EXHIBIT 2

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MARYLAND

MARYLAND SHALL ISSUE, INC., *et al.*	*	
Plaintiffs,	*	
v.	*	Civil Action No.: 1:22-cv-00865-SAG
ANNE ARUNDEL COUNTY, MD	*	
Defendant.	*	

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EXPERT REPORT OF NILESH KALYANARAMAN, MD, FACP

1. I, Nilesh Kalyanaraman MD, FACP, am a licensed physician in the State of Maryland. I graduated from the State University of New York Downstate School of Medicine with my medical degree in 2003. I completed an internal medicine residency at Emory University in 2006. I am an elected Fellow of the American College of Physicians. I am the Health Officer for the Anne Arundel County Department of Health in Anne Arundel County, Maryland and have served in this capacity since September 2019. I oversee all aspects of the Health Department, which consists of:

- Behavioral Health
- Disease Prevention and Management
- Environmental Health
- Family Health
- School Health
- Office of Assessment and Planning including the Gun Violence Intervention Team; and
- Operations.

2. As the County Health Officer, I have experience with assessing and monitoring population health; investigating, diagnosing, and addressing health hazards and root causes; communicating effectively to inform and educate; strengthening, supporting, and mobilizing communities and partnerships; and creating, championing, and implementing policies, plans, and laws to improve population health.

3. I was also an *ex officio* member of the Anne Arundel County Gun Violence Prevention Task Force (GVPTF) which was created by executive order in April 2019. It was an advisory body with a mandate to "research and compile data related to gun violence in Anne Arundel County," "investigate the circumstances in which gun violence incidents in the county have

occurred and how and why they happened," "research how the public health system could be used to address individuals in need of behavioral health services who may be at risk to commit or be the victim of gun violence," and "recommend actionable proposals to reduce gun violence in this county."

4. Through my role on the GVPTF and because of the consensus recommendation to address gun violence as a public health crisis, I was tasked to oversee the development of the final report of the GVPTF. Under my leadership, the report framed the recommendations of the Task Force using a public health approach. The report utilized the Social Ecological model which organizes risk and protective factors for gun violence at the societal, community, relationship, and individual level. In June 2020, the GVPTF released a final report analyzing gun violence in Anne Arundel County and making recommendations to address this problem.

5. I also lead the County's Gun Violence Intervention Team (GVIT) which was launched in August 2020 based on the GVPTF's recommendation that gun violence be addressed as a public health problem. Under the leadership of the Health Department, the GVIT functions as a permanent multiagency workgroup charged to "prevent and reduce gun-related injuries and deaths in Anne Arundel County."

6. Under my leadership, the GVIT has published community resource toolkits on suicide prevention, domestic violence, youth gun safety, and responsible gun ownership. The GVIT has also published a data dashboard on gun suicides, homicides, and injuries that is available online. In June 2022, the GVIT released a strategic plan to reduce gun violence through collecting and reporting data, education and public awareness, violence interruption, and coordinating interventions across the county.

7. I have previously been asked to provide expert testimony in two cases. In the first case, I assessed the impact of 18 months of homelessness on an individual in his case against a housing provider who evicted him without cause. I provided that expert opinion in August 2016 while I was the Chief Health Officer at Health Care for the Homeless, a Federally Qualified Health Center in Baltimore, Maryland. I was not compensated for this work. The case name was Smith-Bey v. Peaceful Haven, et al., Circuit Court of Prince George's County, Case No. CAL15-16726.

8. In the second case, I was accepted as an expert witness during a hearing in December 2020 in the Circuit Court for Anne Arundel County. I assessed the data and projections for the Covid pandemic and the best available evidence for actions to mitigate Covid in a case challenging an Executive Order put into place by the County Executive. I was the Health Officer for the Anne Arundel County Department of Health during that trial. I provided this expert testimony as a part of my job duties and received no additional compensation for this work. The

case name was Titan Hospitality Group LLC, et al. v. Steuart Pittman, Case No. C-02-CV-20-002268 in the Circuit Court for Anne Arundel County.

Background Information

9. Anne Arundel County, Maryland, has a population of 590,366 people as of July 2021 according to the U.S. Census Bureau.[1] In 2019 (the last year for which data is available), 75 people died of suicide in Anne Arundel County[2] making it the 9th leading cause of death in the county. Of these suicides, 34 were firearm suicides, or 45%, making it the leading method of suicide in the county. While complete suicide data is not available for 2020 or 2021, data on gun suicide[3] in Anne Arundel County shows that in 2020 there were 36 gun suicides and in 2021 there were 37 gun suicides.

