2016

Development of Guidelines for Refugee Screening at CMMC Family Medicine Residency, Lewiston, Maine

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2. Problem Identification

Initial medical intake screening for refugees to be completed within 30-90 days of arrival in United States

Increased risk of infectious and noninfectious diseases among refugee populations

- Specific conditions depend on country of origin [6]

Lewiston has second highest number of refugees in state of Maine behind Portland, with 191 total intakes (primary and secondary refugees and asylum seekers) in 2015 [4]

Typically about 300 total primary refugee screenings in Maine for patients over a 12 month period

August 2016: 160 new refugee patients needing screening, overwhelming system

- DHHS reached out to medical clinics to help meet these needs

3. Public Health Cost

Survey of 232 New Americans living in Lewiston-Auburn found many living with a variety of health conditions [1]

- Chronic medical conditions: diabetes, high blood pressure (85 each)
- Mental health: stress (77), sadness/depression (62), trauma/violence (47)
- Other public health concerns: lead poisoning (52), hepatitis (21), tuberculosis (20)

Lead poisoning: higher rates than state average in Lewiston-Auburn primarily due to older rental housing

- Estimated that each cohort of children born in Maine will earn $270 million less throughout lifetime due to on average 1 point lower IQ from effects of lead [2]

Failing to detect other health conditions during initial refugee screening will likewise result in a public health burden

4. Community Perspective

Joan Churchill, Director B Street Clinic

- B Street Clinic (primary healthcare site for refugees in Lewiston-Auburn) was down a provider, wait times for appointments
- Used to be periodic provider training offered through state of Maine, but has not happened for last 3 years

Dr. John Lowery, Medical Director CMMC Family Medicine Residency

- CMMC recognized the increased need for providers to do these screenings
- Providers and staff volunteered their time to help serve the community
- Screenings are complex, require time, attention to detail, and education about refugee/international medicine

5. Intervention/Methodology

Literature review of CDC guidelines for domestic medical examination for newly arriving refugees

Attended International Clinic at Maine Medical Center to see example of established refugee health program in Maine

Created draft of reference and received feedback from providers at CMMC on ways to improve reference guide

Participated in two evening refugee clinics at CMMC Family Medicine Residency

6. Results

Created a two page document consolidating the CDC guidelines

Specific attention paid to key history and lab components that differ from typical domestic new patient encounters

Copies of guideline were distributed to residents and attendings volunteering at the refugee clinics

Reference was used during the 9 clinic sessions held at the CMMC Family Medicine Residency

6a. Refugee Screening Reference

Central Maine Medical Center
Family Medicine Residency

Refugee Screening Reference

Catherine Hayes, UVM College of Medicine, MSIII
November 2016

□ **History**
- □ Acute concerns, Screening Review of Systems
- □ Past Medical/Surgical History
  - Chronic conditions
  - Accidents or other injuries
  - Childhood disease
  - Cognitive or physical impairments
  - Hospitalizations
  - Surgeries or dental procedures
  - Blood transfusions
  - Vaccine Review
- □ Medications
  - Prescription
  - Over the counter
  - Herbal/traditional remedies
- □ Allergies
- □ Social History
  - Travel: country of birth, places lived before United States
  - Living Situation/Family Structure
  - Occupational History
  - Education, literacy, languages spoken
  - Substances (alcohol, tobacco, illicit drugs, region-specific – betel nut, sheesha, argileh, khat)
  - Sexual History (menstrual history, contraception, pregnancy for women)
- □ Mental Health – below is a recommended introduction from the CDC
  - "Many refugees may not be aware that stressful life situations and events they may have experienced can have lasting effects on their health. Most refugees will experience short-term psychological and social difficulties simply as a result of resettlement. This is normal and should be expected. If you feel these symptoms are excessive and are interfering with your life or if you have thoughts of hurting yourself or others, you can always come back to the clinic and ask for help."
  - PHQ-9 for depression
  - For PTSD: "Were you ever a victim of violence in your former country?"
  - Torture, prison, weight loss, appetite, sleep/nightmares, energy level, feeling down, depressed, or hopeless, decreased interest, SI/HI

□ **Physical Exam**
- □ Assessment of nutritional status
- □ Vital signs,
- □ Vision/hearing
- □ Oral exam/dental health
- □ Skin
- □ Cardiac
- □ Respiratory
- □ Abdominal
- □ Lymph nodes

