unquestionably against public policy.” *Id.* The nuisance law in place in *Reaves* is the same law in force today. *Compare id.* ¶ 20; with 50 O.S. § 1. That law is an explicit embodiment of Oklahoma’s public policy—duly enacted by the People of this State. Just as in *Reaves*, to refuse to protect the public rights at stake in this case would “be unquestionably against [that] public policy.” Indeed, as both the Oklahoma and U.S. Supreme Courts have declared: “The suppression of nuisances injurious to public health and morals is among the most important duties of government.” *Id.* at ¶ 25 (quoting *Phalen v. Virginia*, 49 U.S. 163, 168 (1850)).

18. The historical precursors to Oklahoma’s law and similar law in other jurisdictions also support this conclusion. *Phalen v. Virginia*, for example, the U.S. Supreme Court case cited in *Reaves*, describes the selling of lottery tickets as a nuisance and points specifically to the fact that such an act is not “confined to a few persons and places, but . . . infests the whole community.” 49 U.S. 163, 168 (1850). That a seminal Oklahoma nuisance decision, *Reaves*, relies on *Phalen*—a decision having nothing to do with property and everything to do with the sale of a product—is enough to dispel Defendants’ “property argument” entirely.

19. But even more support exists. For example, in the U.S. Supreme Court’s *Fertilizing Co.* decision quoted above, the nuisance complained of was the transportation of foul-smelling “offal” through a village. *Id.* at 664-65. And, in response to a challenge to the village’s power to declare such acts a nuisance, the Supreme Court explained the State’s police power to address and remedy nuisances “extends to the entire property *and business* within their local jurisdiction. *Both* are subject to it in all proper cases. . . . To regulate and abate nuisances is one of its ordinary functions. *The adjudged cases showing its exercise where corporate franchises were involved are numerous.*” *Id.* at 667 (emphasis added).

20. There also is the California lead-paint case, *California v. ConAgra Grocery Products Co.*, 227 Cal Rptr. 3d 499 (Cal. App. 2017), *review denied* 2018 Cal. LEXIS 1277 (Cal., Feb. 14, 2018), *cert denied* *ConAgra Grocery Prods. v. California*, 139 S. Ct. 377 (U.S. Oct. 15, 2018). In that case, California held a group of lead paint manufacturers liable for the epidemic of childhood lead poisoning based on their “affirmative[]

promot[ion of] lead paint for interior residential use while knowing of the public health hazard that such use would create.” *Id.* at 536. Indeed, that case mirrors this one in many crucial respects: nuisance liability for promotion of a product; the use of third-party groups to generate and spread those misleading and deceptive messages; joint and several liability; and the creation of an abatement fund to remedy a public health crisis. And, the defendants in that case made almost identical preemption, First Amendment and Due Process arguments. That case was affirmed by the California Court of Appeals, not overturned by the California Supreme Court and the United States Supreme Court refused to grant *certiorari*. This case is persuasive given the similarity of California’s nuisance statute to Oklahoma’s.⁹⁷

⁹⁷ Compare Cal Civ. Code §§ 3470-3480 (“Anything which is injurious to health, including but not limited to the illegal sale of controlled substances, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin, or any public park, square, street, or highway, is a nuisance. A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.”); with 50 O.S. §§ 1-2 (“A nuisance consists in unlawfully doing an act, or omitting to perform a duty, which act or omission either: First. Annoys, injures or endangers the comfort, repose, health, or safety of others; or Second. Offends decency; or Third. Unlawfully interferes with, obstructs or tends to obstruct, or renders dangerous for passage, any lake or navigable river, stream, canal, or basin, or any public park, square, street or highway; or Fourth. In any way renders other persons insecure in life, or in the use or property, provided, this section shall not apply to preexisting agricultural activities. A public nuisance is one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon the individuals may be unequal.”); see also *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. at 161 (“Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be any act which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property.” (emphasis added)). The Court is aware that a district judge in North Dakota, presiding over a case brought by that state against Purdue under North Dakota’s public nuisance law, dismissed the case prior to the discovery of any evidence at the pleading stage. See *North Dakota ex rel. Stenehjem v. Purdue Pharma L.P.*, No. 08-2018-cv-01300 (N.D. D.Ct. May 10, 2019). Unlike the North Dakota court, which chose not to allow the

21. And there is support in what the Legislature has declared to be a nuisance *per se*. This is so because the list includes things like: (1) “The transportation of unlawful oil or unlawful gas,” 74 O.S. § 152.8; (2) “Every lottery,” 21 O.S. § 1052; (3) “Every slot machine and every punch board,” 21 O.S. § 972; and (4) “Failure to comply with the provisions of the Dog and Cat Sterilization Act,” 4 O.S. § 499.10. That none of these involve the regulation of or harm to real property is proof that the Legislature understands and intends for the concept of nuisance to extend beyond simply matters involving real property.

22. “Within constitutional limitations the Legislature has the power to declare what shall constitute a nuisance; and in the exercise of that power it is not restricted to declaring only such things a nuisance as were so at common law or are so *per se*.” *In re Jones*, 4 OK CRIM 74, 77-78 (1910). Through the enactment of 50 O.S. § 1, the Legislature has exercised that power, and that it has done so with language that plainly

plaintiff to conduct discovery and chose not to review a complete factual record, this Court has the benefit of a comprehensive and fully-developed evidentiary record; therefore, I do not find that court’s decision on a motion to dismiss persuasive or even relevant to the task at hand here. Additionally, the Court notes that at least nine courts have found public nuisance claims against opioid manufacturers actionable. *See State v. Purdue Pharma, L.P.*, No. 3AN-17-09966CI, 2018 WL 4468439, at *4 (Alaska Super. Ct. July 12, 2018); *State ex rel. Morrissey v. AmerisourceBergen Drug Corp.*, No. 12-C-141, 2014 WL 12814021, at *10 (W. Va. Cir. Ct. Dec. 12, 2014); *see also Commonwealth ex rel. Beshear v. Endo Health Sols. Inc.*, No. 17-CI-1147, 2018 WL 3635765, at *6 (Ky. Cir. Ct. July 10, 2018); *State v. Purdue Pharma Inc.*, No. 217-2017-CV-00402, 2018 WL 4566129, at *13-14 (N.H. Super. Ct. Sept. 18, 2018); *In re Opioid Litig.*, No. 400000/2017, 2018 WL 3115102, at *21-22 (N.Y. Sup. Ct. June 18, 2018); *State ex rel. DeWine v. Purdue Pharma L.P.*, No. 17 CI 261, 2018 WL 4080052, at *4 (Ohio Ct. Com. Pl. Aug. 22, 2018); *State v. Purdue Pharma L.P.*, No. 17-2-25505-0 SEA, slip op. at 3 (Wash. Super. Ct. May 14, 2018); *State v. Purdue Pharma L.P.*, No. 1-173-18, slip. op. 8-12 (Tenn. Cir. Ct. Feb. 22, 2019); *In re Nat’l Prescription Opiate Litig.*, No. 1:17-md-2804, 2018 WL 6628898, at *19 (N.D. Ohio Dec. 19, 2018) (applying Ohio law).

reaches beyond the regulation of real property. To conclude otherwise, as Defendants request, would require this court to re-write that solemn act and usurp that power from the Legislature. That I cannot and will not do. *See Wylie v. Chesser*, 2007 OK 81, ¶ 19, 173 P.3d 64, 71 (“Put simply, when called on to interpret a statute or ordinance a court’s function given our tripartite system of government is to interpret or construe the applicable provision **in an effort** to expose the legislative will or intent and apply it to the applicable fact situation then extant, not to **itself** legislate or draft a law nor make policy decisions concerning the wisdom of what the legislative branch has enacted.”).

