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Background

Pediatric NAFLD is the most common cause of chronic liver disease in children

Data on epidemiology and screening patterns for pediatric NAFLD in Canadian primary care in unknown

Objectives

To evaluate patterns of screening and identification of pediatric NAFLD in Canadian primary care using administrative health care database

Methods

Observational population based longitudinal database study

Patients: Children aged 9-18 in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN) database from Jan 1 2018-Dec 31 2019

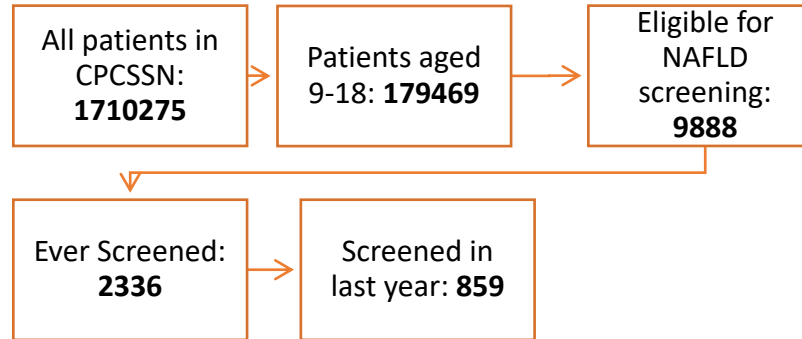
Screening Prevalence:

Determined by ALT testing in all eligible patients (BMI ≥ 95th percentile)

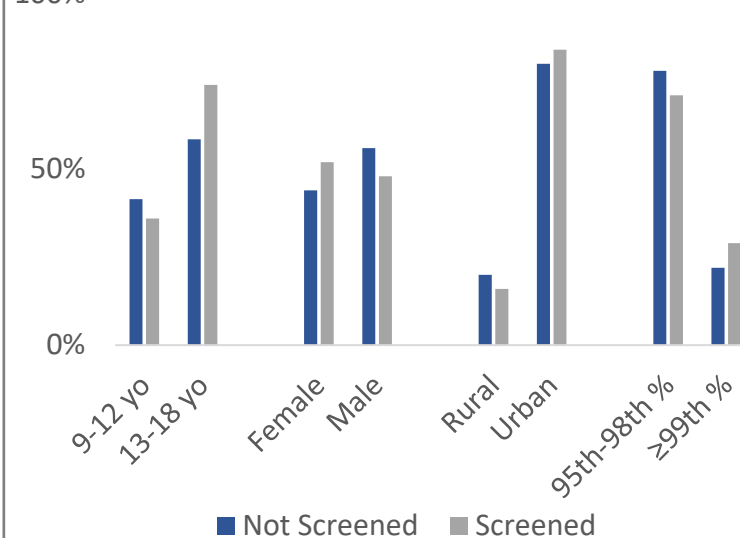
Suspected NAFLD: elevated age and sex specific ALT (after exclusions of other etiologies) OR NAFLD diagnosis (ICD9 Code)

Results

NAFLD Screening Flow Chart



Patients Eligible for NAFLD Screening N=9888

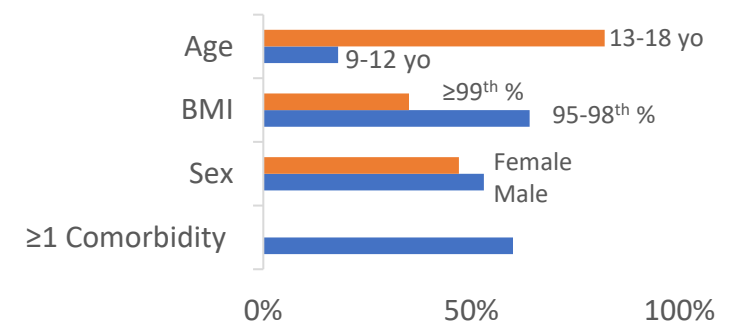


- Almost 9% (N=9,888) of children 9-18yo who visited their primary care provider in 2018/2019 were obese or severely obese
- Only 7% (N=859/9888) of eligible patients were screened in the last year
- Patients with suspected NAFLD: Median ALT - 36 (10% had an ALT >80 U/L)

Predictors of NAFLD screening in eligible patients

	Adjusted Odds Ratio (CI)
13-18 yo vs. 9-12 yo	1.5 (1.3-1.9)
Female vs Male	1.3 (1.1-1.5)
Urban vs Rural	1.3 (1.1-1.7)
BMI ≥99 th % vs 95-98 th %	1.3 (1.1-1.7)
Prior Hypertension	1.5 (1.0-2.3)
Prior Anxiolytics	2.0 (1.3-3.2)
Prior Diabetic Meds	2.8 (1.4-5.4)

Patients with Suspected NAFLD N=1048



Conclusion

First study to estimate screening patterns of pediatric NAFLD in primary care in Canada at a national level.

Results revealed low screening rate for NAFLD in children in Canadian primary care, in contrast to suggested NASPGHAN guidelines.

Future work to evaluate successful implementation strategies while emphasizing the role of primary care providers in screening and managing pediatric NAFLD in Canadian health care setting.