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VA Reaches out to Indian Health Service and Tribal Health Programs with Rural Interdisciplinary Team Training Program

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The VA has developed expertise in geriatrics and gerontology though its network of Geriatric Research Education and Clinical Centers (GRECC). Now, the VA is reaching out to the Indian Health Service and Tribal Health Programs through the Geriatric Scholars Program and its Rural Interdisciplinary Team Training (RITT) Program. The Geriatric Scholars Program is a collaboration of 10 GRECCs to integrate geriatrics into primary care practices. The RITT component includes the entire primary care and administrative support team to promote collaborative teambased care in addressing the complex needs of older patient and their families.

Recently, the S'Klallam Tribe health program invited the RITT program to its facility in Port Gamble, WA. One provider noted that the training highlighted "the importance of humility when interacting with the elderly". Another staff member commented that the training was an "excellent use of teaching methods and aids [with] excellent role playing to drive the point home." The RITT training in addition to bringing geriatrics knowledge and skills to the clinic staff also "brought [clinic] departments together."

Judith L. Howe, PhD, RITT Program Director, commented that "it was an honor for us to be invited to train with the S'Klallam clinic and to share the day together. The providers and staff were welcoming and appreciative of the opportunity to learn together. RITT will continue to be engaged with the S'Klallam clinic over the next year as the team implements its action plan to improve care for Tribal elders."

The IHS Elder Health Consultant, Bruce Finke, MD commented, "The VA RITT training offers IHS and Tribal programs a highly efficient, effective way to improve the quality of care they provide to the elders they serve. The training focuses on building specific capabilities to meet needs identified by the facility and community and it does that by training the whole care team. This approach is perfectly designed for our smaller, rural facilities."

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Josea Kramer, PhD, the Director of the Geriatric Scholars Program, noted that the opportunity to share educational experiences is an important outcome of the Memorandum of Understanding between the VA and Indian Health Service that emphasizes active sharing of resources. The VA Employee Education System accredited the program for Continuing Medication Education and Continuing Education Units for non-physicians. The VA Office of Rural Health provided funding for faculty travel and educational materials to support RITT. This year, the Geriatric Scholars Program plans to offer up to 10 programs to Indian Health Service/Tribal Health Program clinics, as well as 20 VA rural Community Based Clinics.

For additional information about the RITT program for Indian Health Service and Tribal Health Programs, please contact Eve Gottesman, Program Coordinator, at <u>eve.gottesman@va.gov</u>.



Indian Health Service National Pharmacy and Therapeutics Committee <u>Neuraminidase Inhibitors</u> NPTC Formulary Brief April 2016



Background:

Influenza and pneumonia constitute the leading cause of death from infectious disease in the United States. The age-adjusted death rate from these conditions among American Indians and Alaska Natives (AI/AN) is 1.5 times higher than in the general population. The prevention and effective treatment of influenza is a top priority in the Indian Health Service (IHS) requiring a multi-modal approach to reduce disease burden in Indian country. While influenza vaccination remains the single most effective strategy for the prevention of influenza and its complications, anti-viral therapy has been advocated as an adjunct by public health organizations including the World Health Organization and the U.S. Centers for Disease Control and Prevention (CDC).

Discussion:

There are two general classes of anti-viral medications for both the prophylaxis and treatment of influenza, adamantanes and neuraminidase inhibitors. Due to widespread resistance among contemporary influenza strains, adamantanes such as amantadine and rimantidine are no longer recommended for use.

Neuraminidase inhibitors, including oseltamivir, zanamivir, and peramivir are advocated as the sole class of anti-viral medications for the prevention and treatment of influenza. The mechanism of action of neuraminidase inhibitors is the competitive inhibition of neuraminidase on the surface of both Influenza A and Influenza B viruses.

According to its guidance issued for the 2015-2016 influenza season, the CDC recommends all three neuraminidase inhibitors for both the prevention and treatment of influenza. Oral oseltamivir is the preferred agent for pregnant women and hospitalized patients, although intravenous peramivir is an alternative for those who cannot tolerate enteric medication. Because zanamivir is administered as an aerosol, caution is advised regarding potential adverse respiratory effects and should generally be avoided among persons with pre-existing chronic lung disease.

The CDC recommends treatment for any patient with confirmed or suspected influenza who is hospitalized, has severe or progressive illness, or at high-risk for complications including AI/AN adults and children. Treatment decisions should not await laboratory confirmation.

While the CDC does not generally recommend pre-exposure prophylaxis, for post-exposure prophylaxis, anti-viral medications are recommended as an adjunct (not a replacement) to vaccination. Provided that medication can be started within 48 hours of exposure, for those at high risk of influenza complications, chemoprophylaxis is recommended for people who cannot be immunized, are within two weeks of vaccination, or are unlikely to respond to vaccination due to severe immunodeficiency.

