Testimony from Dr. Gary Sprouse

Senate Education, Health and Environmental Affairs

SB0395 – Favorable with Amendments

The Maryland Board of Physicians serves an important role to ensure medical professionals are acting in a safe and legal manner. But the Board is hurting patients and punishing doctors as it is currently configured.

The Board has investigated me for 15 years and never once proved I hurt anyone. In fact all my patients have been shown to be doing very well. My success rate with patients with addiction was 90%.

I want to be clear. I have done everything the Board has ordered me to do. But every time I comply, the Board changes the objective or finds a new doctor with a different opinion.

My patients have been hurt by the Board. In August of 2019 I received a letter to stop writing opioids as of that day. My patients could not possibly find a new doctor in one day. I asked if the Board had a plan for the safety of my patients. They did not. I asked to be given 2 months to transition patients. That request was denied. In the middle of an opioid crisis, my 250 patients on pain meds and 100 patients on suboxone were thrown out on the street to fend for themselves. I can't think of a more dangerous and desperate situation to put these patients in. Patients went on the street and overdosed, they quit their jobs because pain was too intolerable, and at least 1 pt committed suicide.

I believe there are several changes that can be made that can keep the Board's ability to keep patients safe and yet safeguard the physicians who are taking care of them from excessive scrutiny.

1. The standard of proof is currently preponderance of evidence at 51%. It should be changed to clear and convincing at 75%. If a doctor's behaviors are egregious, this will still allow the Board to act but it would protect the physician from the capricious nature of standard of care especially in highly charged topics like pain medication and addiction treatment.
2. The Board should be required to make a plan for the safety of patients if a doctor is to have his/her license restricted or revoked.
3. Probation should be for no more than a year. Probation has become a cruel punishment in todays world. Because I was on probation, I was disenrolled from every private insurance company and every MCO in Maryland. I lost my malpractice carrier. I was decertified as a medical director for nursing homes. I lost multiple jobs and much more. This is an excessive punishment. My lawyer tells me the Board has the power to monitor a physician without invoking probation and all its consequences. So my probation of 6 ½ years is serving no one.
4. A medical professional should be able to appeal the Board's decision to an independent judge. Currently, a medical professional can only appeal the process the Board went through to reach a decision, but the decision itself is not appealable. This is so high and difficult of standard that no one every appeals and so the Board has no check and balance on its decisions.
5. Votes should be written not oral. This decreases the intimidation of a single strong voice and the tendency to go along with the others even if you don't agree.
6. There are other suggestions in the material I have given you.

I want to thank you for your attention. I hope you will see the merit of these changes for the safety of the patients of Maryland and the doctors who take care of them.

Board action started 15 years ago. They combined 3 issues into one action. The main issue was over prescribing opioids. The other 2 issues were related to my opinion on a malpractice case and a patient visit at the hospital. After several years of reviewing my records, appeals, Board meetings and an administrative law judge hearing, I was given a 6-month suspension which was reduced to 5 weeks by accomplishing CME, ethics training and charting training. It was followed by a 3-year probation.

But during the process of this first case, a second case was opened that involved my purported over prescribing opioids. My lawyer asked that these cases be combined but that request was denied. That made me go through the process twice for the same issues. The second hearing ended, and I was given a letter of reprimand.

During my probation, the Board decided I had not changed enough, and I had to go through a third trial for violation of my probation. I was found guilty of a violation of probation. This time I was given another 18 months of probation and was ordered to be monitored by a pain specialist and psychiatrist. I complied with this order. It cost me 50,000 dollars. Both doctors wrote letters stating I was practicing standard of care.

Before the Board could vote to allow me off probation, a complaint was received by the Board about my care. The patient had died 6 months before (unrelated to my care) and the complaint came from a ex-girlfriend who had not been around for 5 years. I don't understand how she had any standing to complain, but the Board used this opportunity to prolong my probation, which is at 6 ½ years and counting. They also asked for 20 more charts. These charts were reviewed by 2 pain specialist and 2 addiction specialists. This has led to the Board taking away my ability to write opioid medication and another hearing that will take place in March.

The Board also sent a complaint to Medicaid in July of 2019. Medicaid sent me a letter stating they had a credible complaint that I had committed Medicaid fraud regarding my pain management patients. They would withhold my reimbursement until the investigation was completed. They are now holding 30,000 dollars. When I asked what I had done, they would not tell me. They would not respond to my lawyer's written request so we could appeal. It is 7 months later, and I still don't know what I did and I see no way to find out or get my money released.