23. However, and in the alternative, in the event Oklahoma’s nuisance law does require the use of property, I also find that the State has sufficiently shown that Defendants pervasively, systemically and substantially used real and personal property, private and public, as well as the public roads, buildings and land of the State of Oklahoma, to create this nuisance.

24. The State presented substantial evidence—which Defendants did not attempt to dispute—that Defendants’ sales representatives were trained in their Oklahoma homes how to spread Defendants’ marketing messages (*see, e.g.*, Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 44:13-46:17, 51:7-9); they conducted their deceptive marketing and sales efforts in doctors’ offices, hospitals, restaurants, and other venues (*see, e.g.*, FOF § F.4 (providing representative examples of Defendants’ messages delivered in Oklahoma); S-2481 – S-2492; Trial Tr. (6/13/19 a.m., Kolodny) at 92:13-25); they used company cars traveling on State and county roads to disseminate those misleading messages (*see, e.g.*, Trial Tr. (7/2/19 p.m., Diesselhorst) at 168:10-170:4); Defendants paid speakers to deliver

Defendants' messages to doctors in their Oklahoma offices (Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 52:20-53:3, 55:17-20, 62:12-22; Trial Tr. (7/2/19 p.m., Diesselhorst) at 168:10-170:4); S-3080); and Defendants sent their messages into the homes of thousands of Oklahomans via computers, smart phones or other devices (*see, e.g.*, S-2358; S-1073; S-0974; S-0954; S-1239; Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 137:14-139:04; Trial Tr. (6/3/19 a.m., J&J: Deem-Eshleman) at 90:17-91:17, 102:23-103:8) Ct. Ex. 0092 (Mashett) at 302:5-304:11), all of which involve the use of property, real and personal, to create and exacerbate the public nuisance.

25. Further, the impact of Defendants' conduct has caused injury to property, and interfered with Oklahomans' use and enjoyment of property. The consequences of Defendants' conduct continues to be felt in homes, hospitals, parks, playgrounds, public buildings, schools, roads, and many other public and private venues in Oklahoma. *See, e.g.*, FOF §§ G, I; *see also, e.g.*, Trial Tr. (6/25/19 a.m., Commissioner White) at 107:2-108:3; Trial Tr. (6/13/19 p.m., Kolodny) at 20:17-22.

26. Having argued for an atextual property element in Oklahoma's nuisance statute, Defendants also contend that these ties to property are insufficient to constitute an actionable nuisance under their definition; according to Defendants, if this is enough, then any use of property could serve as a basis for nuisance liability. This exposes another flaw in Defendants' property theory. Even putting aside that the Oklahoma Supreme Court has held that "*any act*" that produces the kind of injurious condition listed in 50 O.S. § 1 can

serve as a basis for liability,⁹⁸ Defendants' argument misses the forest for the trees. By trying to isolate and minimize their property-based activities, Defendants ignore the pervasive nature of this nuisance. Indeed, when Defendants argue, for example, that Oklahoma's nuisance law is better fit to "deal with menaces such as keeping a large number of cats on . . . residential property"⁹⁹ than the menace produced by a sales force sent to proliferate the supply of dangerous narcotics in homes across this state, Defendants reveal the real crux of their argument: it is not about property; it is about scope.

27. Defendants' argument seeks to limit nuisance law to only those nuisances that can be traced to a precise geographic location—a single residence or a single storefront. According to Defendants' theory, an actionable public nuisance lies when a person lets 40 cats roam on her residence, annoying the comfort and repose of her neighbors; but not so where that person unleashes 150,000 cats in such a manner that wreaks havoc across the entire state. That sort of limitation, however, is antithetical to the very concept of a public nuisance. A public nuisance exists precisely because its effects are felt by "an entire community or neighborhood." 50 O.S. § 2; *Reaves v. Territory*, 1903 OK 92, ¶ 17, 74 P. at 953 ("The difference between a public nuisance and a private nuisance is that one affects the people at large and the other simply the individual." (quoting *In re Debs*, 158 U.S. 564, 592 (1895))). And just like in the *Phalen* case from the U.S. Supreme

⁹⁸ *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. at 161 ("Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be *any act* which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property.").

⁹⁹ See Defs. Mtn. for Judgment at 13-14 (quoting *Boudinot v. State ex rel. Cannon*, 1959 OK 97, ¶ 16, 340 P.2d 268, 269).

Court, what makes this nuisance particularly egregious is that it is not “confined to a few persons and places, but . . . infests the whole community.” 49 U.S. 163, 168 (1850). The law should not become less apt to deal with a wrong simply because the wrong affects many people. I will not write-in a limitation to Oklahoma’s nuisance statute that makes it harder to address nuisances the larger they become. The Legislature has had decades to limit the statute in this or any other manner but has chosen not to do so.

28. Accordingly, I conclude that Oklahoma’s nuisance law does not require the use of property to establish an actionable nuisance; but, even if it did, I find that Defendants’ use of property here has sufficiently established such an element.

2. *The Public Nuisance Elements*

a. The Act and/or Omission

29. The first element of Oklahoma’s nuisance law requires Defendants to have “unlawfully d[one] an act, or omit[ed] to perform a duty.” However, that law does *not* require that the challenged act be *per se* unlawful. Rather, Oklahoma nuisance law has long recognized that when an otherwise lawful act is done “in such a manner as to constitute a private and public nuisance, causing substantial injury to comfort, health, or property, a court is authorized to enjoin and abate such nuisance.” *Crushed Stone Co. v. Moore*, 1962 OK 65, ¶ 0, 369 P.2d 811. *Accord* *Briscoe v. Harper Oil Co.*, 1985 OK 43, ¶ 10, 702 P.2d 33, 36 (“The fact that a person or corporation has authority to do certain acts does not give the right to do such acts in a way constituting an unnecessary interference with the rights of others. A license, permit or franchise to do a certain act cannot protect the licensee who abuses the privilege by erecting or maintaining a nuisance.”); *Winningham v. Rice*, 1955

OK 108, ¶ 7, 282 P.2d 742, 744 (“Defendant’s salvage yard business, though of itself lawful, was admittedly adjacent to a nice residential district and plaintiffs’ evidence, though conflicting with defendant’s evidence on the issues in some respects, substantiated their allegations as to the existence of a nuisance causing substantial injury to the health, comfort and property of the adjoining property owners.”); *Reaves v. Territory*, 1903 OK 82, ¶ 27, 74 P. 951 (“[a] license to operate and engage in a business so long as conducted in a lawful manner would not protect them in maintaining a public nuisance, which is in violation of the law of the territory.”).

30. Indeed, the Oklahoma Supreme Court has made clear that nuisance liability does not even require negligence:

While evil intent, or negligence importing a greater or less degree of moral blame may and ordinarily does accompany the commission of a nuisance, it cannot be said that either is an essential element of the offence.

Oklahoma City v. West, 1931 OK 693, ¶ 15, 7 P.2d 888, 893; *accord Cities Service Oil Co. v. Merritt*, 1958 OK 185, ¶ 30, 332 P.2d 677, 684 (“Nuisance and negligence are distinct torts. As a general rule, liability for nuisance does not depend upon the question of negligence . . . and may exist although there was not negligence. Hence, negligence is not an essential or material element of a cause of action for nuisance and need not be proved.”). Accordingly, in Oklahoma, a nuisance can be “any act which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property.” *Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. at 161.

