NC Child Fatality Task Force CALM Work Group Report

Unintentional Death Prevention Committee of the Task Force

November 7, 2017

I. Background and Charge of the CFTF CALM Work Group

A. How this issue came to the Child Fatality Task Force

In recent years, the North Carolina Child Fatality Task Force (Task Force) has put a great deal of focus on the issue of youth suicides. The Task Force has studied data related to youth suicides and has heard from multiple experts addressing the science and evidence surrounding suicide, suicide risks, and suicide prevention strategies.

In 2016, the State Child Fatality Prevention Team (State Team), chaired by the Chief Medical Examiner, recommended to the Task Force statewide implementation and supporting funding for the suicide prevention program CALM: Counseling on Access to Lethal Means. This recommendation stemmed from the State Team's review of suicide deaths and the Team's concern about youths' access to lethal means and firearms in particular. The CALM Program addresses access to firearms but also other types of lethal means including harmful substances.

B. Charge of the CALM Work Group

In response to this recommendation as well as committee and work group discussions related to suicide prevention, the Task Force included on its 2017 Action Agenda an administrative item as follows:

> *Administratively support the convening of a work group to study best practices for training on access to lethal means and specifically CALM (Counseling on Access to Lethal Means) in order to propose an implementation plan for training to the Unintentional Death Prevention Committee by November, 2017.*

C. CALM Work Group Members

This work group (CALM group) was convened and led by the Executive Director of the NC Child Fatality Task Force. All other group members have suicide prevention expertise and knowledge of means reduction suicide prevention strategies and the CALM Program. Group members include:

- Kella Hatcher, Executive Director, NC Child Fatality Task Force
- Jane Ann Miller, Public Health Program Consultant, NC Division of Public Health

- Susan Robinson, Mental Health Program Manager/Planner, NC Division of Mental Health, Developmental Disabilities & Substance Abuse Services, also a member of the Child Fatality Task Force
- Dr. Kurt Michael, Professor of Psychology, Appalachian State University, and Associate Editor for the Journal of Child and Family Studies
- Dr. J.P. Jameson, Associate Professor of Psychology, Appalachian State University, and Associate Editor, Journal of Community Psychology
- Betsy Rhodes, North Carolina Area Director, American Foundation for Suicide Prevention
- Dana Cea, Chair of the North Carolina Chapter of the American Foundation for Suicide Prevention

II. Data Related to Youth Suicide and Firearms as Lethal Means

A. Youth suicide data

1. Suicide deaths: Nationally and in North Carolina, suicide is the second leading cause of death for youth between the ages of 10 and 17.[1] There were over 300 suicide deaths to North Carolina children age 17 and younger during the ten-year time period between 2006 and 2015.[2] In 2016 there were 44 youth suicides in North Carolina, and suicides accounted for 16% of deaths to youth ages 10 to 17.[3] For the ten-year time period between 2007 and 2016, the number of youth suicides in North Carolina has fluctuated (ranging from 22 to 46); however, the second half of that time period saw a 48% increase in the suicide rate over the first half of that time period, illustrating a general increase in rates.[4]

2. Suicide attempts and self-inflicted injuries: For the 2015 NC Youth Risk Behavior survey, 9.3% of NC high school students surveyed reported attempting suicide, which is almost double the rates reported in 2011 and 2013.[5] In 2014, there were 1,681 emergency department visits and 513 hospitalizations for self-inflicted injuries among youth ages 10 to 17 in North Carolina (note that not all self-inflicted injuries are considered suicide attempts).[6]

3. Other suicide facts: The two most common means of youth suicide death are hanging and firearm, each of which have accounted for approximately 45% of youth suicide deaths in NC during the past ten years, with other means such as poisoning being far less