The consequences to all this Board action have been enormous

300,000 thousand in legal fees

100,000 thousand in consultant and monitoring fees

Loss of all insurance contracts except Medicare and Medicaid (MCOs that control most of Medicaid have disenrolled me)

Loss of Medical Mutual

Loss of accreditation as a medical director for nursing homes.

Loss of attending status at 3 nursing homes

Loss of 80% of my outpatient practice which led to shrinking my outpatient office to 2 half days and eliminated jobs for 2 out of my 3 employees.

Hundreds of thousands of dollars of lost revenue.

I have had to exclude myself from a recovery residence that my wife and I have invested a million dollars because of my reputation.

Stress on family, staff and patients and much more

This is despite the CDC writing a letter in 2019 admonishing Boards to not taper pain medication on patients who were stable. This was reiterated by HHS in 2019.

Despite 2 doctors who monitored me for 18 months writing letters I was practicing standard of care.

Despite the 2 pages of changes I have made to my practice to try and comply with the Board.

Despite no evidence that my patients have been harmed by care. In fact, the opposite has been proven. All my patients were doing very well under my care.

Despite the fact I was getting a 90% success rate in treating opioid addiction.

Despite I am in a rural county which has a dearth of physicians already. The Health officer of my county is angry and frustrated with the Board. He has had a very difficult time finding doctors to take care of this rural population and now has been losing doctors to Board actions. I have been practicing in my county for 35 years and now I have to severely limit my practice because of Board actions.

In addition, I believe the Board has put the patients of Maryland in danger.

They have created an environment where doctors are afraid to treat patients and therefore patients with legitimate pain are suffering

They crossed a line when they put 350 patients that were seeing me for pain or addiction out onto the street. I was given no notice that I could not write opioids. I received a cease and desist order on August 17th. Patients the next day could not get their needed prescription. My lawyer called the Board to see what plans they had for these patient's care and they had none. My lawyer asked for me to have 2 months to transition patients to a different provider and that request was denied. Effectively, the Board made me abandon these patients knowing they had no time to adjust. I think this would be malpractice if a physician did this on his own.

Plus, there is an issue with conflict of interest. The Board chairman and at least one Board member are pain specialist. Every doctor who is convicted means more patients for them and more importantly the thousands of doctors who are frightened enough to not do pain management means more patients for them.

I have had time and experience to see if there are possible changes that could allow the Board to fulfill their mandate to keep patients safe without punishing doctors.

1. **The goal of the Board should be remediation not punishment**
2. **The legal standard should be changed from preponderance of evidence (51%) to clear and convincing (75%).** It does not need to be beyond a doubt (98%). This makes decisions more than

just their expert vs my expert. The burden is higher to prove harm or substandard care but if there is a real problem this should be easy to accomplish. This will stop borderline cases from ruining doctors and their patients care.

3. **Standard of Care should not be used to judge doctors.** Standard of Care is a poor measuring stick to mete out punishment to doctors. It is constantly changing, it is nebulous and capricious, at any given time there are multiple standards that can be used. It should not be used because it is vague and in the case of doctors treating patients with chronic pain it is being manipulated to harm the doctor. But if it standard of care needs to be the bench mark, then if a doctor breaches the current standard of care it should not invoke a suspension or probation. It should invoke the appointment of a mentor for 6 months to a year.
4. **Suspension should only be for doctors who have negligently harmed their patients, committed criminal acts, committed inappropriate acts with their patients or operated under the influence of a mind altering substance**.
5. Probation has become a horrible punishment. It should follow the completion of their suspension but **probation should not be more than a year**. The consequences of probation are far beyond what the Board intended. Malpractice will no longer write a policy, all insurance companies will no longer let you on their panels, many physician organizations will deactivate your membership, many corporations will terminate your contract, if you are on probation. This is a ridiculous punishment. The Board has many other ways to ensure compliance. There is nothing that happened while I was on probation that they couldn't have ordered at any time to any physician. Probation complicated my professional career for no good reason.
6. **Probation should never be used for supposed breaches of standard of care** (for the reasons stated above). Remediation should be the goal and probation inhibits this because the physician is encumbered with all the consequences of a probationary status.
7. **There should be an arbitration panel within Med Chi that can filter complaints that are malicious, inaccurate or there is a conflict of interest.** These types of complaints should never reach the Board.
8. The Board limit of 15 minutes for arguments is insufficient and should be at least an hour. At Board hearings a limit of 15 minutes is ridiculous. Your entire career is based on that hearing and 15 minutes is insufficient. I would agree a time limit is necessary. **There should be a limit of one hour for Board arguments.**
9. **Consultants for the State should have to disclose their fee and how many times they have testified against other doctors**.
10. Because the legal process of a complaint can be slow, **a consultant cannot use a current standard of care to judge a doctor about past practices**.
11. **The Board notifications should come by registered mail**. The actions should not start until the registered letter is delivered, not when they wrote the letter. There can be significant delay between the time a letter is written and the doctor opens it.
12. **There should be a plan in place for patient care when a doctor's license is limited or taken away by Board action**. When the Board suspends a doctor, thousands of patients can be hurt with their doctor suddenly not able to practice or write prescriptions. There should be a plan, ahead of time, to deal with a doctor not being able to practice. There should be a patient-oriented plan so the patients do not have to scramble to find a new source for medical care.