31. The challenged conduct here is Defendants’ misleading marketing and promotion of opioids. The State claims that Defendants engaged in a false, misleading,

and deceptive marketing campaign designed to convince Oklahoma doctors, patients, and the public at large that opioids were safe and effective for the long-term treatment of chronic, non-malignant pain. The evidence is clear that Defendants did, in fact, engage in such false and misleading marketing, and the law is clear that such conduct qualifies as the kind of act or omission capable of sustaining liability under Oklahoma's nuisance law.

32. Defendants promoted their specific opioids using misleading marketing. Among other things, they sent sales representatives into Oklahoma Doctors' offices to deliver misleading messages, they disseminated misleading pamphlets, coupons, and other printed materials for patients and doctors, and they misleadingly advertised their drugs over the internet—all of which occurred here in Oklahoma. *See* FOF §§ F.2 – F.4. But Defendants also pervasively promoted the use of opioids generally. This “unbranded” marketing included things like print materials that misleadingly touted the safety and efficacy of opioids as a class of pain medication, as well as online materials that promoted opioids generally. Defendants used and viewed medical education events (including Speakers Bureau sessions and CME opportunities) as promotional endeavors that Defendants leveraged to increase the market for opioids through misleading messaging. *See* FOF §§ F.2 – F.4.

33. Defendants' marketing was false, misleading, and deceptive.

34. According to Defendants' own internal training documents, Defendants concede that “False and Misleading” promotion includes at least the following types of conduct:

- Broadening of product indication;

- Data taken out of context;
- Minimization of safety issues;
- Omission of material information;
- Comparative efficacy or safety claims without substantial evidence; and
- Overstatements of efficacy or safety.¹⁰⁰

As discussed in Sections F.2 – F.4 in the Findings of Fact above, the preponderance of the evidence demonstrated that Defendants engaged in promotional activities that violated each one of these rules.

35. Defendants were warned repeatedly that their promotional statements were false and misleading—from both internal scientific advisors and the FDA. *See* FOF §§ F.3, F.4.

36. In approximately 1994, Defendants anticipated “demand” for oxycodone in the U.S. and promptly embarked on a research project that resulted in the mutant Norman Poppy that “enabled the growth” of OxyContin in the U.S. *See* S-0006; Trial Tr. (5/29/19 p.m., J&J: Deem-Eshleman) at 59:19-24; Trial Tr. (6/11/19 a.m., Kolodny) at 113:2-13. In 1997, after seeing the success that Defendants’ partner, Purdue, had in just a single year of aggressively marketing OxyContin for chronic non-cancer pain, Defendants re-launched their fentanyl-based Duragesic patch for the chronic, non-cancer market as well. S-2355; *see also* Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 78:07-81:05; Trial Tr. (6/3/19 p.m., J&J: Deem-Eshleman) at 25:01-03; Trial Tr. (6/13/19 p.m., Kolodny) at 16:15-25. That same year, Defendants substantially increased their funding for the organizations that issued the “Consensus Statement,” a document Defendants actively

¹⁰⁰ S-2376 at 20.

promoted for years thereafter to push their message that chronic pain was undertreated and liberal prescribing of opioids was the solution. *See* S-1349; Trial Tr. (6/11/19 p.m., Kolodny) at 47:05-17. The purpose of this campaign was and remained clear: “Expand DURAGESIC Use in Non-Malignant Pain” and “convince physicians that DURAGESIC is effective and safe to use in moderate to severe chronic pain such as back pain and degenerative joint disease like osteoarthritis.” S-0510; *see also, e.g.*, S-2375; S-2358; S-1358.

37. In 1998, within a year of Defendants’ expansion into chronic, non-cancer pain, the FDA notified Defendants that the marketing messages they were using were false and misleading. *See* S-4128. Defendants were overstating the efficacy of Duragesic without the evidence to support their claims and minimizing the risks associated with their drug by omitting material information about these crucial dangers. S-4128. Moreover, the FDA made clear that Defendants’ marketing materials deceptively broadened the product indication for their drug by making claims that contradicted the drug’s label, including by promoting Duragesic as “recommended for use in chronic pain” broadly, when the label stated that the drug was indicated for a much narrower purpose: “chronic pain in patients who require continuous opioid analgesia for pain that cannot be managed by lesser means...” S-4128 at 2.

38. In 2001, Defendants’ board of KOLs and consultants “resounding[ly] and unanimous[ly]” advised Defendants they should not market Duragesic by “[o]verpromising” about the drug’s “abuse potential.” *See* S-0035; *see also* S-1703. Defendants were advised that no data existed that could support these claims, that the data Defendants

pointed to (DAWN data) was incapable of supporting these claims, that aggressively marketed OxyContin on this very same basis was what had gotten Purdue “in trouble,” that minimizing the risk of abuse of Duragesic was “dangerous” due to its lethal nature, and that an increase of Duragesic sales would surely cause an increase in abuse of and addiction to the drug—as has consistently occurred throughout history when a civilization experienced a sudden increase in its supply of opioids. S-0035. The **“Conclusion: Do not include the abuse message. Do not sell opioids on the abuse issue.”** S-0035.

39. But Defendants ignored those warnings; so again, in 2004, the FDA delivered nearly identical messages to Defendants, explaining that Defendants’ marketing materials contained “false or misleading claims about the abuse potential and other risks of [Duragesic], and include[d] unsubstantiated effectiveness claims for Duragesic.” S-0038 at 1. FDA notified Defendants of the danger inherent in persistently downplaying of the risk of abuse with Duragesic, as these false messages could cause individuals to suffer “serious or life-threatening hypoventilation.” S-0038 at 1. Like Defendants’ advisory board had advised Defendants in 2001, the FDA warned Defendants that their use of DAWN data and the Milligan, Simpson and Allan studies was misleading and not based on any valid evidence.

40. Defendants ignored and defied these clear warnings from both the FDA and Defendants’ advisory board every step of the way. The reason was simple: Defendants sought to build a \$1 billion brand, and misleading marketing messages that created the false impression of a powerful drug that carried a low risk of addiction or abuse worked. *See, e.g.,* S-2359.

41. Defendants' misleading marketing had its intended effect, and opioid sales skyrocketed—along with opioid addiction and overdose death rates in Oklahoma. *See* FOF § G. As they did, Defendants doubled down with their unbranded efforts to eliminate “barriers” to liberal prescribing of opioids, like the fear of addiction, by actively promoting unsupported and dangerous concepts like “pseudoaddiction” in a misleading way. *See* FOF § F. Defendants continued to press their misleading marketing “hooks” that chronic pain was undertreated and the consequences of such undertreatment were dire. *See* FOF § F.2.

42. Defendants considered “[n]othing” to be “more important” to their success in selling opioids than their sales force and trained and instructed these sales representatives to deliver Defendants' false and misleading messages. *See* S-1358. Defendants did not train their sales representatives on addiction or the red flags that would indicate a potential pill mill. *See* Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 46:19-51:06; Trial Tr. (6/3/19 a.m., J&J: Deem-Eshleman) at 29:07-09; Trial Tr. (7/2/19 p.m., Diesselhorst) at 86:22-87:7, 170:6-172:6. Defendants did train the sales force to target high-opioid prescribers and use DAWN data and the Simpson, Allan and Milligan studies to overstate the efficacy and downplay the risks of opioids. *See* FOF §§ F.2 – F.4. Defendants further trained their sales representatives to “avoid the addiction ditch” and used a study from Defendants' number one KOL, Dr. Portenoy, to train the sales force there was only a 2.6% risk of addiction when using opioids—when in reality, no one at Defendants' organizations or anywhere else, then or now, knew the real rate of addiction. *See* S-1364; Trial Tr. (5/29/19 p.m., J&J: Deem-Eshleman) at 30:14-33:11; *see also* Trial Tr. (7/2/19 p.m., Diesselhorst) at 46:10-16; S-1162.