[1] NC DHHS State Center for Health Statistics, based on 2015 NC Death Certificate data. US data - Centers for Disease Control and Prevention, National Center for Health Statistics, based on 2015 Underlying Cause of Death from CDC WONDER Online Database.
[2] State Center for Health Statistics, NC Department of Health and Human Services.
[3] State Center for Health Statistics, NC Department of Health and Human Services.
[4] State Center for Health Statistics, NC Department of Health and Human Services.
[5] 2015 Youth Risk Behavior Survey, North Carolina High School Survey: http://www.nchealthyschools.org/docs/data/yrbs/2015/statewide/highschool/trend.pdf.
[6] The percentage of these self-inflicted injuries where there was an intent to die cannot be determined from the hospital and emergency department data. Data source: N.C. State Center for Health Statistics, Vital Statistics-Hospitalizations, 2014; NC DETECT, 2014. Analysis by Injury Epidemiology and Surveillance Unit, NC Division of Public Health.

common.[7] More females than males attempt suicide, while more males than females die by suicide.[8]

B. Data on firearm-related deaths and injuries and safe storage of firearms

1. Deaths and injuries: For North Carolina children ages 0 to 17 during the five-year period between 2010 and 2014, there were 279 firearm-related hospitalizations and 777 firearm-related emergency department (ED) visits; in 2016 alone there were 97 firearm-related hospitalizations and 314 ED visits.[9] Between 2010 and 2014 there were 210 firearm-related deaths to NC children ages 0 to 17. [10] Of those firearm-related deaths, 15% were to children age 9 and under; 35% were to children age 14 and under. In 2016, there were 51 firearm-related deaths to NC children ages 0 to 17.[11] During the five-year period between 2010 and 2014, firearms (of all types) were the lethal means used in almost 45% of suicides and over 50% of homicides to children ages 0 to 17.[12]

2. Safe storage: According to the 2011 North Carolina Behavioral Risk Factor Surveillance System, 41.6% of North Carolina residents own firearms (2011 was the last year this data was collected). Approximately half of North Carolina residents with a firearm reported that the firearm is unsecured (secured = gun cabinet, trigger or cable lock), and 62.5% of residents who are parents left their firearms unsecured. Nationally, approximately one in three handguns is kept loaded and unlocked and most children know where guns are kept by their parents; more than 75 percent of guns used by youth in suicide attempts were kept in the home of the victim, a relative, or a friend.[13]

III. The Concept of Means Reduction and the CALM Program

Experts who spoke to the Task Force emphasized that "means reduction," which is reducing a suicidal person's access to highly lethal means, is a critical strategy in suicide prevention. The "Means Matter" campaign, a product of the Harvard Injury Control Research Center, backs up the importance of this strategy with the following facts:[14]

- Many suicide attempts are hastily decided-upon and involve little or no planning
- The particular means chosen for a suicide attempt may determine whether one who attempts suicide lives or dies

[7] Office of the Chief Medical Examiner, NC Department of Health and Human Services.
[8] Injury and Violence Prevention Branch, NC Division of Public Health.
[9] Data according to NC Violent Death Reporting System. Note: In October 2015, there was a change in the coding system used in administrative data sets that impacted the definition used to identify firearm-related injury cases. Because of this change, data are unavailable for 2015, and data pre-2015 are not comparable to data collected after this change occurred. For more information on the coding transition visit: http://www.injuryfreenc.ncdhhs.gov/DataSurveillance/ICD-10-Transition-1pg-Summary.pdf
[10] Office of the Chief Medical Examiner, NC Department of Health and Human Services.
[11] North Carolina State Center for Health Statistics, NC Department of Health and Human Services.
[12] Office of the Chief Medical Examiner, NC Department of Health and Human Services.
[13] *Gun Violence: Facts and Statistics*, from the Center for Injury Research and Prevention, Children's Hospital of Philadelphia Research Institute.
[14] Means Matter website from the Harvard T.H. Chan School of Public Health: https://www.hsph.harvard.edu/means-matter/. This website contains links to specific citations for these facts.