13. **The Board votes should be written not oral.** In a group, if one person votes guilty there is a tendency for the others in the group to vote along with that person. In a written vote there is no influence from the other members and there will be less group bias.
14. **There needs to be an overseeing organization that monitors the Board.** Currently they wield their power with impunity with no checks or balances. There needs to be some committee or judicial process to appeal the verdict. Currently, a physician can only appeal the process the Board went through. The physician cannot appeal the verdict. This gives all the power to the Board and essentially takes away all the judicial rights of appeal the physician has.

I hope this information is of some use to you. I would love to meet with you and/or testify at your committee hearing about the Board. I believe this topic is of utmost importance for the patients of Maryland. I recognize that any action that is taken will not help me but if it helps future doctors and the patients they take care of that will have its own reward.

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## What I have changed

Spread sheet

Hired 2 new employees to monitor pts with pain, ADD and anxiety and better obtain vital signs and old records

Using EMR and have expanded my note to include more information for each visit

Engaged a consultant to streamline and improve the systems in the office.

Developing a list of consultants to help with pain and addiction treatment

Send pts to pain management when indicated

Increased urine testing and now results monitored on spread sheet

BPI each visit

CAARS for each pt with ADD

CRISP each visit

GAD each visit

MD judicial search on new pts

I am editing each note for patients in pain

Pts are recommended to use a safe to store medication

Opioid Risk Assessment for each pt

Naloxone script for each pt

Read CDC guidelines

Attended multiple conferences, see separate list

Became a diplomat of American Pain Society

Working toward Addiction Board Certification

Hypnosis certified

Working toward Marijuana registration, once off probation

Suboxone certified

Vivitrol certified

Synopsis of pts pain, testing and treatments which is in each note

Tapering opioids when possible

Tapering benzodiazepines when possible

Tapering Adderall when possible, trying to keep at 40mg/day level

Communicating more with pharmacies

Doing Pill counts

Developing a relationship with Maryland Insurance Commission

Working on being appointed to Behavioral Health Advisory Council once off probation

On the Med Chi addiction committee

Setting up a recovery residence, spending 400,000 dollars of my own money

Writing a book on Stress reduction

Yearly pain contract

18 months of meeting with Dr. Krajewski and Dr. Matsunaga

Developed protocol for pts with abnormal urine screens and monitor on spreadsheet

Read multiple guidelines

When pts report meds stolen, need a police report and get only a week at a time till next scheduled fill date

Calculating MED for each pt and updating on regular basis

Reducing all patients to MED of 200 (American Pain Society recommendations) or so regardless of symptoms

Reviewing spread sheet

Use motivational interviewing as much as possible

## Amendments I propose to make the Board of Physicians be able to fulfill its mandate to keep the patients of Maryland safe and to ensure that medical professionals are treated fairly when a Board inquiry occurs.