10. Per the Centers for Disease Control & Prevention (CDC), there were 45,979 suicides nationally, making it the 12th leading cause of death in 2020 (the last year for which data is available). Of these suicides, there were 24,292 firearm suicides, or 53% of all suicides, making it the leading method for suicide.[4]

11. On January 21, 2020, the Anne Arundel County Council passed Resolution 2-20[5] declaring suicide a public health crisis and requesting that the Department of Health "continue to work with stakeholders to deliver services, expand awareness of this issue, reduce stigma, and ensure access to care to help those affected by mental illness and at risk of death by suicide." In the resolution, data was cited from the Gun Violence Prevention Task Force that from 2013 to 2017 67% of gun deaths in Anne Arundel County were suicides and that guns were the leading cause of suicide.

12. On January 3, 2022, the Anne Arundel County Council passed Bill 108-21 titled, "Public Safety - Distribution of Literature to Purchasers of Guns or Ammunition." The bill requires the Anne Arundel County Department of Health to "prepare literature relating to gun safety, gun training, suicide prevention, mental health, and conflict resolution." The Department of Health is directed to distribute this literature to stores that sell guns or ammunition. The bill further

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[1] QuickFacts Anne Arundel County, Maryland, *U.S. Census Bureau*, www.census.gov/quickfacts/fact/table/annearundelcountymaryland,MD/PST045221. Accessed July 28, 2022.

[2] 2020 Report Card Updated May 2021, *Anne Arundel County Department of Health*, https://www.aahealth.org/wp-content/uploads/2017/07/aahealthreportcard2021.pdf. Accessed July 28, 2022.

[3] Anne Arundel County Gun Violence Incidents, *Geographic Information Systems, Anne Arundel County*, https://gis.aacounty.org/portal/apps/dashboards/257a647dc5a64b3fae0bd0b2f4a883d9. Accessed July 28, 2022.

[4] National Center for Health Statistics, Suicide Mortality in the United States, 2000-2020*, Centers for Disease Control and Prevention*, https://www.cdc.gov/nchs/products/databriefs/db433.htm. Accessed July 28, 2022.

[5] Resolution 2-20*, Anne Arundel County, Maryland*, https://www.aacounty.org/departments/county-council/legislation/bills-and-resolutions/resolution-declaring-suicide-a-public-health-crisis-in-anne-arundel-county-and-requesting-that-the-department-of-health-ensure-adequate-treatment-and-services-to-help-those-affected-and-at-risk-of-death-by-suicide-as-amended. Accessed July 28, 2022.

provides that stores that sell guns or ammunition shall make the literature available and visible and shall distribute the literature to purchasers of guns or ammunition.

Analysis— "Firearms and Suicide Prevention" Brochure

13. One of the two pieces of literature being distributed by the Anne Arundel County Department of Health is a brochure titled "Firearms and Suicide Prevention." This brochure is jointly produced by the American Foundation for Suicide Prevention and the National Shooting Sports Foundation, a firearms industry trade association. The brochure contains accurate information regarding suicide prevention, mental health, and gun safety. The information in the brochure is supported by evidence-based best practices disseminated by the CDC and National Institute for Mental Health (NIMH) at the National Institutes for Health. I hold my opinion about the accuracy of this brochure to a reasonable degree of professional certainty. A detailed review of the recommendations in the brochure follows.

14. **Page 4** of the brochure, "Some People are More at Risk for Suicide than Others", summarizes key risk factors for suicide across three categories: health factors, environmental factors, and historical factors. Under health factors, the brochure identifies as risk factors: (a) a range of mental health conditions, (b) serious or chronic health conditions, (c) pain, and (d) traumatic brain injury. Under environmental factors, the brochure identifies as risk factors: (a) stressful life events, (b) prolonged stress, (c) exposure to another person's suicide, and (d) access to lethal means including firearms and drugs. Under historical factors, the brochure identifies as risk factors: (a) previous suicide attempts, (b) family history of suicide, and (c) childhood abuse, neglect or trauma.

