National Advisory Council on Migrant Health

December 18, 2017

The Honorable Acting Secretary Hargan, J.D.
U.S. Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Acting Secretary Hargan,

The National Advisory Council on Migrant Health (NACMH/Council) advises, consults with, and makes recommendations to the Secretary of the U.S. Department of Health and Human Services (HHS) and the Administrator, Health Resources and Services Administration (HRSA). The Council is charged with reviewing the health care concerns of migrant and seasonal agricultural workers (MSAW), and the organization, operation, selection, and funding of migrant health centers (MHC) and other entities assisted under section 330(g) of the Public Health Service Act, as amended, 42 USC 254(b) with the goal of improving health services and conditions for MSAWs and their families.

During our meeting, held November 7-8, 2017, in Raleigh, North Carolina, we received updates from HRSA senior leaders. Additionally, the Council heard presentations from:

- Joseph Gallegos, Vice- President, National Association of Community Health Centers (NACHC), who provided the NACHC update,
- E. Benjamin Money, President of the North Carolina Community Health Center Association, and Elizabeth Freeman Lambar of the North Carolina Farmworker Health Program,
- Dr. Thomas Arcury from the Wake Forest School of Medicine, who presented on Green Tobacco Sickness, and
- Dr. Sara Quandt of the Wake Forest School of Medicine, Josh Hinson of the University of North Carolina, and Dr. Alison Bartel of the Rural Health Group, NC, who participated in a panel on Stress, Mental Health and Substance Abuse, and Intimate Partner Violence in MSAWs and the Need for Trauma Informed Care as a Standard of Practice.

The Council also heard testimonies from 16 MSAWs from across the state of North Carolina. These testimonies indicated that there were unmet health and safety needs in the areas of mental and behavioral health, intimate partner violence, and exposure to pesticides and other toxicants including nicotine poisoning from harvesting tobacco. Some MSAWs shared their experiences of working in the fields, often as early as 12 years old, and described “youth labor teams” that worked in fields. These youth often experienced mental and physical stress. Multiple individuals testified to the stressful experiences associated with migrating from state to state, or country to country. They testified that promotor/as (Community Health Workers) from their communities are often their first point of contact with the health care system and provide multiple types of support, including helping them navigate the healthcare system; connecting

them to community resources; and providing culturally and linguistically appropriate education and services for primary care and mental health services, including critically needed behavior change support services.

Several MSAWs reiterated that health center enabling services play a cardinal role in supporting access to health and occupational safety education, especially in rural areas, where transportation and long workdays make accessing health services a challenge. A few testifiers indicated that they have to travel several hours to access health care services; seeking specialty care in particular, often resulted in significant loss of wages.

On behalf of the Council that met November 7-8, 2017 and in accordance with the charge given to the Council, we submit the following recommendations for your consideration.

Recommendation I

The Council recommends that HRSA Bureau of Primary Health Care (BPHC) fully integrate primary care and mental/behavioral health services, and adopt Trauma Informed Care as a standard of practice at health centers serving MSAWs by:

- Supporting the continued expansion of mental and behavioral health care services for agricultural workers through targeted supplemental funding to health centers,
- Supporting efforts to address shortages in the mental and behavioral health workforce,
- Providing technical assistance and training to MHC staff on the unique situational stressors experienced by MSAWs, and
- Adopting universal screening using a trauma-focused screening instrument with all health center patients.

Background:

MSAWs migrate to, and live in rural and often geographically isolated areas, with limited access to health care, and little access to bilingual and culturally competent providers. There is a dearth of mental health providers in rural areas, where the most disadvantaged and under-resourced communities are often those with the greatest need for their services. County-level estimates of mental health professional shortage in the United States show higher levels of unmet need for mental health professionals in counties that are more rural and have lower income levels.[i] MSAWs experience multiple situational stressors, including family separation, job related demands of migratory and seasonal farm work (frequent mobility, long work hours, limited or nonexistent benefits, poor housing conditions), and social marginalization (linguistic and cultural isolation, lack of understanding of the U.S. health system). Studies of MSAW mental and behavioral health status have found that the prevalence of depressive symptoms is higher among MSAWs as compared to the general population. The long-term separation from family and difficult working conditions often result in MSAWs developing depression and anxiety disorders and turning to alcohol and other drugs to cope with these stressors. Regional studies of Latino migrant laborers have identified prevalence rates as high as 80 percent for regular binge drinking, 39 percent for alcohol dependence, and 25 percent for substance use.[ii]