43. Defendants unleashed their sales force to deliver these deceptive sales messages in Oklahoma. The 35 boxes containing well over 100,000 call notes memorializing Defendants' visits to Oklahoma doctors are evidence themselves of the pervasive nature of Defendants' marketing campaign in this State. *See* S-2481 – S-2492. The content of these call notes, however, is undisputed proof that Defendants delivered these false, deceptive and misleading messages to sell their opioids here. Examples of this campaign in action are laid out in detail in Section F.4 of the Court's Findings of Fact above, and they demonstrate Defendants used the precise messages they knew were false, misleading and dangerous.

44. Defendants' false, misleading, and dangerous marketing campaigns have caused serious harm to public health and safety, including by exponentially increasing rates of addiction, overdose deaths, and Neonatal Abstinence Syndrome. *See* FOF §§ G, H.

45. The facts show Defendants engaged in false and misleading marketing of both their drugs and opioids generally, and the law makes clear that such conduct is more than enough to serve as the act or omission necessary to establish the first element of Oklahoma's public nuisance law. *See Epps v. Ellison*, 1921 OK 279, ¶ 3, 200 P. 160, 161 (“Section 4250, Rev. Laws 1910 [(former numbering for 50 O.S. § 1)] defines a nuisance to be *any act* which annoys, injures, or endangers the comfort, repose, health, or safety of others, or in any way renders other persons insecure in life or in the use of property.” (emphasis added)).

46. Furthermore, though not required in order to prove nuisance, these facts show that Defendants' tortious conduct here was wanton, willful and intentional. In Oklahoma,

a defendant's conduct is willful and wanton if the Defendant "was either aware, or did not care, that there was a substantial and unnecessary risk that its conduct would cause serious injury to others." OUII 9.17. The conduct "must have been unreasonable under the circumstances, and also there must have been a high probability that the conduct would cause serious harm to another person." *Id.* As the Supreme Court has explained:

The intent in willful and wanton misconduct is not an intent to cause the injury; it is an intent to do an act – or the failure to do an act – in reckless disregard of the consequences and under such circumstances that a reasonable man would know, or have reason to know, that such conduct would be likely to result in substantial harm to another.¹⁰¹

Conduct is intentional, meanwhile, where the defendant either "desired to cause injury to plaintiff or knew that such injury was substantially certain to result from [its] conduct." OUII 9.17.

47. Consider what they knew. First, Defendants knew that the significant influx of opioid products into a society has always precipitated exponential increases in the number of deaths and cases of addiction—a substantial harm substantially certain to result. Defendants should have learned this lesson from history, but they certainly learned it in 2001 when their internal scientific advisors warned them of that history. Second, Defendants knew as early as 1995, and no later than 1998, that marketing their drugs for "chronic pain" was a deceptive expansion of their product label's indication—an indication that has always included crucial limitations regarding the circumstances in which use of their drug was appropriate. Third, Defendants knew by at least 2001 that marketing a

¹⁰¹ *Graham v. Keuchel*, 1993 OK 6, ¶ 49, 847 P.2d 342.

Schedule II narcotic based on “low abuse potential” was deceptive. Fourth, Defendants knew in 2001 when the reports of abuse of OxyContin were circulating, in 2003 when the GAO report was published, in 2007 when Purdue pleaded guilty to felony misbranding of OxyContin, in 2011 when the CDC declared the opioid epidemic. Indeed, Defendants admit that by 2008 they knew that the increase in prescription opioids was fueling a public health problem. And, during all that time, they knew that no one knew what the true rate of addiction was—despite the fact that their top KOL, Dr. Portenoy, advised them to conduct high quality clinical studies to determine the rate of addiction. Defendants chose to never conduct or fund any such study. *See* FOF §§ F.3 – F.4.

48. Yet, in spite of all that knowledge, Defendants continued to misleadingly market their opioids contrary to their labels, contrary to their scientists’ advice, contrary to the FDA’s warnings, and contrary to the interests of the public they harmed. That is wanton. That is willful. And that is intentional.

49. Accordingly, based on the foregoing, I conclude (a) that Defendants engaged in false and misleading marketing of both their drugs and opioids generally; (b) this conduct is sufficient to serve as a basis for liability under Oklahoma’s nuisance statute; and (c), although not required to establish liability under Oklahoma nuisance law, I also conclude that Defendants actions were willful, wanton and intentional.

50. Finally, I reject Defendants’ argument that they lacked fair warning of the conduct prohibited by Oklahoma nuisance law and that imposing civil liability on these facts violates due process. Defendants’ argument is unfounded because their conduct subjects them to liability under Oklahoma’s longstanding law of nuisance. *See ConAgra,*

17 Cal. App. 5th at 166 (no due process problem where defendants’ “conduct was just as unlawful and tortious when they engaged in it as it is now because the creation of a public nuisance has been unlawful in California since the 1800s”).

i. Regulatory Approvals and Oklahoma’s “Safe Harbor” Statute

51. Defendants argue that their conduct in marketing opioids cannot form the basis for liability under Oklahoma’s nuisance law because those activities are authorized by law and thus fall within Oklahoma nuisance law’s “safe harbor” provision. By “safe harbor,” Defendants refer to 50 O.S. § 4, which states: “Nothing which is done or maintained under the express authority of a statute can be deemed a nuisance.” Defendants argue that, because certain FDA and DEA approvals allow them to sell their drugs without violating certain provisions of federal law, that conduct is “maintained under the express authority of a statute” and thus cannot “be deemed a nuisance.” But that is not the law.

52. As the Oklahoma Supreme Court explained in *Oklahoma City v. West*:

If the Legislature expressly authorizes an act which must inevitably result in public injury, what would otherwise be a nuisance may be said to be legalized; but if they authorize an erection which does not necessarily produce such a result, but such result flows from the manner of construction or operation, the legislative license is no defense. In order to justify a nuisance by legislative authority, it must be the natural and probable result of the act authorized, so that it may fairly be said to be covered by the legislation conferring the power.¹⁰²

Moreover, as the *Reaves* case discussed above demonstrates, nuisance liability is properly imposed on a business licensed to sell a product where the “manner of running the business,

¹⁰² 1931 OK 693, ¶ 14 (quoting *Village of Pine City v. Munch*, 42 Minn. 342, 345-46).

the permitting of unlawful practices and violations of law, and the obligation to the public” create a nuisance. 1903 OK 92, ¶27 (“It is not the sale of intoxicating liquors in a lawful manner which is authorized by their license, nor the conducting of a theatre in a lawful and peaceful manner, that is complained of, but it is the manner of running the business, the permitting of unlawful practices and violations of law, and the obligation to the public, that are complained of; therefore a license or licenses to operate and engage in a business so long as conducted in a lawful manner would not protect them in maintaining a public nuisance, which is in violation of the laws of the territory.”). This statutory “safe harbor” existed when both of those cases were decided. And, since then, Oklahoma has developed a long line of cases saying that an ostensibly lawful business becomes an actionable nuisance when it infringes on the health, safety and rights of others.¹⁰³ Accordingly, Defendants cannot avoid liability under 50 O.S. § 4 merely because they have received