15. The CDC[6] and the NIMH[7] both identify a set of risk factors for suicide which are evidence-based guidelines and reflect the scientific consensus. These risk factors are consistent with the material in the brochure. With respect to firearms, the CDC notes as a risk factor, "easy access to lethal means among people at risk (e.g. firearms, medications)" and the NIMH notes as a risk factor, the "presence of guns or other firearms in the home." Both the CDC and the NIMH identify access to firearms as a risk factor for suicide in their evidence-based guidelines.

16. One study published by Siegel et al. in the *American Journal of Public Health* assesses firearm suicide rates in each state compared to the rate of state level gun ownership from 1981-

[6] Suicide Prevention Risk and Protective Factors*, Centers for Disease Control and Prevention*, https://www.cdc.gov/suicide/factors/. Accessed July 28, 2022.

[7] Frequently Asked Questions About Suicide*, National Institute of Mental Health*, https://www.nimh.nih.gov/sites/default/files/documents/health/publications/suicide-faq/21-mh-6389_faqaboutsuicide_73021.pdf. Accessed July 28, 2022.

2013.[8] The study finds that there is a strong correlation between household firearm ownership in a state and higher rates of firearm suicide, namely that states with higher rates of firearm ownership had higher rates of firearm suicide. A review paper by Miller et al. in *Aggression and Violent Behavior*[9] identifies two studies that looked at household level gun ownership and the association with suicide. In those two studies, across all ages, suicide rates were higher in households with a gun compared to households without a gun. One study by Miller et al. in *Injury Prevention*[10] found that people who live in a home with a firearm were no more or less likely than people without a firearm in their home to have anxiety, mood disorders, substance dependence and/or abuse, suicidal ideation, or suicidal planning. The study did find that people who had attempted suicide in the past year were less likely to have a firearm in the house currently. A study by Betz et al. in *Suicide and Life-Threatening Behavior*[11] found that while rates of suicidal ideation and planning were similar for individuals in households with and without a firearm, individuals with a plan to use a firearm in a suicide attempt were seven times more likely to have a firearm in the house than not. Together these studies support the conclusion that higher rates of firearm ownership lead to higher rates of firearm suicide because of the availability of firearms and not due to higher rates of mental health issues.

17. **Page 5** of the brochure, "Take Suicide Warning Signs Seriously", lists key signs that indicate that someone is considering suicide: (a) what a person talks about, (b) behaviors they are exhibiting, and (c) moods that they are exhibiting. The NIMH[12] identifies a set of warning signs for suicide that are evidence-based and reflect the scientific consensus. These warning signs are consistent with the material in the brochure. One of the behavioral warning signs noted in the brochure is "looking for a way to end their lives, such as online for materials or means," which would include firearms. In the NIMH guide on suicide, they note a serious warning sign is "making a plan or looking for ways to kill themselves, such as searching for lethal methods online, stockpiling pills, or buying a gun."

18. **Page 6** of the brochure, "Reaching Out Can Help Save a Life", addresses ways that an individual can help someone they are concerned may attempt suicide. The first item is "suicide is a leading cause of death and it's preventable." In Anne Arundel County, 2019 data (the last year in which mortality data is available) identifies suicide as the 9th leading cause of death in the

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[8] Michael Siegel, Emily F. Rothman, "Firearm Ownership and Suicide Rates Among US Men and Women, 1981–2013", *American Journal of Public Health* 106, no. 7 (July 1, 2016): pp. 1316-1322.

[9] Miller, M., Hemenway, D., The relationship between firearms and suicide: A review of the literature. *Aggression and violent behavior* 4.1 (1999): 59-75.

[10] Miller M, Barber C, Azrael D, Hemenway D, Molnar BE. Recent psychopathology, suicidal thoughts and suicide attempts in households with and without firearms: findings from the National Comorbidity Study Replication. Inj Prev. 2009 Jun;15(3):183-7.

[11] Betz ME, Barber C, Miller M. Suicidal behavior and firearm access: results from the second injury control and risk survey. Suicide Life Threat Behav. 2011 Aug;41(4):384-91.

[12] Frequently Asked Questions About Suicide*, National Institute of Mental Health*, https://www.nimh.nih.gov/sites/default/files/documents/health/publications/suicide-faq/21-mh-6389_faqaboutsuicide_73021.pdf. Accessed July 28, 2022.

county. "Suicide Mortality in the United States, 2000-2020"[13] published by the National Center for Health Statistics identifies suicide as the 10th leading cause of death in the nation in 2019 and the 12th leading cause of death in the nation in 2020, moving down due to the emergence of Covid-19 and an increase in chronic liver disease. Suicides are preventable and the CDC's Preventing Suicide: A Technical Package of Policy, Programs, and Practices,[14] compiles a range of evidence-based strategies that communities can use to prevent suicides. There are seven strategies identified with a range of approaches within each strategy.