Research indicates MSAWs often experience “triple trauma” - trauma in their home country, trauma of migration, and trauma in the new country.[iii] Trauma leads to depression and post-traumatic stress disorder (PTSD). Multiple studies have found a link between exposure to violence and depression among Latinos.[iv] Understanding risk factors for the increased disease burden of concurrent PTSD and depression is essential for appropriate screening and treatment

planning. Without a clear understanding of the effect that traumatic experiences have on development, it is difficult for practitioners to make meaningful connections in diagnosis and treatment.[v] Hence, it is essential that the "trauma-informed care framework" should universally guide primary care and mental health services provided to MSAWs in order to more effectively address the complex social, cultural, economic, and justice factors that contribute to MSAW disease burden.[vi]

Recommendation II

The Council recommends that the Secretary ensure that enabling services are an integral part of providing comprehensive care to MSAWs, by directing BPHC to fully fund and support health centers serving MSAWs towards the provision of enabling services. In order to increase access to healthcare with demonstrated improved health outcomes, and towards the provision of sustainable and comprehensive services, the Council recommends that BPHC:

- Provide supplemental funding opportunities and targeted technical assistance to health centers to build MHC capacity to develop model collaborations and/or networks with local and state agencies to support MSAWs access to care. For example:
  - To address the social determinants of health and help MSAWs be more aware of their rights and resources available to them, develop collaborations such as Medical-Legal Partnerships (MLP), a healthcare model that integrates legal care into the healthcare setting.[vii] Strong links between MHCs and MLPs can benefit MSAWs and their families who face diverse situations including living with domestic and intimate partner violence, and living in poor housing conditions, among others.
  - Establish strong partnerships and collaboration with federal agencies, including local representatives of Occupation Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA), to identify and address occupational hazards and reduce injuries that impact agricultural workers.
- Collaborate with Agency for Healthcare Research and Quality (AHRQ), Rural Health Information Hub (RHIHub) and other HHS-supported platforms to encourage implementation of successful strategies that demonstrate improved health outcomes, and efficiencies in the provision and utilization of health care services. Efficiencies that result in enhanced returns on investment include the integration of Community Health workers (CHW), Promotor/as, and Outreach Workers into clinical care teams.

Background

Community Health Centers (CHC), including MHCs, are a central component of our nation's health safety net. CHCs provide comprehensive preventive, primary and mental health services to over 25 million patients annually, at nearly 10, 400 sites across the US, to low-income, racially and ethnically diverse, and uninsured populations. Targeted outreach and the provision of enabling services is essential to improving access, continuity of care and better health outcomes for MSAWs. MSAWs face multiple barriers to care because they often live in rural/frontier areas where there is no public transportation and lack personal transportation. Poor housing conditions in farmworker labor camps, cultural and linguistic isolation, and employment that exposes workers to elevated risks of occupational injury and exposure to toxicants make MSAWs especially vulnerable to poor health outcomes, which often go unnoticed because they are hidden in the rural landscape, increasing farmworker vulnerability.[viii] Enabling services often include health education, interpretation, transportation, and case management.[ix, x] The availability of enabling services contributes to effective and efficient primary and preventive care utilization, which results in improved health outcomes. Studies have shown that health

centers provide high quality primary care for their patients, with higher rates of screening and health promotion counseling. Medicaid prospective payment rates and federal health center grants have not kept up with the new paradigm and cost of patient care.[xi] Because they are not adequately reimbursed or funded for the provision of enabling services, health centers absorb the costs at the expense of other services or reaching new patients. Collaborations with other federal agencies to share and bring successful strategies to scale has the potential to improve outcomes.

