United States Arctic Research Commission

December 13, 2017

The Honorable Cathy Giessel
State Senate
Alaska State Capitol
Juneau, Alaska 99801-1182

Dear Senator Gissel:

I am writing to to share three summaries of work that have been part of the U.S. Arctic Research Commission's focus for the last few years. As you know, USARC was created by Congress to provide advice about research priorities for the federal government and others. USARC has three working groups in Alaska: The Alaska Rural Water and Sanitation Working Group, the Arctic Renewable Energy Working Group and the Arctic Mental Health Working Group. Each of these are briefly summarized in the papers included with this letter. For more information please see www.arctic.gov/working_groups.html.

I would like to bring special attention to the Arctic Mental Health Working Group (AMHWG), which was formed by USARC in 2015 to promote research on, and raise awareness of, the significant mental and behavioral health disparities that exist between Arctic and non-Arctic populations. A critical component of addressing the mental and behavioral health needs in Northern communities is the presence of a well-trained cadre of mental health providers. Unfortunately, in Alaska, the mental health care provider to population ratio is below the national average. Additionally, most Alaskan mental health care providers are centered in our urban areas, resulting in fewer providers in the rural communities where the need is greatest.

The AMHWG has developed the enclosed publication on needs and research recommendations related to Alaska's mental health care workforce shortage. This publication highlights research that is needed in a variety of areas ranging from better understanding the magnitude and scope of this shortage to the development of alternative means of mental health care provision in remote areas.

Hopefully this publication will be useful to you as you address this challenging issue that touches so many Alaskans. Please let us know if we can be of any assistance.

Sincerely

Fran Ulmer

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Chair, U.S. Arctic Research Commission

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Alaska's Mental Health Care Workforce Shortage

A Publication of the Arctic Mental Health Working Group

Needs and Research Recommendations

To address the shortage of mental health care providers in Alaska, research is needed to:

- Understand the magnitude and composition (i.e., type of providers needed) of the shortage
- Inform solutions to increase the number of providers, their retention, and job satisfaction, and to develop alternative means to provide care in remote areas

Mental Health Care Needs

Alaska's suicide rate is among the highest in the nation, with the prevalence among the Alaska Native population, particularly in the most remote areas of the state, surpassing that of the general Alaskan population[1] (Figure 1). The 2016 Alaska Behavioral Health Systems Assessment Report estimated that 145,790 adult Alaskans—**roughly 20% of the state's population**—need mental and behavioral health services.[2] One component necessary to address mental health issues is a well-trained cadre of mental health care providers to provide preventative support and treatment.

The Alaska Behavioral Health Systems Assessment Report further indicated that **only 19% of those in need received mental health care services** with funds from the State of Alaska Medicaid and/or Behavioral Health Fund.[2] No data exist to determine if the remaining 81% received mental health services paid for by other means or simply did not receive services.[2]

There are several reasons why individuals needing mental health services do not receive them. In some cases, the perceived stigma associated with the problem or illness prevents individuals from seeking help. In other cases, individuals may be more comfortable seeking help from alternative providers such as faith-based, tradition/culture-based or peer-support resources within their community. Finally, particularly in remote areas, **availability and access to mental health care providers are often limited.**[3,4]

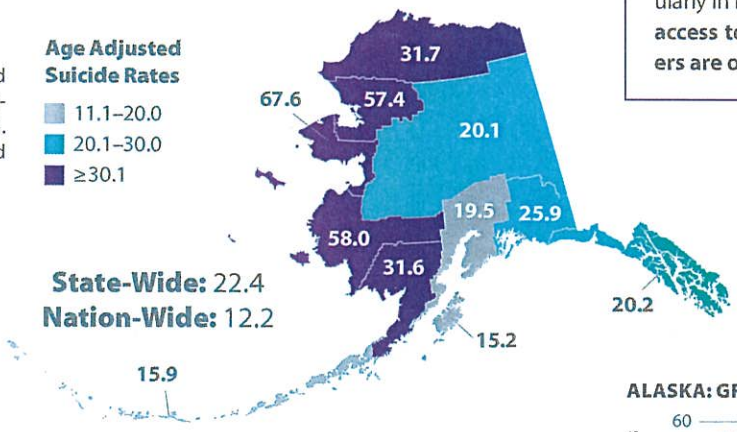

FIGURE 1. Suicide rates (age-adjusted rate* of suicide per 100,000 individuals) in Alaska by region 2006–2015. Source: Alaska Health Analytics and Vital Records, last updated 2/13/17.

How Many Mental Health Care Providers Are Needed?

Despite the number of individuals in need of mental health care services, the ratio of mental health care providers to population is lower in Alaska than nationally (Figure 2). Furthermore, most providers work in urban areas,[5] such that the state's remote areas have even lower provider/population ratios.

