

# Patterns of High vs. Standard dose flu vaccinations in Canadian Primary Care: A Baseline Cohort Pilot Study

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## Background

The high dose flu vaccination is newly available to Canadians and recommended for adults aged  $\geq 65$  years. Describing patterns of flu vaccination in Canadian primary care using electronic medical records (EMR) is challenging. By using a combination of the ATC code and product lot number, we can differentiate between high and standard dose flu vaccination using routinely collected structured EMR data.

## Objective

Construct and describe baseline cohorts of patients who received a flu vaccine during the 2018-2019 and 2019-2020-flu season.

## Method

**Data:** Q42020 data from Eastern Ontario Network (EON)  
**Patients:** Patients who received a flu vaccination administered by primary care provider indicated by ATC code (J07BB) during the 2018-19 or 2019-20 Canadian flu seasons. Baseline cohorts for each flu season included patients with  $\geq 1$  encounter over 2 years (Jun 1 2017-May 31 2019 and Jun 1 2018-May 31 2020)  
**High vs. Standard Dose:** Vaccination dose was determined by specific lot numbers supplied by study sponsor

## Results

Figure 1: Study Flow

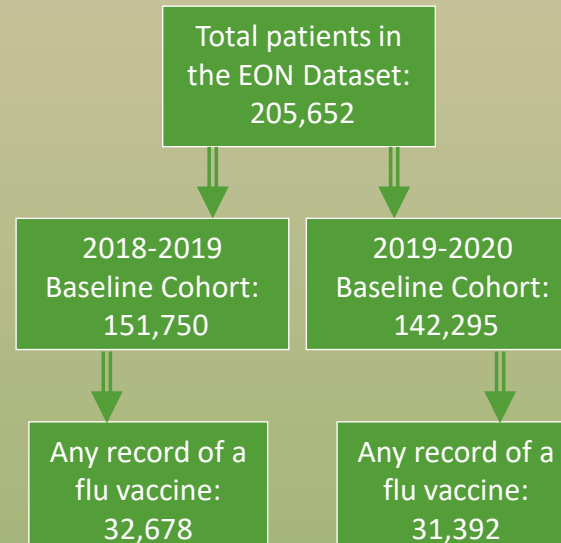


Table 1: High vs. Standard flu vaccinations in EON patients by Age Category during the 2018-2019 and 2019-2020 Canadian Flu Seasons.

	2018-2019 Flu Season		2019-2020 Flu Season	
	$\geq 65$ years old	$\leq 64$ years old	$\geq 65$ years old	$\leq 64$ years old
<b>High Dose</b>	6,961/19,037 (36.6%)	398/13,641 (2.9%)	6702/18,910 (35.4%)	197/12,482 (1.6%)
<b>Standard Dose</b>	12,076/19,037 (63.4%)	13,243/13,641 1 (97.1%)	12,208/18,910 0 (64.6%)	12,285/12,482 2 (98.4%)

NB: Data source is Eastern Ontario Network, Q4-2020; Data presented as n/N (%)

## Results (cont'd)

During the 2018-2019 flu season 21.5% of the patients received a flu shot from their primary health care provider. Of those who received a flu shot:

- 36.6% of the patients aged 65 years of age and older received a high dose flu vaccination
- 2.9% of patients aged 64 years and younger received a high dose flu vaccine.

During the 2019-2020 flu season 22.1% of the patients received a flu shot from their primary health care provider. Of those who received a flu shot:

- 35.4% of the patients aged 65 years of age and older received a high dose flu vaccination
- 1.6% of patients aged 64 years and younger received a high dose flu vaccine.

## Conclusion & Next Steps

- We successfully assembled two cohorts of patients who received a flu shot and were able to differentiate between high and standard dose vaccinations.
- Next:
- Describe age, SES and CPCSSN validated comorbidity related patterns of standard vs. high dose flu vaccinations in Canadian primary care.
  - Explore the relationship between flu vaccine dose and subsequent evidence of any respiratory infections.