Despite longstanding recommendations from public health organizations, the use of neuraminidase inhibitors has been considered controversial by some experts. The principal controversy pertains to concerns about the efficacy of the medications in reducing influenza-related morbidity and mortality. Following accusations of publication bias related to claims made in industry-supported drug trials, in 2014 the Cochrane Collaboration published a systematic review of all randomized control trial (RCT) data.

In summarizing the findings of their review, the Cochrane authors noted that both oseltamivir and zanamivir reduced the time to symptomatic improvement of influenza-like illness but only by about half a day, which may not be superior to the use of anti-pyretic agents. They found no credible evidence for reduction in the risk of complications of influenza, including pneumonia, hospitalization or death. Specifically, no evidence was found for these benefits in children or adults considered at high risk. They also found little evidence to support use of these agents for chemoprophylaxis.

In response to the Cochrane analysis, both the CDC and the Infectious Disease Society of America (IDSA) re-iterated their recommendations regarding the use of neuraminidase inhibitors for the treatment of influenza. The rationale for this recommendation was two-fold. First, the ISDA noted that the RCT data in the Cochrane analysis involved treatment of healthy outpatients with mild illness and included both patients proven to be influenza infected as well as those with influenza-like illness. This was felt to underestimate the treatment efficacy of neuraminidase inhibitors.

Second, the CDC and IDSA cited consistent observational studies among hospitalized patients with both seasonal and pandemic flu during 2009 that documented reductions in serious outcomes including ICU admission and death. They also noted that while no RCT was powered to evaluate the effect of oseltamivir treatment of outpatients to reduce influenza-associated complications such as hospitalization or lower respiratory tract infections, pooled RCT data demonstrated a reduction in clinician-diagnosed lower respiratory tract infections requiring antibiotics.

Findings

Influenza is a major source of morbidity and mortality in the United States and AI/AN patients are at higher risk both from infection and influenza-related complications.

There is widespread agreement that influenza vaccination remains the single most effective strategy in reducing the risk both of influenza infection and its complications.

Randomized control trial data show a modest benefit from use of neuraminidase inhibitors among healthy outpatients, primarily in reducing the time to alleviation of symptoms. RCT data was not adequately powered to assess benefit in reducing

risk of influenza-related complications or death. Multiple observational studies have cited the potential benefits of neuraminidase inhibitors in reducing morbidity and mortality from influenza during the 2009 H1N1 influenza pandemic. Neuraminidase inhibitors continue to be recommended by public health experts for both treatment and prevention of influenza among high-risk groups, including AI/AN children and adults.

Based on limited clinical advantages of neuraminidase inhibitors noted in current reviews of influenza treatment and prophylaxis, the NPTC did not add a neuraminidase inhibitor to the National Core Formulary.

If you have any questions regarding this document, please contact the NPTC at <u>IHSNPTC1@ihs.gov</u>. For more information about the NPTC, please visit the <u>NPTC website</u>.

References:

- 1. Centers for Disease Control and Prevention, cdc.gov.
- 2. Gounder, P et al., Influenza Hospitalizations Among American Indian/Alaska Native People and in the United States General Population, Infectious Diseases Society of America 2014.
- Deaths Related to 2009 Pandemic Influenza A (H1N1) Among American Indian/Alaska Natives --- 12 States, 2009, MMWR, December 11, 2009 / 58(48);1341-1344.
- Harper, Scott et al, Seasonal Influenza in Adults and Children—Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management: Clinical Practice Guidelines of the Infectious Diseases Society of America. Clinical Infectious Diseases 2009; 48:1003–32, April 15, 2009.
- 5. WHO Guidelines for Pharmacological Management of Pandemic Influenza A(H1N1) 2009 and other Influenza Viruses. Revised February 2010.
- 6. 2015-2016 Influenza Antiviral Medications: Summary for Clinicians. cdc.gov (Accessed 10/2/15).
- Recommendations for Prevention and Control of Influenza in Children, 2015–2016 Committee on Infectious Diseases. PEDIATRICS Volume 136, number 4, October 2015.
- 8. Jefferson T et al, Neuraminidase inhibitors for preventing and treating influenza in adults and children. Cochrane Collaboration, 10 APR 2014.
- 9. Statement by the Infectious Disease Society of America (IDSA) on the recent publication on "Neuraminidase inhibitors for preventing and treating influenza in healthy adults and children" http://www.idsociety.org/Influenza_Statement.aspx#sthash.TOrcP4q9.dpufhttp://www.idsociety.org/Influenza_Sta tement.aspx (Accessed on October 02, 2015).
- 10. "Have You Heard?" CDC recommendations for influenza antiviral medications remain unchanged. http://www.cdc.gov/media/haveyouheard/stories/Influenza_antiviral2.html (Accessed on October 02, 2015).

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