Family History Data from Clarity and Other Sources

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Introduction

Information about a patient’s family history is an important tool to identify potential risks for many diseases like cancer or diabetes. Group Health Cooperative (GHC) collects family history using several applications, including visits and surveys, to manage effective screening programs. In 2004, GHC adopted Epic’s electronic medical record system. In the poster, we investigate Clarity, Epic’s reporting database, to determine its usefulness as a new source of structured family history data.

Methods

We compared several structured data sources for family history of four conditions: colon cancer, colon polyps, breast cancer, and ovarian cancer.

We examined all patients with a known birth date and sex who had any pattern encounter recorded in Clarity between Jan 1, 2004 and Jun 30, 2012. This denominator is restricted to females only for breast and ovarian cancer.

Results

Among patients with any evidence of family history of a condition, Clarity’s FAMILY_HX table independently contributes as many as 75% of patients with available family history, GHC’s VDW DDX dataset adds 2-3%, and Clarity’s PROBLEM_LIST adds no more than 2-3%.

For female patients at GHC, the Breast Screening Recruitment and Reminders survey (BSRR) remains a key source, being the classic 2 or 3-circle diagrams often do not speak to the side of each.

Conclusion

Examining records from Clarity’s FAMILY_HX table may significantly augment, in both numbers and detail, conventional clinical and survey sources of family history data.

Larger rectangle represents n=1,292,799 patients with a known birth date and sex who had any ‘encounter’ in Clarity between 1/1/2004 and 6/30/2012

Smaller rectangle represents n=1,041,631 patients between ages 18 and 75 some time during the time range