- Access to firearms is a risk factor for suicide
- 90% of those who attempt suicide and survive do not go on to die by suicide later
- Firearms used in youth suicide usually belong to a parent
- Reducing access to lethal means saves lives

Clinical CALM: Counseling on Access to Lethal Means, is a 2-3 hour training designed to train practitioners (medical, mental health) to implement counseling strategies to help clients and patients who are deemed to be at risk for suicide by enlisting the help of their families and supportive others to reduce their loved ones' access to lethal means, particularly firearms. There are briefer versions of the CALM training designed to educate gatekeepers (emergency medical personnel, law enforcement, educators, firefighters) on many of the core principles of Means Matter and the benefits of lethal means restriction. (These types of trainings are commonly referred to as "Gatekeeper Trainings," and the duration is 1 to 1.5 hours.)

The CALM Program and many of its components, including the New Hampshire Firearm Safety Coalition were developed by Mark Ciocca, Elaine Frank from Dartmouth's Injury Prevention Center, and Cathy Barber from the Harvard School of Public Health. Evaluations of the CALM Program have revealed post-training increases in the perception that lethal means restriction approaches are effective[15] and a higher likelihood of implementing CALM principles after a 6-month post-training follow-up.[16] With respect to involving firearm retailers in lethal means restriction programming, approximately half of the gun shops who received educative materials for display still had those materials visible 6 months later. Moreover, firearm retailers who believed in the merits of lethal means restriction (69%) were more likely to maintain the visible displays than the gun shop owners who did not (41%) 6 months later.[17] Given these findings, the CALM Program was identified by suicide prevention experts and Task Force members as a promising public health approach to preventing death by suicide in North Carolina.

IV. Current Reach of CALM in North Carolina

Dr. Kurt Michael and Dr. J.P. Jameson, members of CALM group, initially investigated the utility of scaling up the CALM Program in 2015 as part of the Assessment, Support, and Counseling (ASC) Center, a school mental health partnership in 3 western North Carolina school districts. Members of the ASC Team participated in the 2015 Injury Free Prevention Institute in Chapel Hill that focused on suicide prevention and selected the CALM Program as their focus after communicating with Cathy Barber and Elaine Frank directly.

In January of 2016, Dr. Michael sought and received internal funding from Appalachian State University (ASU) to cover the costs associated with travel to the Harvard School of Public Health and the purchase of the proprietary CALM program materials. Drs. Michael and Jameson received two full days of training from CALM developers, Elaine Frank and Cathy Barber to

[15] Johnson, Frank, Ciocca, & Barber, 2011; Rosen, Michael, Jameson, in preparation.
[16] Johnson, Frank, Ciocca, & Barber, 2011
[17] Vriniotis, Barber, Frank Demicco, & New Hamshire Firearm Safety Coalition, 2014.

enable them to scale up CALM training to North Carolina constituents. Elaine Frank and Cathy Barber included extensive materials on CALM as part of the training package provided to Drs. Michael and Jameson, after which they were given permission to modify the materials to fit the training needs of the local constituencies.

Drs. Michael and Jameson have conducted Clinical and Gatekeeper CALM trainings in North Carolina, primarily in the Western part of the state where they are based and where the suicide rates are higher than state and national averages. In addition, the rate of handgun deaths determined to be suicides (78%) are especially high in rural northwest North Carolina.[18] In terms of CALM trainings delivered thus far, Drs. Michael and Jameson trained the ASU Counseling Center staff and all participants in the Carolina Network for School Mental Health meeting during 2016. During January of 2017, they provided Gatekeeper training to 167 resident assistants at ASU. During the summer of 2017, they trained the medical staff at the ASU Health Services Center, which has several thousand patient visits each academic year. They have also provided CALM training to constituents nationally, including presentations in Texas (National Association of School Psychologists), Utah, Missouri (Mental Health Education Integration Consortium), and Florida.

Among the six suicide prevention experts in the CALM group, all of whom are well connected to suicide prevention resources in North Carolina, none were aware of anyone else providing CALM training in North Carolina besides Drs. Michael and Jameson. As indicated above, Clinical CALM trainings last 2-3 hours, whereas Gatekeeper trainings are about 1 to 1.5 hours, as well as informational presentations (not trainings) on CALM. It is estimated that approximately 100 clinical practitioners and 300 gatekeepers have been trained by Drs. Jameson and Michael in North Carolina to date, with the majority of participants residing in the northwestern area of the state.