Recommendation III

The Council would also like to draw the Secretary's attention to effects of Green Tobacco Sickness (GTS) among MSAWs, especially children and adolescents working on tobacco farms. The magnitude of the adverse effects have not been sufficiently assessed through research and accurate data collection, on the incidence, prevalence, and its short and long-term health effects. Health centers, health care providers (clinicians, outreach workers, lay health workers), public health officials, and agencies that serve MSAWs in tobacco-producing states need to become more knowledgeable about the causes, signs and symptoms of GTS in order to more accurately diagnose and treat the illness. To achieve this, the Council recommends the following:

- Health centers that serve MSAWs should conduct universal screening for environmental toxicants, including GTS, especially among pediatric and adolescent patients.
- Ensure the availability of training on the timely and appropriate diagnosis and treatment of GTS available for health care professionals. Consider offering continuing medical education credits for clinical providers.
- Include GTS as a required clinical reporting measure in the BPHC annual Uniform Data System (UDS) collection.
- Create pathways for collaboration between employers, outreach and community health worker programs, agricultural extension agents, Migrant Head Start Centers, and other agencies to provide workers with culturally and linguistically appropriate information and training about nicotine hazards, GTS prevention, and personal protective equipment (PPE) before letting MSAWs harvest tobacco.
- Commission a study to research and collect accurate data on the incidence, prevalence, short and long-term effects of GTS.
- Fund research to study the health effects of prolonged occupational poisonings among MSAWs, especially children and adolescents who are uniquely vulnerable to environmental toxicants.
- Update the Department of Labor's list of Prohibited and Hazardous Occupations for Minors,[xii] to include tasks where children have direct contact with tobacco in any form, because child labor in tobacco fields is a common practice, and the health effects of long-term exposure are unknown.
- Include GTS-specific questions in the US Department of Labor's annual National Agriculture Workers Survey.

Background

Historically, the tobacco industry has played an integral role in North Carolina's economy, serving as the backbone of the state's agricultural base. Despite the federal government's decision to end the quota system in 2004, tobacco remains among North Carolina's biggest cash crops and the state is, by far, the nation's top tobacco producer.[xiii] MSAWs who plant, cultivate, and harvest tobacco are at risk of suffering from a unique occupational hazard in the form of

nicotine poisoning known as GTS. Workers are at especially high risk for developing this illness when their clothing is saturated from tobacco that is wet from rain or morning dew, or perspiration in hot temperatures.[xiv] GTS may have rapid onset while the worker is in the field, or symptoms may be delayed for several hours and are characterized by nausea, vomiting, dizziness, headache, and muscle weakness that normally resolve within three days.[xv] [xvi]Workers who are new to handling and harvesting tobacco may have a lower tolerance to nicotine exposure than previously exposed workers and therefore are at increased risk for GTS. Additionally, children and adolescents may be more vulnerable to GTS because their body size is small relative to the dose of nicotine absorbed, they lack tolerance to the effects of nicotine, and they lack knowledge about the risks of harvesting tobacco.[xvii,xviii] Additionally, many of the pesticides used in tobacco production are known neurotoxins, poisons that alter the nervous system. The long-term effects of childhood pesticide exposure can include cancer, problems with learning and cognition, and reproductive health issues. Children are especially vulnerable because their bodies and brains are still developing. [xix, xx]

A National Institute for Occupational Safety and Health (NIOSH)-funded study indicates that about one quarter of workers harvesting tobacco in North Carolina fields suffer from GTS in a single agricultural season. Because acute nicotine poisoning is self-limiting and of short duration, GTS cases are commonly misdiagnosed as pesticide poisoning or heat exhaustion unless the health care practitioner is familiar with the illness, has knowledge of a worker's potential for exposure, or has received training.[xxi] There are no standard diagnostic criteria for GTS, nor does the illness have an ICD-10 code, and there is no reporting requirement on the UDS. The true impact of GTS is unclear, because cases are not accurately identified and documented, and GTS is underreported. Little is known about the long-term health effects among workers who do not develop acute poisoning but absorb dangerous amounts of nicotine over a prolonged period. The aforementioned NIOSH-funded study indicates that saliva samples of non-smoking workers had nicotine levels equivalent to regular smokers and that in just one day, workers can absorb the amount of nicotine found in 36 cigarettes.[xxii]

