

Using family physician Electronic Medical Record data to measure the pathways of cancer care

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Introduction

Gaps in care have been identified along the disease pathway for specific cancers. However, no real-world data exists to identify wait times along these cancer pathways. Secondary use of family physician (FP) electronic medical record data (EMR) can augment existing health administrative data in measuring steps in the care pathways.

Objectives and Approach

We used FP EMR data to identify care pathways for lung cancer and breast cancer patients from the description of symptoms, to the initiation of investigations, referrals to specialty care and the receipt of specific treatments (surgery, chemotherapy, radiation treatment). Data from the Electronic Medical Record Administrative data Linked Database (EMRALD) held at the Institute for Clinical Evaluative Sciences (ICES) was used to identify a cohort of lung cancer and breast cancer patients. Data abstractors examined the FP EMR notes to identify pre-diagnostic symptoms, pre-diagnostic radiological test, biopsy results, oncology and surgical specialist referrals and post-diagnostic surgical and oncological consultations.

Results

To date, abstractors have reviewed the FP EMR notes for 300 lung cancer patient and 1200 breast cancer patients. Abstractors identified an index date where there was documentation of the first abnormal test result and/or a FP progress note documenting a “suspicious” or “concerning” sign or symptom. For both lung cancer and breast cancer patients, a pre-diagnostic index date was identified in 88.5% of FP EMR notes. For lung cancer patients 66.7% based were based on abnormal chest x-rays and for breast cancer patients 81.1% were based on abnormal mammograms. Pre-diagnostic symptoms were identified in 62.1% of FP EMR notes and 81.6% had post-diagnostic consultation notes. Wait times from the index date to seeing an oncological specialist were less than four weeks for all patients.

Conclusion/Implications

We are able to use information from FP EMRs linked to health administrative data to identify pre-diagnostic care received by patients prior to their cancer diagnosis. This information can be used to identify care gaps and measure wait times in receiving cancer care from a patient’s perspective.