¹⁰³ See *Briscoe v. Harper Oil Co.*, 1985 OK 43, ¶ 10, 702 P.2d 33, 36 (“The fact that a person or corporation has authority to do certain acts does not give the right to do such acts in a way constituting an unnecessary interference with the rights of others. *A license, permit or franchise to do a certain act cannot protect the licensee who abuses the privilege by erecting or maintaining a nuisance.*”) (emphasis added); *Winningham v. Rice*, 1955 OK 108, ¶ 7, 282 P.2d 742, 744 (“Defendant’s salvage yard business, *though of itself lawful*, was admittedly adjacent to a nice residential district and plaintiffs’ evidence, though conflicting with defendant’s evidence on the issues in some respects, substantiated their allegations as to the existence of a nuisance causing substantial injury to the health, comfort and property of the adjoining property owners.”) (emphasis added); *Crushed Stone Co. v. Moore*, 1962 OK 65, ¶ 0, 369 P.2d 811, 816 (“Where the facts show that a lawful business is being conducted in such a manner as to constitute a private and public nuisance, causing substantial injury to comfort, health, or property, a court is authorized to enjoin and abate such nuisance.”); *Dobbs v. City of Durant*, 1949 OK 72, ¶ 5, 206 P.2d 180, 182 (“No principal is better settled than that where a business is conducted in such a manner as to interfere with the reasonable and comfortable enjoyment by others of their property or which occasions material injury to the property, a wrong is done to the neighboring owners for which an action will lie *although the business may be a lawful one* and one useful to the public and although the best and most approved methods may be used in the conduct and management of the business.”) (emphasis added); *Champlin Refining Co. v. Dugan*, 1928 OK 322, ¶ 9, 270 P. 559, 561’.

certain federal approvals to sell these products. Nuisance liability hinges on the manner in which they operated their businesses and whether the injury they produced was an inevitable result of their activity.

53. As the facts above demonstrate, neither the manner in which Defendants operated their business nor the injurious conditions it created were necessitated by their federal approvals to sell these products. First, Defendants clearly promoted beyond their labels and engaged in false and misleading marketing, which no law authorized them to do. Nothing in the FDA or DEA approval processes requires Defendants to misinform and deceive the public. Those were decisions Defendants made later, in determining the manner in which to operate their ostensibly lawful businesses. And the fact that there was no crisis of OUD, overdose or death in the initial years that Duragesic existed proves that the nuisance at issue here was not a necessary result of conducting approved activities. Accordingly, just as in *Reaves*, it is not the fact that Defendants owned and operated their businesses that the State complains of; it is the manner in which they ran those businesses—“the permitting of unlawful practices and violations of law, and the obligation to the public”—that form the basis of the State’s action. Therefore, just as in *Reaves*, Defendants’ federal approvals to operate their business in a lawful way does not protect them.

(1). *FDA Regulation of Pharmaceutical Marketing*

54. Defendants have at various times asserted that either “impossibility preemption” or “obstacle preemption” forecloses the State’s public nuisance claim. The Court disagrees.

55. Under impossibility preemption, state law is preempted only where it is impossible for a private party to comply with both state and federal law. *Wyeth v. Levine*, 555 U.S. 555, 571, 573 (2009). Impossibility preemption is a “demanding defense.” *Id.* at 573. It requires a drug manufacturer to show that federal law “prohibited the drug manufacturer from adding any and all warnings to the drug label that would satisfy state law.” *Merck Sharp & Dohme Corp. v. Albrecht*, 139 S. Ct. 1668, 1678 (2019). The Supreme Court recently explained that, because federal law permits brand-name drug manufacturers to change their labels to warn about new safety information, “a drug manufacturer will not ordinarily be able to show that there is an actual conflict between state and federal law such that it was impossible to comply with both.” *Id.* at 1679. Preemption requires the manufacturer to show “that it fully informed the FDA of the justifications for the warning required by state law and that the FDA, in turn, informed the drug manufacturer that the FDA would not approve a change to the drug’s label to include that warning.” *Id.* at 1678. That standard is not met here.

56. The State has never claimed Defendants should not be able to market opioids for lawful use. The State has never claimed that Defendants needed to modify their labels. And the State has never claimed that Defendants cannot promote their drugs consistent with their FDA-approved labels. As the State made clear in its response to Defendants’ Motion to Dismiss approximately two years ago, this case has never been about any of those issues. That did not change at trial.

57. Rather, this trial addressed Defendants’ aggressive and deceptive marketing of opioids—contrary to and outside of FDA labels—that caused the deadly oversupply of

opioids in Oklahoma. For example, a piece of the evidence in this case was the FDA letters expressly warning Defendants that their marketing was false, misleading and outside the approved label.

58. Defendants argue that the State's theory is preempted because there is clear evidence the FDA would not have let them modify their medications' labels. But, because the State does not challenge the label warnings for Defendants' drugs, decisions by the FDA related to those warning labels cannot conflict with the State's claims.

59. However, even if the State were challenging the sufficiency of the FDA labels, which it made clear it did not seek to do—impossibility preemption still would not apply because Defendants have not provided clear evidence that (a) Defendants fully informed the FDA of the justifications for the warning it alleges would be required by the State's claim and that (b) the FDA, in turn, informed Defendants that the FDA would not approve a change to the drug's label to include that warning.

60. Defendants based their argument on the submission of the PROP Petition to the FDA in 2012—a petition that neither the State nor Defendants submitted to the FDA. However, the PROP Petition in 2012 and corresponding label changes it precipitated indicate that not even this would be sufficient to satisfy *Merck*. In 2012, in response to the PROP Petition and supporting materials, the FDA did require a label change for all ER/LA schedule II opioids. Specifically, the FDA required changes to the boxed warning to “give greater emphasis and prominence to the risks of misuse, abuse, NOWS, addiction, overdose, and death.” *See* J-1576 at 7. The FDA also required changes to the Indications and Usage section of the labeling by removing the “moderate to severe pain” language and

replacing it with pain “severe enough to require daily, around-the-clock, long-term opioid treatment, and for which alternative treatment options are inadequate.” See J-1576 at 7-8. Moreover, the FDA’s decision not to *mandate* further and additional label changes based on then-available data does not establish that it *prohibited* all further manufacturer-initiated changes, particularly as the available information evolved over time, including the additional studies requested by the FDA in the petition decision. Nevertheless, because the State is not and has never asserted a failure-to-warn claim based on the adequacy of Defendants’ warning labels, Defendants’ argument is misplaced.

61. Accordingly, there is no “impossibility” preemption here.

62. Obstacle preemption, meanwhile, exists “where ‘under the circumstances of [a] particular case, [the challenged state law] stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.’” *Crosby v. Nat’l Foreign Trade Council*, 530 U.S. 363, 372-73, 120 S. Ct. 2288, 147 L. Ed. 2d 352 (2000) (alterations in original) (quoting *Hines v. Davidowitz*, 312 U.S. 52, 67, 61 S. Ct. 399, 85 L. Ed. 581 (1941)). The Supreme Court has rejected obstacle preemption in context of the FDA and state tort law:

If Congress thought state-law suits posed an obstacle to its objectives, it surely would have enacted an express pre-emption provision at some point during the FDCA’s 70-year history. But despite its 1976 enactment of an express preemption provision for medical devices . . . Congress has not enacted such a provision for prescription drugs. See *Riegel v. Medtronic, Inc.*, 552 U.S., at 327 (2008) (“Congress could have applied the pre-emption clause to the entire FDCA. It did not do so, but instead wrote a pre-emption clause that applies only to medical devices.”). Its silence on the issue, coupled with its certain awareness of the prevalence of state tort litigation, is powerful evidence that Congress did not intend FDA oversight to be the exclusive means of ensuring drug safety and effectiveness. As Justice

O'Connor explained in her opinion for a unanimous Court: "The case for federal pre-emption is particularly weak where Congress has indicated its awareness of the operation of state law in a field of federal interest, and has nonetheless decided to stand by both concepts and to tolerate whatever tension there [is] between them." *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 166-167, 109 S.Ct. 971, 103 L.Ed.2d 118 (1989) (internal quotation marks omitted).