19. In the brochure, one of the points on how to intervene is, "If you are concerned about a loved one: Always store firearms securely and consider temporary offsite storage for firearms when not in use." In the CDC's Preventing Suicide: A Technical Package of Policy, Programs, and Practices,[15] one of the strategies is "create protective environments" and one of the approaches in this strategy is "reduce access to lethal means among persons at risk of suicide." Specifically, safe storage practices are identified as a key approach through "education and counseling around storing firearms locked in a secure place (e.g. in a gun safe or lock box), unloaded and separate from the ammunition."

20. Lethal means reduction is a strategy that addresses how suicides are attempted and focuses on reducing the lethality of the means of suicide chosen by an individual so that they are more likely to survive a suicide attempt. How a person attempts suicide matters because approximately 90% of people who attempt suicide will do not do so again. Owens et al in the *British Journal of Psychiatry*[16] conducted a review of studies and found that 70% of those who attempted suicide did not do so again, 23% did attempt suicide and didn't die, and 7% died from suicide in a subsequent attempt. Lethal means reduction reflects the scientific consensus on how to decrease the chances of death from a suicide attempt.

21. **Page 7** of the brochure, "Firearm Storage For Your Lifestyle", identifies options for gun owners on how to safely store firearms when they are not in use. The methods of safe storage listed in the brochure are: (a) cable lock, (b) lock box, (c) gun case, and (d) full size gun safe. Safe storage of firearms reduces the chance that someone will use a firearm in a suicide attempt by making a firearm less available at the time of suicidal ideation. As noted above, the CDC's Preventing Suicide: A Technical Package of Policy, Programs, and Practices[17] identifies safe

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[13] Suicide Mortality in the United States, 2000-2020*, Centers for Disease Control and Prevention*, https://www.cdc.gov/nchs/data/databriefs/db433.pdf. Accessed July 28, 2022.

[14] Preventing Suicide: A Technical Package of Policy, Programs, and Practices*, Centers for Disease Control and Prevention*, https://www.cdc.gov/suicide/pdf/suicideTechnicalPackage.pdf. Accessed July 28, 2022.

[15] Preventing Suicide: A Technical Package of Policy, Programs, and Practices*, Centers for Disease Control and Prevention*, https://www.cdc.gov/suicide/pdf/suicideTechnicalPackage.pdf. Accessed July 28, 2022.

[16] Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. Br J Psychiatry. 2002 Sep;181:193-9.

[17] Preventing Suicide: A Technical Package of Policy, Programs, and Practices*, Centers for Disease Control and Prevention*, https://www.cdc.gov/suicide/pdf/suicideTechnicalPackage.pdf. Accessed July 28, 2022.

storage practices as a tool to reduce suicide death. A study by Grossman et al.[18] in the *Journal of the American Medical Association* compared a group of respondents who had a firearm in the household at the time of a suicide attempt or unintentional injury due to a firearm in someone younger than 20 years with a group of respondents who had firearms in the household without a suicide attempt or unintentional injury. Their results showed that in households where there was a suicide attempt or unintentional injury, guns were less likely to be stored unloaded, locked, or separate from ammunition, and ammunition was less likely to be stored locked.

22. **Page 8** of the brochure identifies resources for suicide prevention and mental health support.

Opinion— "Firearms and Suicide Prevention" Brochure

23. The information in the brochure "Firearms and Suicide Prevention" is accurate, represents best practices as put forth by the CDC and NIMH, reflects the scientific consensus, and is supported by published research. Written materials are a cornerstone of public health education. They provide information to the public on important health and safety topics and should do so in a clear and concise way. The CDC publishes a Clear Communication Index Guide[19] that provides "research-based criteria to develop and assess public communication products." The materials in this brochure follow these guidelines. The brochure tailors its message to gun owners through the use of images and language that clearly identifies gun owners as the target audience. Key messages are clearly identified and includes actions that gun owners can take to make themselves and their household safer.