Note: may choose to defer genital exam until follow-up care is established

□ **Labs**
- □ General Labs
  - □ CBC with differential, platelets
  - □ Urinalysis
  - □ Metabolic screening for newborn refugee
  - □ Lead – check in all refugees ages 6 months – 16 years on arrival; *schedule recheck in 3-6 months for all refugees ages 6 months – 6 years (see supplemental material for specific cultural practices associated with high lead levels)*
  - □ Uric Acid – Hmong refugees
  - □ Vitamin B12 – Bhutanese refugees
  - □ Vitamin D – African refugees
  - □ The following tests should be done as recommended by the USPSTF in non-refugee populations: lipids, AAA screening, cancer screenings, chemistry, and glucose.

- □ Disease-Specific Labs
  - □ Tuberculosis
    - Tuberculin skin test OR interferon gamma release assay
      - If positive, or clinical suspicion, order chest x-ray
      - (for TST, > 5 mm is positive for refugees with HIV, close contact with someone with infectious TB, changes on CXR consistent with prior TB, organ transplant, or other immunosuppressing conditions; > 10 mm is positive for all other refugees)
  - □ Hepatitis B – surface antigen, surface antibody, (core antibody)
  - □ Varicella
  - □ Hepatitis A, C – if high risk
  - □ Malaria
    1. Check EDN for presumptive treatment. If treated, document in record.
    2. If no treatment and coming from endemic area, treat presumptively.
  - □ Intestinal Parasites
    1. Check EDN for presumptive treatment. If treated, document in record.
    2. If no treatment for helminths (albendazole), schistosomiasis (praziquantal), and strongyloides (ivermectin), treat depending on country of origin (no testing needed). Do not treat if contraindicated:
       - Albendazole: <1yo, pregnancy, neurocysticercosis, hx of cysticercosis, unexplained seizures
       - Praziquantal: <4yo or <94cm, neurocysticercosis, hx of cysticercosis, unexplained seizures
       - Ivermectin: <15kg or <90cm, pregnancy, breastfeeding in first week after birth
       - Loa loa endemic area
    3. If treated but symptomatic, perform stool O&P x3.
  - □ Sexually Transmitted Infections
    - HIV: screen all patients unless they opt out, provide informed consent and document in EMR
      - Screen children ≤12 years old unless documented neg. mother and low risk
      - In children <18 months who are Ab +, perform DNA/RNA assay
      - In children born to/breast-fed by HIV + mother, give TMP-SMX for 6 weeks until confirmed uninfected
    - Syphilis: VDRL or RPR if ≥15 years old, or <15 with history of sexual activity or + mother
    - Chlamydia: <25 and sexually active, or >25 with risk factors, or LE + urine, or history of sexual assault, or symptoms
    - Gonorrhea: LE + urine, or history of sexual assault, or symptoms

□ Schedule follow up appointments; refer for dental care (Community Dental, B Street Clinic); education (overview of US Healthcare system, insurance, primary care, 911, oral/dental health, and medications)

Refer to CDC Immigrant and Refugee Health website for current complete references on history and physical exam, mental health, TB guidelines, lead, malaria, intestinal parasites, general labs, immunizations, sexually transmitted infections, hepatitis, and HIV.

7. Effectiveness/Limitations

Effectiveness

- Feedback from CMMC:
  - *"I like the way it is organized…very easy to read and makes something that is complex fairly simple."*
  - *"These are very complex office visits with many moving parts. The reference is an extremely helpful tool to navigate this office visit in an efficient and effective way, ensuring that all aspects of comprehensive evaluation are covered."*

Limitations

- Based on current guidelines, which will change over time
- Aimed at general guidelines for refugee health, but each individual and country of origin requires nuanced approach
- Paper guide, but user must input the information gathered into the electronic medical record

8. Future Interventions

Yearly training session during new intern orientation aimed at refugee health
- Interactive/role-playing activity

Ensure all CMMC Family Medicine Residency staff are familiar with refugee needs, since these patients will be returning for their primary care needs

Establish template within the electronic medical record for new refugee patient visits

Order sets (vaccinations, laboratory testing) that can be applied to refugee patients

Optimize interpreter services to ensure language needs of patients are being met

9. References

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15. “Screening for Sexually Transmitted Infections During the Domestic Medical Examination for Newly Arrived Refugees.” US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Emerging and Zoonotic Infectious Disease, Division of Global Migration and Quarantine. April 7 2014.