Recommendation IV

The Council recommends the Secretary support the continued expansion of telehealth services to provide access to care for MSAWs in rural and geographically isolated areas with limited access to transportation, by ensuring the following:

- The availability of telemedicine as a reimbursable service covered by the Federally Qualified Health Center (FQHC) Medicaid Prospective Payment System (PPS), to improve access to care for MSAWs and their families, in all states. The Health Center Program serves approximately 25 million patients, often in critically underserved areas. FQHCs play a critical role for Medicaid patients and state programs by providing access and the value they deliver. The PPS system is central to continued viability, ensuring predictability and stability for health centers, while also protecting other federal investments. PPS ensures that health centers are not forced to divert their section 330 grant funds provided to support health center operations and care to the uninsured, to subsidize low Medicaid payments.
- Ongoing updates keep PPS rates at pace with inflation and with changes to the range of services health centers provide.
- All states permit health centers to bill Medicaid for more than one medical, mental/behavioral health, or dental encounter per day to ensure optimal seamless care.

Currently, individual States pursue diverse reimbursement policies, especially as new legislation is introduced each year.

- Ensure uniformity in available telehealth services for all health centers, irrespective of the State of location. Uniformity should apply to definitions, reimbursement policies, licensure requirements and other important issues in their Medicaid Program Guidelines.
- Enable HRSA to provide Federal Torts Claims Act (FTCA) coverage for telemedicine services.

Background

MSAWs work and reside primarily in rural areas and the availability of reimbursable telehealth services can benefit patients, providers and payers, including enabling timely care in remote areas, preventing delays in care due to lack of access at rural and isolated MHCs. This would lead to fiscal and resource efficiencies on numerous fronts. As an example, a critical service currently not covered by Medicaid is the provision of tele mental health services. Reimbursable tele mental health service offers a promising avenue for improving access due to provider shortages, making immediate warm hand-offs possible. Telemedicine has also been found to be as effective as in-person visits for patients with asthma and other conditions.[xxiii]

In closing, we extend our appreciation for the honor of serving on the National Advisory Council on Migrant Health. The Council recognizes the essential role that MSAWs play in our economy and in our country's domestically produced food supply. We recognize the complexity of the needs of the individuals and the key role that federal health centers play in the provision of high quality, cost effective health care to MSAWs, as well as to residents in rural, frontier and metro communities across our country. We thank the Secretary for considering our recommendations on behalf of those we serve.

Sincerely,

Amanda Phillips Martinez
Chair, NACMH

cc: George Sigounas, Ph.D., MS
James Macrae, MA, MPP
Jennifer Joseph, Ph.D., MSEd
Esther Paul, MBBS, MA, MPH

[i] Thomas KC, Ellis AR, Konrad TR, Holzer CE, Morrissey JP. County-level estimates of mental health professional shortage in the United States. Psychiatr Serv. 2009 Oct;60(10):1323-8. doi: 10.1176/ps.2009.60.10.1323. https://ps.psychiatryonline.org/doi/pdf/10.1176/ps.2009.60.10.1323

[ii] Anna Pagano, Ph.D. BARRIERS TO DRUG ABUSE TREATMENT FOR LATINO MIGRANTS: TREATMENT PROVIDERS' PERSPECTIVES. *J Ethn Subst Abuse*. 2014 ; 13(3): 273–287. doi:10.1080/15332640.2014.886320. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4388552/pdf/nihms588555.pdf

[iii] Triple Trauma Paradigm: https://tacklingtrauma.wordpress.com/trauma-an-introduction/triple-trauma-paradigm/

[iv] Stacey Kaltman, PhD, Bonnie L. Green, PhD, Mihriye Mete, PhD, Nawar Shara, PhD, MPH, and Jeanne Miranda, PhD. Trauma, Depression, and Comorbid PTSD/Depression in a Community Sample of Latina Immigrants. Psychol Trauma. 2010 Mar 1; 2(1): 31–39. doi: 10.1037/a0018952 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2850073/#R26

[v] Poole and Greaves Becoming Trauma Informed in Poole, N., & Greaves, L., (2012) http://www.camh.ca/en/education/about/camh_publications/Pages/becoming_trauma_informed.aspx

[vi] (Migrant Clinicians Network. Trauma Informed Care: Behavioral Health in a Trauma-Informed Setting. http://www.migrantclinician.org/toolsource/resource/trauma-informed-care).