Wyeth, 555 U.S. at 574-575 (internal footnotes omitted). I reject it here as well.

63. Obstacle preemption does not exist in this case because the State's public nuisance claim seeks to address the harm caused by Defendants' marketing and promotion of opioids outside of and contrary to their FDA labels, complementing the FDA's purpose of ensuring drug safety and effectiveness rather than serving as an obstacle thereto. I further find that obstacle preemption does not apply because it has long been acknowledged that Congress did not intend FDA oversight to be the exclusive means of ensuring drug safety and effectiveness.

64. While not preclusive or dispositive, the letters Defendants received from the FDA warning them that certain marketing and promotional messages were false, misleading and broadened their product labels indicate that the State's suit here is not in conflict with or an obstacle to the federal law Defendants cite. *See e.g.*, S-0038; S-4128. The State remains empowered to remedy such false and misleading promotion according to its own laws.

(2). *Noramco and Tasmanian Alkaloids*

65. Defendants also argue the State should be barred from pointing to the conduct Johnson & Johnson's former subsidiaries, Noramco and Tasmanian Alkaloids. This is wrong for several reasons.

66. *Noramco and Tasmanian Alkaloids Status as Separate Entities*: Defendants argue that Noramco and Tasmanian Alkaloids are wholly separate entities from the named Defendants. Noramco and Tasmanian Alkaloids have not been named in this lawsuit. According to Defendants, the conduct of Noramco and Tasmanian Alkaloids is therefore irrelevant to the case, and Defendants cannot be held liable for any conduct of the subsidiaries. Below, I address in more detail the relevance of the conduct of Noramco and Tasmanian alkaloids as it pertains to this Court's Findings of Fact and Conclusions of Law. Before doing so, however, I must address Defendants' argument regarding the alleged separate nature of Noramco and Tasmanian Alkaloids.

67. Evidence was presented regarding the intertwined relationship between Defendants, Noramco and Tasmanian Alkaloids. To start, Defendant Johnson & Johnson originally purchased Noramco and Tasmanian Alkaloids to guarantee its own supply of codeine (an opioid) for its Tylenol with Codeine product. *See* S-0006 ("The company was purchased by Johnson & Johnson in 1982, who moved the codeine plant to the Wesbury site. Johnson & Johnson are manufacturers of the Tylenol range of pain medication, and purchase of Tasmanian Alkaloids was made to ensure a reliable source of raw materials."); Trial Tr. (6/11/19 a.m., Kolodny) at 108:13-17 ("That's my understanding as to why Johnson & Johnson purchased Tasmanian Alkaloids. They wanted to ensure a good supply of codeine."). Thus, Defendants' original purchase of Noramco and Tasmanian Alkaloids indicates the goal was to integrate with Defendants' existing business operations.

68. Next, Noramco and Tasmanian Alkaloids were considered to be part of Defendants' "pain management franchise." S-0340. In 2003, a VP of Noramco sent a

presentation to a Janssen employee with “a short presentation summarizing our involvement in the pain management franchise.” S-0340. The presentation includes an “organizational alignment” chart that depicts Johnson & Johnson at the top with Janssen and Noramco underneath and next to one another. *See* S-0340. Tasmanian Alkaloids and other Noramco entities are listed below Noramco. *See* S-0340. This structure reflects the significance of Noramco’s role in the pain management franchise, as it is placed directly alongside (and not underneath) Janssen. *See* S-0340. The “pain franchise” is how Defendants often referred to their pain products area (*see, e.g.*, S-2358) and Noramco and Tasmanian Alkaloids were part of it. The “pain franchise . . . was an important part of J&J’s business from the mid 1990s to after 2010.” *See* Ct. Ex. 92 (Mashett) at 75:01-11.

69. The development of the Norman Poppy itself shows the intertwined relationship between Noramco, Tasmanian Alkaloids and Defendants. The parties presented significant evidence regarding the Norman Poppy. The Norman Poppy is a “patented, high thebaine poppy” that was considered by Defendants as a “transformational technology that enabled the growth of oxycodone.” *See* S-0340. The Norman Poppy was developed primarily by Dr. AJ Fist who “was awarded a Johnson Medal” for this work. *See* S-0006; S-0340. The nature of the award is significant to show the intertwined relationship between the companies. Dr. Fist was not awarded a “Noramco Medal.” He was not awarded a “Tasmanian Alkaloids Medal.” He was awarded a “Johnson Medal.” *See* S-0340. Further, by Dr. Fist’s own account, the development of the Norman Poppy: “developed from discussions in Tasmanian Alkaloids and Johnson & Johnson Research, a

J&J Company based in Sydney.” S-0006 at 7. Thus, Defendants appear to have been directly involved in the development of the Norman Poppy.

70. The integration and operation of Noramco and Tasmanian Alkaloids further show the intertwined relationship. First, Noramco and Tasmanian Alkaloids were supposed to operate by the same Credo and Code of Conduct that govern Defendants, and which applies to the entire “Johnson & Johnson Family of Companies.” *See* S-1044; Ct. Ex. 220 (Martin) at 104:05-12. Second, Defendants shared employees with Noramco and Tasmanian alkaloids. *See, e.g.*, S-1048. One employee of Noramco testified: “yeah, the folks from Noramco were with Johnson & Johnson.” *See* Ct. Ex. 220 (Martin) at 9:17-18, 9:21-23. According to company documents, at the time of the sale of Noramco, the companies shared 28 full time employees. *See* S-1048. Further, employees held positions at multiple companies within the Johnson & Johnson Family of Companies simultaneously at times. *See* Trial Tr. (6/11/19 p.m., Kolodny) at 15:11-20 (“I’m aware of testimony to congress from Johnson & Johnson International’s vice president, who at the time that he testified before congress was the president of Noramco and who, in his testimony, stated that the managing direct of Tasmanian Alkaloids reported directly to him.”). Third, the companies also appear to have shared financial accounts, as Noramco “didn’t maintain its own separate accounts.” Ct. Ex. 220 (Martin) at 101:10-24. Finally, at the time Defendant Johnson & Johnson divested Noramco and Tasmanian Alkaloids, the proceeds from that divestiture went to the company Johnson & Johnson. *See* Trial Tr. (6/3/19 p.m., Deem-Eshleman) at 58:16-59:09.

71. While I do not find that the State is entitled to “pierce the corporate veil” as it pertains to Noramco and Tasmanian Alkaloids, based on the above-described evidence and facts, Noramco and Tasmanian Alkaloids do not appear to be as “separate and distinct” from Defendants as they have argued.

72. *Defendants’ Market Share Arguments Ignore Noramco and Tasmanian Alkaloids:* Regardless of whether the “corporate veil” is pierced, the role of Noramco and Tasmanian Alkaloids relates to Defendants’ arguments and evidence about their market share. To start, market share is neither relevant nor a defense to a nuisance claim or for liability in a joint and several liability case such as this one. However, Defendants appear to argue based on concepts of fairness or due process that they should not be held liable based on the market share of two of their branded products: Duragesic and Nucynta. This argument is not persuasive when viewed the context of Defendants’ complete market share with respect to the entire pain franchise.

73. First, Noramco and Tasmanian Alkaloids were the “#1 Supplier of Narcotic APIs in the United States” as of October 2015. *See* S-1048. Hydrocodone and oxycodone were pointed out by Defendants at trial as making up a much larger share of the opioid market than their fentanyl product Duragesic or their tapentadol product Nucynta. According to company documents, in 2015, Noramco and Tasmanian Alkaloids supplied: 65% of the U.S. oxycodone; 54% of the U.S. hydrocodone; 60% of the U.S. codeine; and 60% of the U.S. morphine. *See* S-1048. As demonstrated by the evidence regarding Noramco and Tasmanian Alkaloids, Defendants played a critical and outsized role in the opioid market—both at the pivotal moment when forces conspired to expand that market

into the treatment of chronic, non-malignant pain, and throughout the height of the epidemic that course of action sparked.