24. The strategy of engaging gun stores in addressing suicide prevention is taking place in various states and jurisdictions across the country. Gun shop owners have partnered with mental health and public health professionals to develop and distribute gun suicide prevention materials. Examples include the NH Firearm Safety Coalition[20] in New Hampshire and the Colorado Firearm Safety Coalition.[21]

25. Targeting and delivering health education materials to groups at a higher risk is a well-established public health practice.[22] Since higher rates of gun ownership are associated with

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[18] Grossman DC, Mueller BA, Riedy C, Dowd MD, Villaveces A, Prodzinski J, Nakagawara J, Howard J, Thiersch N, Harruff R. Gun storage practices and risk of youth suicide and unintentional firearm injuries. *JAMA*. 2005 Feb 9;293(6):707-14.

[19] CDC Clear Communication Index*, Centers for Disease Control and Prevention*, https://www.cdc.gov/ccindex/pdf/clear-communication-user-guide.pdf. Accessed July 28, 2022.

[20] NH Firearm Safety Coalition*, The Connect Program*, https://theconnectprogram.org/resources/nh-firearm-safety-coalition/. Accessed July 28, 2022.

[21] Colorado Firearm Safety Coalition, https://coloradofirearmsafetycoalition.org/. Accessed July 28, 2022

[22] Evidence-based Practice Center Systematic Review Protocol, Agency for Healthcare Research and Quality, *Effective Healthcare,* https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/medical-evidence-communication_research-protocol.pdf. Accessed July 28, 2022.

increased rates of gun suicide, it is sound public health practice to develop materials tailored to gun owners and deliver it in a setting with a high number of gun owners to best reach a high-risk population. In my opinion, which I hold to a reasonable degree of professional certainty, the distribution of suicide prevention literature by gun dealers is an effective method to reduce suicide by firearms.

Analysis—Conflict Resolution Brochure

26. The second of two pieces of literature being distributed by the Anne Arundel County Department of Health is a one-page flier about conflict resolution. The flier is sponsored by the Anne Arundel County Department of Health.

27. The first part of the flier poses three questions: "Do you have unresolved conflicts?", "Are you looking for peaceful solutions?", and "Want to know what mediation can do for you?" The next item, which is the intervention that the flier endorses, is "Conflict resolution is a process to help you find the best way to resolve conflicts and disagreements peacefully." The other items are resources for the Anne Arundel County Conflict Resolution Center and a number of mental health resources.

28. One of the key methods identified by the CDC in addressing violence as a public health issue is understanding the risk and protective factors for violence.[23] Risk factors increase the likelihood of violence and protective factors decrease the likelihood. The goal of interventions to reduce violence is to decrease or mitigate risk factors and increase or augment protective factors.

29. The CDC's "A Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors"[24] identifies a range of risk and protective factors in youth violence (defined as the use by persons aged 10 to 24 of physical force or power to threaten or harm others). One of the protective factors it identifies is "healthy social, problem-solving, and emotional regulation skills." Specifically, the report notes that "the likelihood of violence increases when youth have under-developed or ineffective skills in the areas of communication, problem-solving, conflict resolution and management, empathy, impulse control, and emotional regulation and management." The report goes on to note that, "building youth's interpersonal, emotional, and behavioral skills can help reduce both youth violence perpetration and victimization."

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[23] The Public Health Approach to Violence Prevention, *Centers for Disease Control and Prevention*, https://www.cdc.gov/violenceprevention/about/publichealthapproach.html. Accessed July 28, 2022.

[24] A Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors, *Centers for Disease Control and Prevention, National Center for Injury Prevention and Control*, https://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf. Accessed July 28, 2022.

30. A study by Miller et al. in the *American Journal of Public Health*[25] assesses firearm homicide rates in each state compared to the rate of state level gun ownership from 1988-1997. The study finds that there is a strong correlation between household firearm ownership in a state and higher rates of firearm homicide and suicide, with states that have higher rates of firearm ownership having higher rates of firearm homicide across all ages 5 and older. A study by Siegel et al. in the *American Journal of Public Health*[26] similarly assesses firearm homicide rates in each state compared to the rate of state level gun ownership from 1981-2010. The study finds that there is a strong correlation between household firearm ownership in a state and higher rates of firearm homicide and suicide, with states that have higher rates of firearm ownership having higher rates of firearm homicide. A recent study by Studdert et al. in the *Annals of Internal Medicine*[27] shows that people who don't own a gun who are gun homicide victims are more likely to live with someone who owns a gun than with someone who doesn't own a gun.