There are many types of mental health providers in Alaska (e.g., psychiatrists, neurologists, psychologists, counselors, clinicians, technicians, behavioral nurse practitioners, and behavioral health aides), though as an example, here we consider only the shortage of psychiatrists. Two studies estimated a need for 25.9[6] and 15.3[7] psychiatrists per 100,000 adults nationally, with the authors of the second study noting that the mental and behavioral health care needs of rural populations may not have been adequately captured.[7] National estimates do not account for Alaska's unique population, geography, and need but can serve as a benchmark for estimating the number of psychiatrists needed in Alaska. Based on 2010 Census data, Alaska needs 184 or 106 psychiatrists, respectively.

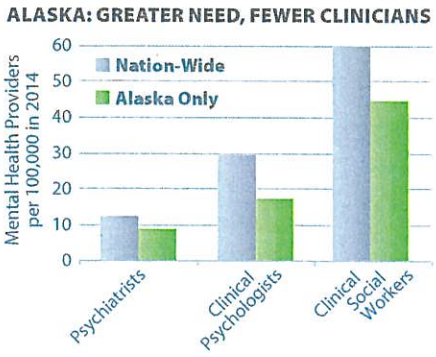

FIGURE 2. The ratio of mental health providers per 100,000 adult population in 2014 in the United States versus Alaska. US data from World Health Organization, Global Health Observatory Data repository, https://goo.gl/62f48K. Alaska-only data are from the Alaska Department of Labor and Workforce Development (https://goo.gl/wCctk3) and 2010 US Census data.

* Age-adjustment is a statistical process applied to rates of disease, death, injuries, or other health outcomes which allows communities with different age structures to be compared.

In comparison to this estimated need, the Alaska 2015–2016 Primary Care Needs Assessment identified 85 licensed psychiatrists in Alaska.[5] This figure is likely high, as "licensed" does not necessarily mean practicing. This number is also 54% and 20% below the need estimated based on the national studies referred to above.

Several barriers to hiring and retaining mental health care workers in Alaska have been identified that may lead to this shortage:

- Limited state and federal funding for mental health care provider positions[8, 9]
- Compensation packages are insufficient to attract qualified candidates[10]
- Social and geographic isolation (especially in rural locations)[10]
- Alaska's extreme climate[10]
- State-required documentation burdens reduce patient contact time and job satisfaction[2,8]

2.9 Years

The average retention time for mental health care providers* in Alaska[11]

Over 1 in 5

The ratio of vacant mental health provider positions in rural Alaska as compared to 1 in 10 in urban Alaska.[9]

Research Recommendations to Address Alaska's Shortage of Mental Health Care Providers

- **Establish *Alaska-specific* estimates for the number and types of mental health care providers needed.** Without more information on those receiving mental health services paid for by non-Medicaid/Behavioral Health Fund sources (i.e., commercial/private insurance or self payment), it is difficult to know the true shortage of providers. Alaska-specific research similar to the previously mentioned study[7] on the national requirements for behavioral health practitioners would provide insight into the different types of providers most urgently needed and the most effective approaches for workforce development.
- **Understand and predict how the redesign of Alaska's Medicaid program and the potential integration of mental and primary health care will impact the shortage of mental health care providers.** Behavioral health redesign and reform is part of the larger Medicaid reform initiative (https://goo.gl/Aomx9f) to improve mental health care quality and accessibility. Research is needed to understand how policy changes will impact the need for the various types of mental health care providers in the state, and inform recruitment and retention solutions.
- **Create research-informed alternative approaches to providing mental health care in remote areas.** Remote telemedicine systems and other e-health applications offer significant technical and clinical benefits when applied within broader-based systems serving isolated populations.[12] These benefits can improve the quality of care provided.[13] Evaluation of telemedicine as an alternative approach, as well as the evaluation of community and behavioral health aides as frontline mental health care providers in rural Arctic communities could be undertaken to assess the impact of these approaches on both patient and provider.
- **Investigate job satisfaction and retention to better understand how to grow and strengthen the mental health workforce.** Challenges in hiring and retaining employees and in ensuring an appropriate level of job satisfaction are not unique to Alaska. Indeed, this is an issue across the Arctic. However, research into the Alaska-specific challenges would assist with solution development. A better understanding of various approaches (e.g., job or task-sharing strategies, rotating positions, "grow-your-own" strategies) successfully employed in rural communities elsewhere in the Arctic could help inform potential solutions for Alaska.

Next Steps

To determine specific efforts needed to address these research recommendations, input will be solicited from a broad suite of stakeholders, including community members, researchers, practitioners, and administrative personnel through future USARC workshops and conference sessions.