1. **The goal of the Board should be remediation not punishment**
2. **The legal standard should be changed from preponderance of evidence (51%) to clear and convincing (75%).** It does not need to be beyond a doubt (98%). This makes decisions more than just their expert vs my expert. The burden is higher to prove harm or substandard care but if there is a real problem this should be easy to accomplish. This will stop borderline cases from ruining doctors and their patients care.
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perspective

# No Shortcuts to Safer Opioid Prescribing

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## Article

INCE THE CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC) RELEASED ITS Guideline for Prescribing Opioids for Chronic Pain in 2016,[1] the medical and health policy communities have largely embraced its recommendations. A majority ofstate Medicaid agencies reported having implemented the guideline in fee-for-service programs by 2018, and several states passed legislation to increase access to nonopioid pain treatments.[2] Although outpatient opioid prescribing had been declining since 2012, accelerated decreases — including in high-risk prescribing — followed the guideline's release.[2]3 Indeed, guideline uptake has been rapid. Diffculties faced by clinicians in prescribing opioids safely and effectively, growing awareness of opioid-associated risks, and a public health imperative to address opioid overdose underscored the need for guidance and probably facilitated uptake. Furthermore, the guideline was rated as high quality by the ECRI Guidelines Trust Scorecard. In addition, the CDC (including the authors of this Perspective, who were also authors of the Guideline) engaged clinicians, health systems leaders, payers, and other decision makers in discussions of the guideline's intent and provided clinical tools, including a mobile application and training, to facilitate appropriate implementation. [4]

Efforts to implement prescribing recommendations to reduce opioid-related harms are laudable. Unfortunately, some policies and practices purportedly derived from the guideline have in fact been inconsistent with, and often go beyond, its recommendations. A consensus panel has highlighted these inconsistencies,[5] which include inflexible application of recommended dosage and duration thresholds and policies that encourage hard limits and abrupt tapering of drug dosages, resulting in sudden opioid discontinuation or dismissal of patients from a physician's practice. The panel also noted the potential for misapplication ofthe recommendations to populations outside the scope of the guideline. Such misapplication has been reported for patients with pain associated with cancer, [5] surgical procedures,[5] or acute sickle cell crises. There have also been reports of misapplication of the guideline's dosage thresholds to opioid agonists for treatment ofopioid use disorder. Such actions are likely to result in harm to patients.



We need better evidence in order to evaluate the benefits and harms of clinical decisions regarding opioid prescribing, including when and how to reduce high-dose opioids in patients receiving them long term. The CDC developed the guideline on the basis of the best available evidence, with input from a multidisciplinary group that included experts in pain management as well as representatives of patients and the public. In situations for which the evidence is limited, it is particularly important not to extend implementation beyond the guideline's statements and intent. And yet in some cases, the guideline has been misimplemented in this way.

For example, the guideline states that "Clinicians should...avoid increasing dosage to 90 MME [morphine milligram equivalents]/day or carefully justify a decision to titrate dosage to 90 MME/day. "1 This statement does not address or suggest discontinuation of opioids already prescribed at higher dosages, yet it has been used to justify abruptly stopping opioid prescriptions or coverage. [5] This recommendation also does not apply to dosing for medicationassisted treatment for opioid use disorder. The CDC based the recommendation on evidence of dose-dependent harms ofopioids and the lack of evidence that higher dosages confer long-term benefits for pain relief. However, we know little about the benefits and harms of reducing high dosages ofopioids in patients who are physically dependent on them.

Patients who are able to successfully taper their opioid use are likely to have a lower risk of overdose, and evidence is accumulating that they might experience reduced pain.[4] Other patients may find tapering challenging; could face risks related to withdrawal symptoms, increased pain, or unrecognized opioid use disorder; and if their dosages are abruptly tapered may seek other sources of opioids or have adverse psychological and physical outcomes. Policies should allow clinicians to account for each patient's unique circumstances in making clinical decisions.

The guideline offers guidance for caring for patients who are already taking opioid dosages of 90 MME or more per day long term, including guidance on when tapering the dose might be appropriate, the importance of empathetically reviewing risks associated with continuing high dose opioids, collaborating with patients who agree to taper their dose, maximizing nonopioid treatment, and tapering slowly enough to minimize withdrawal symptoms. Patients exposed to high dosages for years may need slower tapers (e.g., $10^0$/0 per month, though the pace oftapering may be individualized). [1] Success might require months to years. Though some situations, such as the aftermath of an overdose, may necessitate rapid tapers, the guideline does not support stopping opioid use abruptly. [1]

Guidelines can improve patient outcomes when they lead to policies that reduce harm, while offering support and coverage for underused services (e.g., nonpharmacologic strategies, naloxone coprescribing, and treatment for opioid use disorder). However, policies invoking the opioid-prescribing guideline that do not actually reflect its content and nuances can be used to justify actions contrary to the guideline's intent. The CDC has engaged quality-improvement organizations, payers, federal partners, state health departments, and others in discussions to encourage adherence to recommendations while avoiding actions that might cause harm. For example, the CDC worked with the American Society of Addiction Medicine to clarify that dosage thresholds in the guideline should not direct dosing of medication-assisted treatment for opioid use disorder.