Opinion—Conflict Resolution Brochure

31. The information in the flier about conflict resolution is accurate. Conflict resolution is a best practice as put forth by the CDC and is an evidence-based approach to reduce youth and community violence. I hold these opinions to a reasonable degree of professional certainty. Conflict resolution can occur in a number of settings, including structured settings through conflict resolution services or in community settings as part of violence interruption programs. Research demonstrates a positive correlation between rates of gun ownership and homicides at the state level and at the household level.

32. Targeting and delivering health education materials to groups at higher risk is a well-established public health practice.[28] Since higher rates of gun ownership are associated with increased rates of gun homicide, it is a reasonable public health practice to deliver materials designed to decrease violence to gun owners and deliver it in a setting with a high number of gun owners to best reach a high-risk population. In my opinion, which I hold to a reasonable degree of professional certainty, the distribution of conflict resolution literature by gun dealers is likely to be an effective method to reduce gun homicides.

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[25] Miller M, Azrael D, Hemenway D. Rates of household firearm ownership and homicide across US regions and states, 1988-1997. *Am J Public Health*. 2002 Dec;92(12):1988-93.

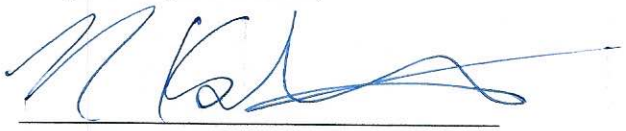
[26] Michael Siegel, Craig S. Ross, Charles King III, "The Relationship Between Gun Ownership and Firearm Homicide Rates in the United States, 1981–2010", *Am. J Public Health* 103, no. 11 (November 1, 2013): pp. 2098-2105.

[27] Studdert DM, Zhang Y, Holsinger EE, Prince L, Holsinger AF, Rodden JA, Wintemute GJ, Miller M. Homicide Deaths Among Adult Cohabitants of Handgun Owners in California, 2004 to 2016 : A Cohort Study. *Ann Intern Med.* 2022 Jun;175(6):804-811.

[28] Evidence-based Practice Center Systematic Review Protocol, *Agency for Healthcare Research and Quality, Effective Healthcare*, https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/medical-evidence-communication_research-protocol.pdf. Accessed July 28, 2022.

Dated: July 29, 2022

Respectfully submitted,



Nilesh Kalyanaraman, MD, FACP

APPENDIX A

NILESH KALYANARAMAN, MD, FACP

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PROFESSIONAL EXPERIENCE

Anne Arundel County Department of Health, Annapolis, MD — Sep 2019 – Present
Health Officer

- Lead a Local Health Department serving a population of 590,000+ people across urban, suburban and rural populations
- Manage over 800 staff members at 11 locations and 128 schools
- Responsible for $83M budget
- Oversee delivery of public health services including environmental health, school health, family health, disease prevention and management, and behavioral health
- Led public health Covid response including implementation of vaccination, testing, contact tracing, and equity programs.
- Relaunched Local Health Improvement Coalition, Healthy Anne Arundel, which collaborates with communities to identify and address their health priorities
- Led county's Gun Violence Intervention Team, a multiagency collaborative to address gun violence as a public health issue
- Led Opioid Intervention Team, a multiagency collaborative to address the opioid epidemic and implement a range of solutions across prevention, harm reduction, treatment and recovery

Health Care for the Homeless, Baltimore, MD — Jul 2012 – Sep 2019
Chief Health Officer — 2016 – Sep 2019
Chief Medical Officer — 2012 – 2016
Primary Care Physician — Jul 2012 – Sep 2019

- Supervise all clinical care at a Federally Qualified Health Center including medical, behavioral health, dental, case management, outreach, supportive housing, respite care and disability benefits
- Manage over 175 clinical staff at 6 locations
- Share responsibility with executive team for management of $28M agency budget
- Planned, implemented and launched three new care delivery sites including a new clinic in West Baltimore, a mobile clinic and a dental clinic
- Over 6 years led 45% growth in patients served and 65% growth in visits
- Responsible for grant development, implementation, and outcomes for federal, state, local and private grants
- Led agency wide implementation of SDH (social determinants of health) screening, alcohol and drug abuse screening, naloxone distribution, Hepatitis C treatment, medication assisted treatment expansion, and supportive housing expansion