74. Second, Defendants' market share argument is limited to Schedule II opioids, rather than all opioids it manufactures. Defendants' pain franchise manufactured and marketed other opioid products including: Ultram, Ultram ER, Tylenol with Codeine and Tylox. *See, e.g.*, S-2358. Contrary to the low market share arguments made in Court, Defendants internal business documents refer to itself as a "Top 10 Company by LA/SA Opioid Sales (Generic & Brand)." *See* S-2358. Moreover, as the State showed, Defendants did not just market their branded drugs; they also marketed opioids as a class of medication. *See* FOF §§ D, F. This increased the opioid market as a whole, just as Defendants' brand-specific marketing increased their share of that market. *See id.*

75. Thus, any argument as to the fairness of holding Defendants liable based on their market share, must be viewed through the correct market share lens.

76. *Noramco and Tasmanian Alkaloids Further Explain Defendants' True Purpose*: By expanding the opioid market as a whole, Defendants stood to gain: as the pie got larger, their share got bigger. This issue was addressed early in the discovery phase of this case. On April 25, 2018, the Special Discovery Master found that "As a former subsidiary of Johnson & Johnson, Tasmanian Alkaloids manufactured the poppy-based opiate ingredient used in many of the United States marketed and distributed opioids. The J&J Defendants had a direct financial interest in the sale of the opioid products generally, not just limited to their own branded opioids. That places J&J Defendants in a position of having a financial interest in opioids generally and possible motive relevant to issues raised

in this case.” Apr. 25, 2018 Orders of Special Discovery Master. I agree and find that, after presentation of the evidence, Defendants did have a financial interest in opioids generally and sought to increase the sale of opioids generally through a campaign of unbranded marketing. “A rising tide lifts all ships.” Trial Tr. (6/10/19 p.m., Stone) at 39:12-24, 80:6-16, 158:6-11; *see also See, e.g.,* S-0353.

77. Defendants stood to gain on both ends. As the primary supplier of oxycodone and hydrocodone to the United States, Defendants enjoyed in the successes of products like OxyContin, Vicodin, and Lortab, as well as in the growth of every generic medication they supplied. *See* S-1048 (“Noramco has long-term agreements and/or majority controlled substance share with all 7 of the top US generic companies.”). Thus, in considering why Defendants would have been so aggressive in both their branded and unbranded marketing of opioids, the evidence of Noramco and Tasmanian Alkaloids makes that answer clear: Defendants stood to gain no matter whose opioid was prescribed. If a doctor prescribes their branded product, they made money. If a doctor prescribes a competitor’s branded product, Defendants again stood to make money based on the dominant position they held in the supply of narcotic APIs.

78. Thus, as set forth above, the ownership and facts related to Noramco and Tasmanian Alkaloids explain Defendants’ motive and intention for marketing opioids generally as a class of drugs and also dispel Defendants’ notions of any “lack of fairness” in holding them jointly and severally liable for the public nuisance.

79. *DEA Regulation of Narcotic Ingredients*: Defendants also assert that holding them liable for their sale of narcotic raw materials and API would trigger various forms of

preemption. This argument misstates the basis of Defendants' liability. The facts about Noramco and Tasmanian Alkaloids are relevant for the reasons set forth above: Defendants' knowledge and intent behind their aggressive and false marketing of opioids as a class. Further, Defendants' arguments generalize and mischaracterize the role of the DEA and regulations. Defendants appear to suggest that the allowance of a quota is the same as a mandatory supply. It is not. DEA quotas are a ceiling, not a floor. Defendants identify nothing in federal law that prohibited them from complying with Oklahoma nuisance law. Nor do they identify anything in federal law that required them to import, manufacture, or sell the full amounts authorized in federal permits or quotas.

80. Moreover, DEA quotas apply nationally, not state-by-state. I am not aware of any federal regulations—and none has been brought to the Court's attention—regulating the amount of opioids Defendants or their cohorts supplied into *Oklahoma*. Oklahoma has been disproportionately flooded with opioids. Defendants failed to put on any evidence or make any argument about how DEA quotas or other regulations might relate to or affect their supply of opioids into Oklahoma *specifically*.

81. Further, the DEA regulations did *not require* Defendants or Noramco or Tasmanian Alkaloids, to:

- sell the full quota they manufactured;
- supply Purdue and Teva with opioids after becoming aware of their marketing tactics (in which Defendants were also participating);
- continue supplying Purdue and Teva after they pled guilty to federal crimes related to their opioid marketing; or

- develop a high thebaine poppy in anticipation of demand for oxycodone increasing with the release of OxyContin (*see* S-0006).

No federal regulations *required* Defendants to participate in a multifaceted marketing campaign designed to get doctors to prescribe, and people to consume, more opioids in the United States.¹⁰⁴ Nor do they excuse it. Thus, the regulations on which Defendants rely do not address the false and misleading marketing conduct at issue. It was entirely possible for Defendants to comply with both federal law and Oklahoma law. *See Merck Sharp & Dohme Corp. v. Albrecht*, 139 S. Ct. 1668, 1678 (2019) (no impossibility preemption “where the laws of one sovereign permit an activity that the laws of the other sovereign restrict or even prohibit”).

82. Defendants identify no statute or regulation providing that state law stands as an obstacle to DEA oversight under the Controlled Substances Act. On the contrary, a federal regulation makes clear that DEA oversight does *not* preempt Oklahoma nuisance law. The regulation provides that “Nothing in this chapter” – which includes the DEA regulations Defendants cite – “shall be construed as authorizing or permitting any person to do any act which such person is not authorized or permitted to do . . . under the law of the State in which he/she desires to do such act.” 21 C.F.R. § 1307.02 (2018). It also provides that “nor shall compliance with such [DEA regulations] be construed as compliance with other Federal or State laws unless expressly provided in such other laws.” *Id.* That regulation confirms that Oklahoma nuisance law poses no obstacle to federal law

¹⁰⁴ Evidence was submitted at trial that Noramco specifically stated in a presentation to a Janssen employee that it has played “a significant role influencing INCB, DEA policies.” S-0340.

in this context. Defendants also identify nothing in the Controlled Substances Act or DEA regulations giving them a federal right to perform the activities at issue in this case even when doing so creates a nuisance prohibited by Oklahoma law. Moreover, none of the cases Defendants cite addresses preemption under the Controlled Substances Act or the DEA's implementing regulations.

83. Accordingly, I conclude that (a) evidence of Noramco and Tasmanian alkaloids was relevant, but not as a basis for imposing liability; and (b) that the State's claim is not preempted based on the federal law regulating the activities of Noramco and Tasmanian Alkaloids.

84. *Component Part Manufacturer Liability*: Defendants also claim that they cannot be held liable for Noramco and Tasmanian Alkaloids supplying activity because Oklahoma does not recognize tort liability for component part suppliers that have no role in the finished product. *See* Defendant's Motion for Judgment at 44. Again, Defendants' liability does not stem from their subsidiaries' supplying of opioid APIs. Rather, Defendants' control of the operations that supplied up to 60% of opioid APIs in the country, while at the same time engaging in aggressive and false marketing of opioids generally, speaks directly to Defendants' knowledge and intent in creating public nuisance and also further demonstrates why their legally irrelevant market share arguments are of no consequence.