* "Provider" includes psychiatrist, psychologists, clinicians, counselors, behavioral health aides, and technicians

References

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AMHWG

Arctic Mental Health Working Group

GROUP MISSION: To strengthen systems of care to prevent suicide and improve mental health in the circumpolar North via the promotion of indigenous knowledge, research, and evidence-based early intervention and primary prevention efforts.

Suicide is a devastating event, with a web of causality encompassing social, emotional, environmental, and other health factors. In Alaska, the suicide rate is almost twice the US national suicide rate, with even more disproportionate statistics reported from Native Alaskan communities (Figure 1).[1]

Similarly, high rates of suicide exist across the Arctic[2] where remote indigenous communities are adapting to the social, political, economic, and environmental changes that characterize rapid modernization. Many of these communities have also experienced historical trauma through early interactions with Western cultures. These pressures, and the myriad ways in which they impact access to resources and the perceived future prospects of young people, are manifest in the health disparity of Arctic indigenous youth suicide.[3,4]

The US Arctic Research Commission coordinates the Arctic Mental Health Working Group (AMHWG), which aims to work collaboratively with tribes, healthcare providers, and other stakeholders to promote research on, and raise awareness of, the significant mental and behavioral health disparities that exist between Arctic and non-Arctic populations. As an initial focus, AMHWG has chosen to address suicide prevention in Arctic communities with a specific emphasis on early intervention approaches for children and youth.

Research has shown that early intervention and prevention programs are critically important in reducing the risk and occurrence of suicide.[5,6] Promoting wellness, developing protective factors, and raising awareness of suicide risk factors are examples of early interventions that can provide support to individuals and communities before a crisis situation arises.[5,6]

FOCUS AREAS

AMHWG focuses on the following topics:

- Strengthening mental health protective factors and resilience in children and youth
- Emphasizing the importance of follow-up contact when patients are discharged from psychiatric services
- Raising awareness about unmet mental health provider needs in Alaska
- Encouraging research needed to better understand and address the instability of the mental health care provider workforce
- Promoting improved information technology infrastructure to support data integration and analysis
- Supporting the forensic review of suicides to refine prevention strategies and provide support to communities

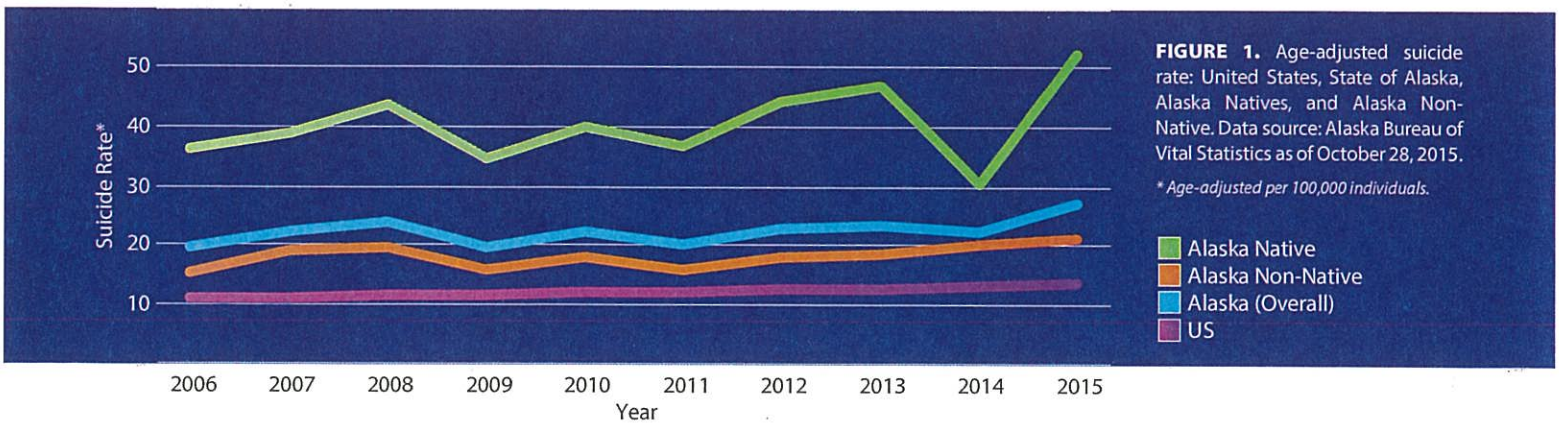

FIGURE 1. Age-adjusted suicide rate: United States, State of Alaska, Alaska Natives, and Alaska Non-Native. Data source: Alaska Bureau of Vital Statistics as of October 28, 2015.

** Age-adjusted per 100,000 individuals.*

[1] Alaska State Suicide Prevention Council, http://dhss.alaska.gov/SuicidePrevention/Pages/Statistics/aksuiciderate_nativenonnative96-05.aspx.