- Served as agency lead for health services collaboration with community partners
- Led the creation of a performance improvement team and implementation of a population health management system
- Successfully organized and implemented the agency's patient centered medical home transformation plan and Joint Commission PCMH certification
- Responsible for regulatory oversight of all clinical services

People's Community Health Center, Baltimore, MD — Oct 2011 – Jul 2012
Medical Director, Internal Medicine

- Managed medical, dental and mental health care providers at 2 sites of a multi-site Federally Qualified Health Center.
- Responsible for quality improvement and clinic volume at both sites

AAAS Science & Technology Policy Fellow — Sep 2010 – Aug 2011
National Center for Complementary & Alternative Medicine
National Institutes of Health
Office of Policy, Planning & Evaluation
Bethesda, MD

- Assisted with policy proposal writing and development
- Participated in NIH wide informatics planning groups
- Conducted health services research on CAM usage

Unity Health Care, Washington, DC
Assistant Medical Director, DC Department of Corrections — 2008 – Aug 2010
Director of Internal Medicine — 2007 - 2008
Physician: Primary Care, Corrections, Hospital Medicine — Sep 2006 – Aug 2010

- Coordinated with Department of Corrections to ensure continuous provision of health care services to incarcerated individuals
- Implemented quality improvement programs in Hepatitis C, STI screening and Asthma
- Developed and implemented corrections infirmary care standards and supervised infirmary care staff

Physician — Jul – Aug 2006
Indian Health Service
Tahlequah, OK

Research Assistant — Jun – Aug 2000
Hammersmith Hospital, Imperial College
London, UK

- Worked on expression analysis of genes regulated by tyrosine kinase activity in cells containing the Bcr-Abl fusion protein

Research Assistant - Single Nucleotide Polymorphism Discovery — Sep 1997 – Jul 1999

Whitehead Institute
Cambridge, MA
- Developed and implemented high throughput genotyping methodology to perform gene association studies in case control populations
- Implemented and refined use of DNA microarrays in the discovery of polymorphisms

EDUCATION

Internal Medicine Residency 2003 – 2006
Emory University School of Medicine
Atlanta, GA

Doctor of Medicine 1999 - 2003
SUNY Brooklyn School of Medicine
Brooklyn, NY

Bachelor of Science 1993 - 1997
Yale University
New Haven, CT

BOARD CERTIFICATION

Internal Medicine 2006

BOARD & COMMITTEE MEMBERSHIPS

Maryland Association of County Health Officers 2019-present
President 2022-present
- Advanced member driven priorities at the state level including representing health officers with the state Department of Health and other organizations.

Maryland Dental Action Coalition 2019 - 2019
Glen Burnie, MD
- Oversight of organization working to increase oral health promotion, disease prevention, education, advocacy and access to oral health care.

Research Committee Chair 2016 - 2019
National Health Care for the Homeless Council
Nashville, TN
- Responsible for oversight of (a) research projects conducted by the Council and (b) development of future research opportunities.

Baltimore City Opioid Misuse Prevention Program 2015 - 2017
Baltimore, MD

- Member of committee tasked to develop low-cost rapid interventions to decrease opioid misuse in Baltimore City.

Maryland Health Care Commission Primary Care Collaborative 2014 - 2017
Baltimore, MD

- Member of state commissioned group of physician leaders tasked with reviewing and refining state proposal for the primary care portion of the state's Medicare waiver proposal to the Centers for Medicare and Medicaid Services.

Amerigroup Adult Medical Advisory Committee 2014 - 2016
Hanover, MD

- Physician advisor to the quality improvement and program implementation group of the health plan.

Evergreen Health Co-Op Physician Advisory Committee 2013 - 2014
Baltimore, MD

- Physician advisor to the quality improvement and program implementation group of the health plan.

Morbidity and Mortality Committee, DC Jail 2007 - 2010
Washington, DC

Pharmaceutical and Therapeutics Committee, DC Jail 2008 - 2010
Washington, DC

Grady Memorial Hospital Ethics Committee 2004 - 2006
Atlanta, GA

HONORS AND AWARDS

Fellow of the American College of Physicians 2014

Daily Record VIP List 40 under 40 2014
Baltimore, MD

Science & Technology Policy Fellowship 2010
American Association for the Advancement of Sciences

Downstate Alumni Association Summer Fellowship 2000
SUNY Brooklyn

Morse Fellows Award 1997
Yale University

PUBLICATIONS

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