85. Even so, the component-parts defense is not applicable here. The case that Defendants argue established the component parts rule in Oklahoma, as in other jurisdictions, is a products liability case. *See Swift v. Serv. Chem.*, 2013 OK CIV APP 88,

¶ 5, 310 P.3d 1127, 1129. Similarly, Defendants point to the products liability section of the Restatement of Torts—Section 5—to argue that the component-parts rule is “blackletter law.” See Defendants’ Motion for Judgment at 45. *Swift* expressly notes this section “is specifically directed to products liability[.]” *Swift*, 2013 OK CIV APP 88, ¶ 19. Here, the State has not alleged—and did not put forward at trial—a products liability cause of action. As such, the component-parts defense is inapplicable.

ii. *The First Amendment*

86. Defendants also argue that, for various reasons, the First Amendment to the United States Constitution prohibits imposing liability for the acts complained of here. As explained below, I conclude that it does not.

(1). *Speech*

87. Defendants’ first argument is that imposing liability for their marketing efforts violates their speech rights under the First Amendment. Not so.

88. “First Amendment rights may not be used as the means or the pretext for achieving substantive evils which the legislature has the power to control.” *Cal. Motor Transport Co. v. Trucking Unltd.*, 404 U.S. 508, 515(1971) (internal citation omitted). “The fact that dissemination of information and opinion on questions of public concern is ordinarily a legitimate, protected and indeed cherished activity does not mean, however, that one may in all respects carry out that activity exempt from sanctions designed to safeguard the legitimate interests of others. . . . Federal securities regulation, mail fraud statutes, and common-law actions for deceit and misrepresentation are only some examples

of our understanding that the right to communicate information of public interest is not unconditional.” *Curtis Pub. Co. v. Butts*, 388 U.S. 130, 150 (1967) (plurality op.).

89. Moreover, Supreme Court precedent recognizes a “commonsense distinction between speech proposing a commercial transaction”—*i.e.*, commercial speech—“which occurs in an area traditionally subject to government regulation, and other varieties of speech.” *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 562 (1980). “The Constitution, therefore, accords a lesser protection to commercial speech than to other constitutionally guaranteed expression.” *Id.* at 562-63. As a threshold test, “for commercial speech to come within [the First Amendment], it at least must concern lawful activity and not be misleading.” *Id.* at 563-564. “Consequently, there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity.” *Id.* at 563.

90. This understanding of the First Amendment has led the Supreme Court to consistently “emphasize that some forms of commercial speech regulation are surely permissible,” including “restrictions on false, deceptive, and misleading commercial speech.” *Friedman v. Rogers*, 440 U.S. 1, 9 (1979). See *Virginia State Bd. of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 771-72 (1976) (“Untruthful speech, commercial or otherwise has never been protected for its own sake. Obviously, much commercial speech is not provably false, or even wholly false, but only deceptive or misleading. We foresee no obstacle to a State’s dealing effectively with this problem. The First Amendment, as we construe it today, does not prohibit the State from insuring that the stream of commercial information flow cleanly as well as freely.”); *Bates v. State Bar*

of Ariz., 433 U.S. 350, 383 (1977) (“Advertising that is false, deceptive, or misleading of course is subject to restraint. Since the advertiser knows his product and has a commercial interest in its dissemination, we have little worry that regulation to assure truthfulness will discourage protected speech. And any concern that strict requirements for truthfulness with undesirably inhibit spontaneity seems inapplicable because commercial speech generally is calculated. Indeed, the public and private benefits from commercial speech derive from confidence in its accuracy and reliability. This, the leeway for untruthful or misleading expression that has been allowed in other contexts has little force in the commercial arena.”); *Bolger v. Yongs Drug Prods. Corp.*, 463 U.S. 60, 69 (1983) (“The State may deal effectively with false, deceptive, or misleading sales techniques.”); *44 Liquormart v. R.I.*, 517 U.S. 484, 501 (1996) (plurality op.) (“When a State regulates commercial messages to protect consumers from misleading, deceptive, or aggressive sales practices, or requires the disclosure of beneficial consumer information, the purpose of its regulation is consistent with the reasons for according constitutional protection to commercial speech and therefore justifies less than strict review.”); *Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 563-64 (1980) (“[T]here can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity. The government may ban forms of communication more likely to deceive the public than to inform it, or commercial speech related to illegal activity.”); *Thomas v. W. States Med. Ctr.*, 535 U.S. 357, 367 (2002) (“Although commercial speech is protected by the First Amendment, not all regulation of such speech is unconstitutional. In *Central Hudson*, *supra*, we articulated a test for determining

whether a particular commercial speech regulation is constitutionally permissible. Under that test we ask as a threshold matter whether the commercial speech concerns unlawful activity or is misleading. If so, then the speech is not protected by the First Amendment.”).

91. To avoid this precedent, Defendants seek to characterize the State’s claim as a view-point based restriction on the scientific debate surrounding chronic pain. Defendants contend the speech at issue is about “complex scientific and policy questions of exceptional public importance” and is, therefore, non-commercial in nature. Thus, they submit, the State’s efforts must be tested under heightened scrutiny. That is not the law.

92. First, the Supreme Court has “made clear that advertising which links a product to a current public debate is not thereby entitled to the constitutional protection afforded noncommercial speech. . . . Advertisers should not be permitted to immunize false or misleading product information from government regulation simply by including references to public issues.” *Bolger v. Youngs Drug Prods. Corp.*, 463 U.S. 60, 67-68 (1983) (internal citations and quotation marks omitted).¹⁰⁵ Accordingly, Defendants’ invocation of “vigorously debated medical, scientific, and public health questions” cannot, on its own, serve as “magic words” that automatically entitle them to the protections afforded to non-commercial speech.

93. Second, the record proves the speech at issue here was clearly commercial in nature. The Supreme Court has defined commercial speech as speech that “propos[es] a

¹⁰⁵ See also *id.* (explaining the rationale for this rule: “A company has the full panoply of protections available to its direct comments on public issues, so there is no reason for providing similar constitutional protection when such statements are made in the context of commercial transactions.”)

commercial transaction.” *See Cent. Hudson Gas & Elec. Corp. v. Pub. Serv. Comm’n*, 447 U.S. 557, 562 (1980); *see also Bolger*, 463 U.S. at 66 (describing the “core notion of commercial speech” as “speech which does no more than propose a commercial transaction”). In the *Bolger* case, however, the Supreme Court was confronted with “informational pamphlets” that, given their inability to be characterized “merely as proposals to engage in commercial transactions,” made the commercial/non-commercial distinction a “closer question.” 463 U.S. at 66. Accordingly, the Supreme Court looked to indicia like whether the speaker acknowledged the promotional nature of the speech, whether the speech referenced a specific product, and whether the speaker had an economic motivation for speaking. *See id.* at 66-67. And, while the Supreme Court instructed that no one of those factors alone compelled a conclusion, it held “[t]he combination of *all* these characteristics . . . provides strong support for the District Court’s conclusion that the informational pamphlets are properly characterized as commercial speech.” *Id.*

94. Those same indicia are present here. This case is about the false and misleading statements Defendants made in an effort to sell more opioids. It is speech promoting a particular product—opioids (including Defendants’ specific brand name products)—in an effort to convince more “customers”—*i.e.*, doctors¹⁰⁶—to utilize more of it. It is speech that proposes and entices a commercial transaction whereby the speaker—Defendants—stand to profit. That speech was delivered by “sales reps” and paid influencers, like those in Defendants’ “speakers bureau.” It included “sales materials” like

¹⁰⁶ *See, e.g.*, Trial Tr. (5/30/19 a.m., J&J: Deem-Eshleman) at 130:8-14; S-2358 (defining “Prescribers” as a “Key Customer Segment”).