Using electronic medical record data to better understand and provide quality care for patient populations

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Background and Objective

- Electronic Medical Record (EMR) data is often not standardized or up-to-date.[1] Improving the quality of this data has the potential to support primary care providers in managing and providing quality care to their patients.[1]
- As part of the connecting South West Ontario (cSWO) Program's Primary Care Data Sharing (PCDS) project, led by the eHealth Centre of Excellence in its role as the cSWO Change Management and Adoption Partner in Waterloo Wellington, four Family Health Teams (FHTs) participated in data quality improvement initiatives.
- The objective of this presentation is to demonstrate how coded EMR data can be used to enable clinical and organizational value for primary care providers and their patients.

Methods

- Data quality was assessed before and after these initiatives, using a data quality assessment and survey. Initiatives involved back-coding EMR data and ensuring it was up-to-date.
- The PCDS project team worked with clinicians to demonstrate how good quality EMR data can generate value ***within the primary care organization***.

Our Partners

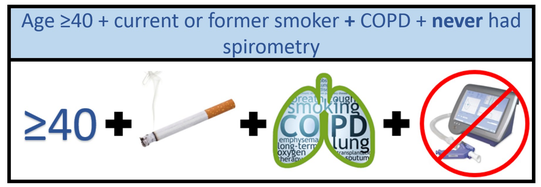
Funded by eHealth Ontario

Results and Impact

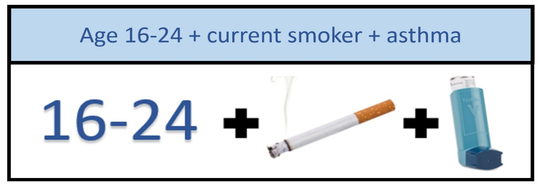
Improvements in EMR data quality made it possible to:

1) Generate patient population searches to identify groups of patients with a particular risk factor or condition. This facilitated best practice diagnosis and provision of preventative care.

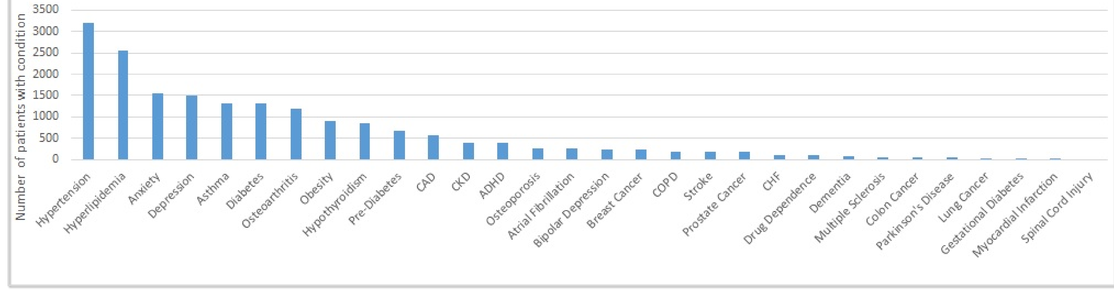
Search #1: Identified Chronic Obstructive Pulmonary Disease (COPD) patients eligible for spirometry testing, to support best practice.



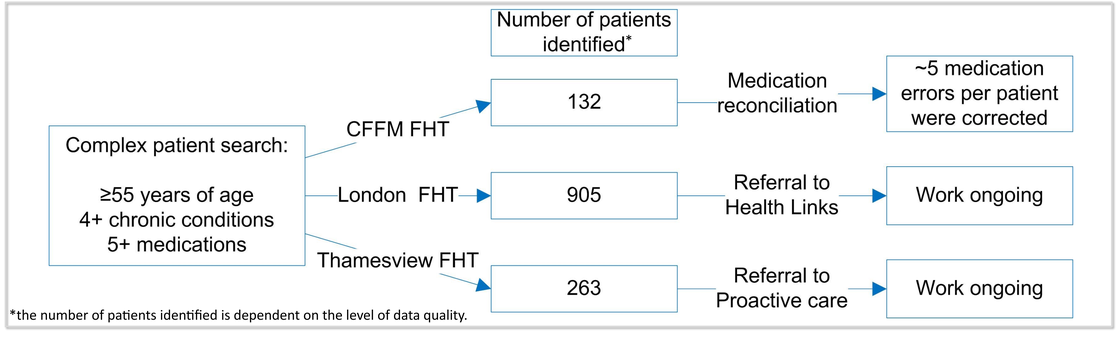
Search #2: Identified asthma patients eligible for free smoking cessation interventions.



2) Generate patient lists for particular conditions and aggregate data to display the prevalence of these conditions. This allowed clinics to better understand their patient population and to allocate resources based on need.



3) Develop an EMR search that identifies complex patients. This supports clinicians to proactively care for their cohort of complex patients.



Conclusion and Next Steps

- When primary care EMR data is standardized and up-to-date, primary care providers can use it to help manage and provide quality care to their patients.
- There is cause for further optimism when high-quality data is shared along the care continuum to support improved care continuity around the broader circle of care.

Reference

1. Greiver, M., Barnsley, J., Glazier, R. H., Harvey, B. J., & Moineddin, R. (2012). Measuring data reliability for preventive services in electronic medical records. BMC Health Services Research, 12, 116. http://doi.org/10.1186/1472-6963-12-116