**DEVELOPING AND IMPLEMENTING ELECTRONIC HEALTH RECORDS-BASED INTERVENTION TOOLS IN A LARGE NYC HEALTHCARE SYSTEM TO FACILITATE H. PYLORI ERADICATION STRATEGIES FOR GASTRIC CANCER PREVENTION**

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**BACKGROUND:** Stomach cancer is the most common infection-related cancer worldwide. In the United States, Chinese Americans experience a disproportionate burden of stomach cancer mortality. The bacterium Helicobacter pylori (H. pylori) is the strongest risk factor for stomach cancer, with eradication of H. pylori the most effective prevention method for stomach cancer. However, clinician adherence to H. pylori treatment guidelines is not high. Additionally, medication adherence to the complex H. pylori treatment regimen is challenging.

**METHODS:** The tool development process included 4 site workflow analyses, which consisted of ethnographic observation and interviews with providers working with underserved Chinese communities, and 15 key informant interviews. A transdisciplinary advisory group refined and implemented the EHR tools across a large, urban healthcare system.

**RESULTS:** We developed 3 EHR-based tools: 1) a H. pylori medication order set for the most common first and second-line therapies; 2) culturally and literacy-appropriate basic health education materials for the patient in English, Chinese and Spanish; and 3) a reminder to place future laboratory orders for follow-up testing in 2 months.

**CONCLUSIONS:** There is a need to integrate system-wide EHR-based tools for underserved, vulnerable communities to enhance and sustain evidence-based practices for treatment adherence and cancer prevention and reduce H. pylori-related stomach cancer disparities for high-risk patient populations.

**CONTENT CATEGORY:** Translational science

**KEYWORDS:** *stomach cancer, H pylori, gastroenterology, Chinese American, EHR*