Assessing Emotional Health Screening Status in Refugees Using Pattern Matching Techniques with Electronic Health Records, Multnomah County, OR, 2012-2014

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PRESENTATION FORMAT: 15 minute oral presentation

TOPIC/TARGET AUDIENCE: Public Health Professionals; primary care providers; mental health providers; research analysts; epidemiologists

ABSTRACT: Background: Emotional health screening in refugees began in August 2012 in partnership with Lutheran Community Services. Screening is done with the RHS-15, a validated, culturally competent tool. However, screening data are only available in scanned documents or text notes in the electronic health record (EHR), making data analysis and interpretation challenging.

Methods: Data were obtained from electronic health records (EHR). Using pattern matching, useful patterns to extract key information from chart notes were extracted. Descriptive statistics including frequencies by age, sex, country of origin, and screener score were calculated. All data analysis was done using SAS 9.3.

Results: Between August 2012 and December 2014, there were 2,098 refugee screenings extracted from the EHR in persons 14 years of age and greater. We had complete RHS-15 screening and referral information on 1,282 individuals (57% were male). Four hundred sixty eight (37%) had a positive screening (score >= 12 or distress thermometer >=5). However, a referral was indicated in chart notes for only 148 (32%) refugees.

Conclusions: Emotional screening is an important component of refugee health assessment. Use of text search methods with EHR allows for a faster method to examine screening data with minimal chart review. Acceptance of referrals decreased over the period of this analysis.

OBJECTIVE(S): Describe how emotional health screening fits into comprehensive health screening among refugees

Explain two ways data can be obtained from electronic health records Understand the basic idea of pattern matching

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