There is also a free CALM training offered online (see http://training.sprc.org/enrol/index.php?id=3), and latest available data shows that 94 people in NC have completed the online training.

V. Factors to Consider in Expanding the Reach of CALM in NC

A. Awareness is critical

A first step in expanding the reach of CALM is to increase awareness related to means reduction as a suicide prevention strategy and the existence and availability of the CALM Program.

B. Importance of expanding both in-person and online CALM training

[18] CDC, WONDER, 2016.

Increasing the number of North Carolinians who access the online CALM Program is valuable, and the CALM group believes it is very important to also increase in-person trainings. In-person trainings are likely to be more effective--among other reasons, live trainings involve interactive work that includes role playing scenarios which strengthen the ability of trainees to apply their knowledge. Past research indicates that interactive demonstrations and role plays are judged to be more effective in the acquisition of procedural skills necessary to deliver evidence-based psychosocial interventions. However, CALM group members are not aware of evaluations comparing the effectiveness of the online training to the in-person training for CALM specifically.

C. In order to expand in-person CALM training, more trainers are needed

Having only two known CALM trainers in the state dramatically limits the reach of this program, so expansion must include train the trainer events. Currently, training is offered through the Injury Prevention Center at Children's Hospital at Dartmouth. Depending on the type of program, costs range from $3,000 to $5,000 plus travel expenses for a train the trainer program.

D. Training format

An ideal means of expanding the reach of CALM would be to provide a training format that includes a two-day train the trainer workshop within which a CALM training is also offered to gatekeepers and clinicians. In other words, most of the two-day training would be for the trainers themselves, and a portion of those two days would be opened up to a much broader audience to take part in CALM training. An ideal number of participants for a clinical training is 30, with two trainers, and gatekeeper trainings can be much larger. Trainings that include local data and information tailored to the audience is especially effective. Including in the training people with lived experiences related to suicide is also especially effective.

E. Priorities for CALM training

1. Geographical priorities: The CALM group identified the need to focus on rural areas because they have twice the suicide rate of urban areas. There is also a need to focus on the Northwestern corner of the state, such as Watauga, Ashe, and Alleghany Counties where the suicide rates tend to be twice that of the rest of the state or the national average.

2. Priority individuals: In terms of priority individuals to receive CALM training, the CALM group identified the following:

- First responders
- Primary care physicians
- Emergency care providers
- Community mental health and substance use care providers

- College students with an academic focus in mental health, substance use, or health care

3. Facilitating outreach: Those groups who could facilitate reaching the above individuals include:

- Managed Care Organizations
- Hospital Association
- Area Health Education Centers
- Academic groups, such as Associations in applicable fields of study
- College campus student health centers
- Military, veterans, National Guard
- Suicide survivors and families of those who have died from suicide

4. Priority trainers: For train the trainer workshops, priority should be placed on training individuals who are affiliated with organizations where it is likely sustainable work on means reduction can be carried forward.

VI. Recommendations to Child Fatality Task Force

The CALM group recommends expanding the reach of the CALM Program in North Carolina as follows:

1. Increase the number of individuals in North Carolina who are trained to conduct CALM training as well as those who are recipients of the CALM training by conducting events that include a train the trainer workshop as well as the CALM training itself.

2. Initiate strategic outreach to increase awareness related to the importance of means reduction as a suicide prevention strategy and the existence and availability of the online and live versions of CALM training. The priority geographical focus for this outreach should be rural areas as well as the Northwestern part of the state. Priority recipients of CALM training should include first responders, primary care and emergency physicians, community mental health and substance use care providers, and college students with an academic focus in mental health, substance use, or health care.

3. Designation of an organizational entity responsible for managing CALM expansion together with funding for that organization to support the work of expansion.