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[6] Mackin, J., T. Perkins, and C. Furrer. 2012. The power of protection: A population-based comparison of Native and non-Native youth suicide attempters. *American Indian and Alaska Native Mental Health Research* 19(2):20–54.

Did you know?

Suicide is the leading cause of death for ages 15–24 in Alaska.[7]

In 2015, 33.6% of Alaskan high school students reported feeling sad or hopeless almost every day for two weeks or more during the past 12 months.[8]

To promote increased capacity and strengthened systems of care[9], AMHWG encourages the following research and activities:

1. **Collect, integrate, and analyze data to improve our understanding of the epidemiology of mental and behavioral health issues, including suicidality.**
   Effort in this area will improve communication among the various agencies addressing mental and behavioral health issues. Specifically, AMHWG will highlight how enhanced sharing of information and data will enable current health care systems to better identify and provide earlier assistance to those needing care. A focus on data collection at the community level also supports locally based actions, which can often be more effective. AMHWG will encourage improving information technology infrastructure to better support data integration and analysis and will support greater forensic review of suicides to further understand their epidemiology.

2. **Improve mental and behavioral health workforce capacity in Alaska.**
   An obvious and critical component of systems of care is a well-trained cadre of mental health care providers. AMHWG will encourage measures to ensure that there are a sufficient number of qualified individuals in rural communities available to assist with mental health and wellness promotion, prevention, and treatment. The working group will gather information on, and raise awareness of, the level of unmet mental health provider needs in rural Alaska. AMHWG will also promote research needed to understand and address the observed instability in this workforce.

3. **Strengthen mental health protective factors of children and youth with a focus on community-based efforts.**
   AMHWG will encourage research into the mental and behavioral health of children and youth, including family, cultural and community protective factors that support and enhance healthy development. Additionally, the group will emphasize the importance of community-based early intervention and follow-up support for children and youth at risk.

AMHWG MEMBERSHIP

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[7] American Foundation for Suicide Prevention
[8] 2015 Youth Risk Behavior Survey
[9] Systems of care are a service delivery approach that builds partnerships to create a broad, integrated process for meeting families' multiple needs (Children's Information Gateway; https://www.childwelfare.gov/topics/management/reform/soc).

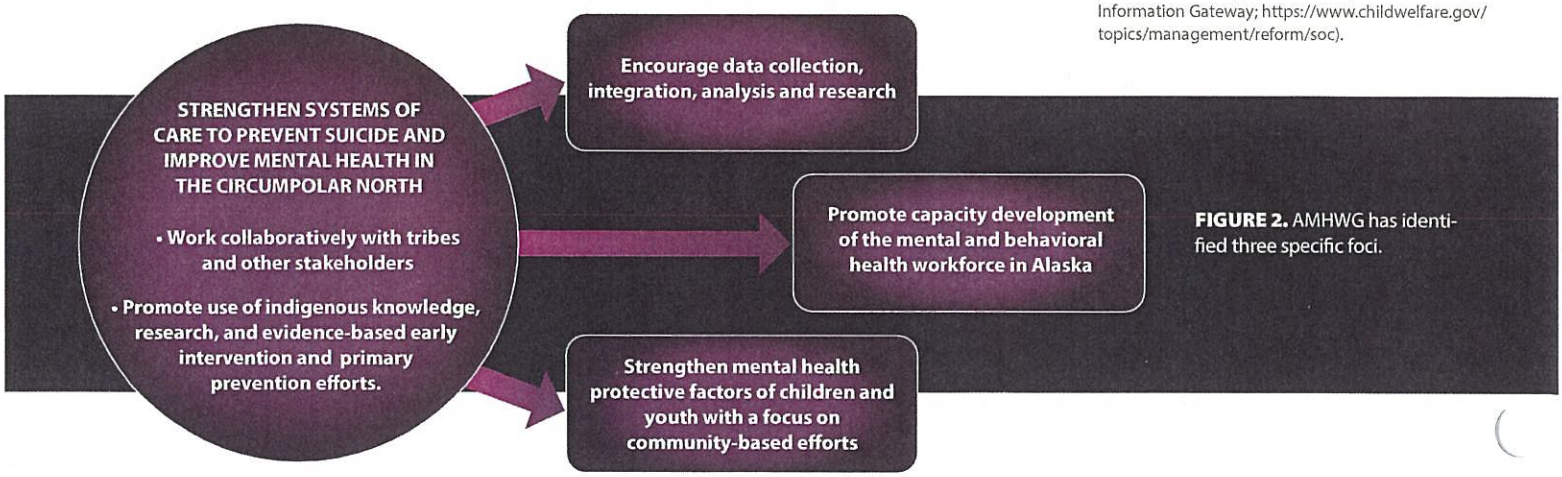

FIGURE 2. AMHWG has identified three specific foci.

For more information on the AMHWG, go to https://www.arctic.gov/AMHWG