Even guideline-concordant care can be challenging. Implementing recommendations with individual patients takes time and effort. An unintended consequence of expecting clinicians to mitigate risks of high-dose opioids is that rather than caring for patients receiving high dosages or engaging and supporting patients in efforts to taper their dosage, some clinicians may find it easier to refer or dismiss patients from care. Clinicians might universally stop prescribing opioids, even in situations in which the benefits might outweigh their risks. Such actions

disregard messages emphasized in the guideline that clinicians should not dismiss patients from care, which can adversely affect patient safety, could represent patient abandonment, and can result in missed opportunities to provide potentially lifesaving information and treatment. [1] Effective implementation of the guideline requires recognition that there are no shortcuts to safer opioid prescribing (which includes assessment of benefits and risks, patient education, and risk mitigation) or to appropriate and safe reduction or discontinuation of opioid use. Starting fewer patients on opioid treatment and not escalating to high dosages in the first place will reduce the numbers of patients prescribed high dosages in the long term. In the meantime, clinicians can maximize use ofnonopioid treatments, review with patients the benefits and risks of continuing opioid treatment, provide interested and motivated patients with support to slowly taper opioid dosages, closely monitor and mitigate overdose risk for patients who continue to take high-dose opioids, and offer or arrange medication-assisted treatment when opioid use disorder is identified. The CDC offers several tools to assist, including a pocket guide on tapering, a mobile app and online training with motivational interviewing components, and information about nonopioid treatments for pain.[4] We are also working to identify ways to integrate recommendations into medical education and to support best practices among the next generation of medical professionals.

Appropriate implementation of the guideline includes maximizing use of physical, psychological, and multimodal pain treatments. However, these therapies have not been used, available, or reimbursed suffciently. The CDC has supported research to better define the evidence and coverage gaps for nonopioid pain treatments and has articulated the need to improve insurance coverage.[2'4] Efforts to support more judicious opioid use will become more successful as effective nonopioid treatments are increasingly available and used.

The CDC is evaluating the (intended and unintended) impact of the guideline and other health system strategies on clinician and patient outcomes and is committed to updating recommendations when new evidence is available. The CDC is funding the Agency for Healthcare Research and Quality to conduct systematic reviews on the effectiveness ofopioid, nonopioid pharmacologic, and nonpharmacologic treatments for acute and chronic pain. Results of these reviews will assist in identifying research priorities and determining when evidence gaps are sufficiently addressed to warrant a guideline update or expansion. Until then, we encourage implementation ofrecommendations consistent with the guideline's intent.

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Disclosure forms provided by the authors are available at NEJM.org.

The views expressed in this article are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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## Supplementary Material

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| Disclosure Forms | PDF | 165KB |

## References (5)

1. Dowell D, Haegerich TM, Chou R. CDC guideline for prescribing opioids for chronic pain — United States, 2016. MMWR Recomm Rep2016;65:1
Crossref Web of Science Medline Google Scholar

2. Centers for Medicare and Medicaid Services. CMCS informational bulletin: Medicaid strategies for non-opioid pharmacologic and non-pharmacologic chronic pain management. February 22, 2019 (https://www.medicaid.gov/federal-policy-guidance/downloads/cib022219.pdf). Google Scholar

3. Bohnert ASB, Guy GP Jr, Losby JL. Opioid prescribing in the United States before and after the Centers for Disease Control and Prevention's 2016 opioid guideline. Ann Intern Med 2018;169:367375.

Crossref Medline Google Scholar

4. Dowell D, Haegerich TM. Changing the conversation about opioid tapering. Ann Intern Med 2017;167:208-209.

Crossref Medline Google Scholar

5. Kroenke K, Alford DP, ArgoffC, et al. Challenges with implementing the Centers for Disease Control and Prevention opioid guideline: a Consensus Panel report. Pain Med 2019;20:724-735. Crossref Medline Google Scholar

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