[vii] https://outreach-partners.org/wp-content/uploads/2015/09/medicallegalpartnership.pdf

[viii] Phillip Summers; Sara A. Quandt, PhD; Jennifer W. Talton, MS; Leonardo Galván, and Thomas A. Arcury, PhD. Hidden Farmworker Labor Camps in North Carolina: An Indicator of Structural Vulnerability. Am J Public Health. 2015 December; 105(12): 2570–2575.Published online 2015 December. doi: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4638263/10.2105/AJPH.2015.302797

[ix] (http://www.aapcho.org/wp/wp-content/uploads/2012/03/ES-Metlife-Report.pdf,)

[x] http://www.nachc.org/wp-content/uploads/2015/06/EnablingServicesReport.pdf

[xi] Maria Castellucci. Community health centers venture into value-based care to increase access, decrease costs: http://www.modernhealthcare.com/article/20170601/NEWS/170609994

[xii] https://www.in.gov/dol/2741.htm

[xiii] Bryan Mims. The Story of the Tobacco Industry in North Carolina: https://www.ourstate.com/tobacco-soldiers/

[xiv] Recommended Practices: Green Tobacco Sickness NIOSH Update. Atlanta: CDC; 2015 March https://www.cdc.gov/niosh/topics/greentobaccosickness/default.html

[xv] Ballard T, Ehlers J, Freund E, Auslander M, Brandt V, Halperin W. Green tobacco sickness: occupational nicotine poisoning in tobacco workers. Arch Environ Health. 1995;50:384–9. https://www.ncbi.nlm.nih.gov/pubmed/7574894

[xvi] McKnight RH, Levine EJ, Rodgers GC. Detection of green tobacco sickness by a regional poison center. Vet Hum Toxicol. 1994;36:505–10. https://www.ncbi.nlm.nih.gov/pubmed/7900265

[xvii] Weaver V.M., T.J. Buckley, J.D. Groopman. 1998. Approaches to environmental exposure assessment in children. Environmental Health Perspectives 106(3) 827-832. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1533077/

[xviii] Ginsberg G., W. Slikker Jr., J. Bruckner, B. Sonawane. 2003. Incorporating children's toxicokinetics into a risk framework. Environmental Health Perspectives 112(2) 272-283. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1241835/

[xix] Sophie Mavrikou; Kelly Flampouri; Georgia Moschopoulou; Olga Mangana; Alexandros Michaelides; and Spiridon Kintzios. Assessment of Organophosphate and Carbamate Pesticide Residues in Cigarette Tobacco with a Novel Cell Biosensor. Published online 2008 Apr 23. doi: 10.3390/s8042818 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673447/pdf/sensors-08-02818.pdf

[xx] Brenda Eskenazi, Asa Bradman, and Rosemary Castorina. Exposures of Children to Organophosphate Pesticides and Their Potential Adverse Health Effects. Environmental Health Perspectives Vol 107, Supplement 3, June 1999 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1566222/pdf/envhper00520-0027.pdf

[xxi] Arcury T.A., S.A. Quandt, J.S. Preisser, D. Norton. 2001. The incidence of Green Tobacco Sickness among Latino farmworkers. Journal of Occupational and Environmental Medicine 43(7) 601-609.

[xxii] Arcury T.A., S.A. Quandt, J.S. Preisser, D. Norton. 2001. The incidence of Green Tobacco Sickness among Latino farmworkers. Journal of Occupational and Environmental Medicine 43(7) 601-609.

[xxiii] Jay M. Portnoy, MD; Morgan Waller, MBA; Stephen De Lurgio, PhD; Chitra Dinakar, MD. Telemedicine is as effective as in-person visits for patients with asthma. DOI: http://dx.doi.org/10.1016/j.anai.2016.07.012