

The Use of Benzodiazepines in NL

Choosing Wisely Canada Recommendations

1. Don't routinely continue benzodiazepines initiated during an acute care hospital admission without a careful review and plan of tapering and discontinuing, ideally prior to discharge.
2. Don't use benzodiazepines or other sedative – hypnotics in older adults as first choice for insomnia, agitation, or delirium.
3. Don't prescribe or dispense benzodiazepines without building a discontinuation strategy into the patient's treatment plan (except for patients who have a valid indication for long-term use).

Practice Points

1. The risk of motor vehicle accidents, falls, and hip fractures can more than double in older adults taking benzodiazepines or other sedative-hypnotics.
2. Use of benzodiazepines should be reserved for alcohol withdrawal symptoms/delirium tremens or severe generalized anxiety disorder unresponsive to other therapies.
3. In 2017, chronic use of benzodiazepines in adults ≥65 years per 1,000 population ≥65 years in NL (56.3) was nearly four times greater than for the Canadian population (14.6), and it was the second highest provincial rate in the country.

Data

Data on the use of benzodiazepines in the community was obtained from the Pharmacy Network at NL Centre of Health Information (NLCHI) for two years: Apr 2018–Mar 2020.

Results

- In 2018/19 there were 104,033 prescriptions for benzodiazepines and in 2019/20, there were 101,529.

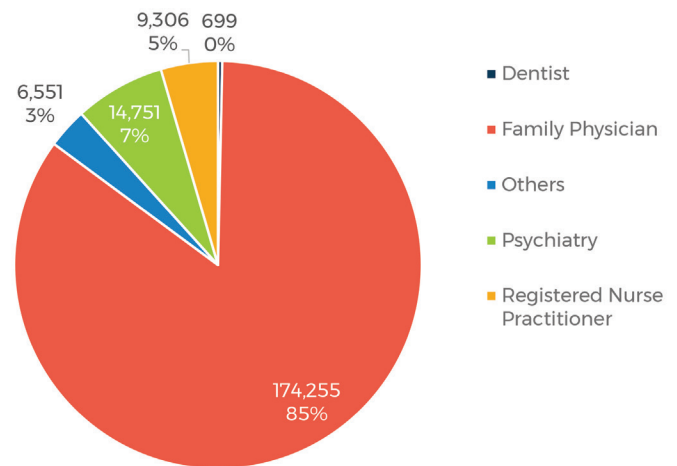


Figure 1. Prescriptions by Specialty

- 85% of prescriptions were from Family Physicians (FPs), who comprise the majority of providers.

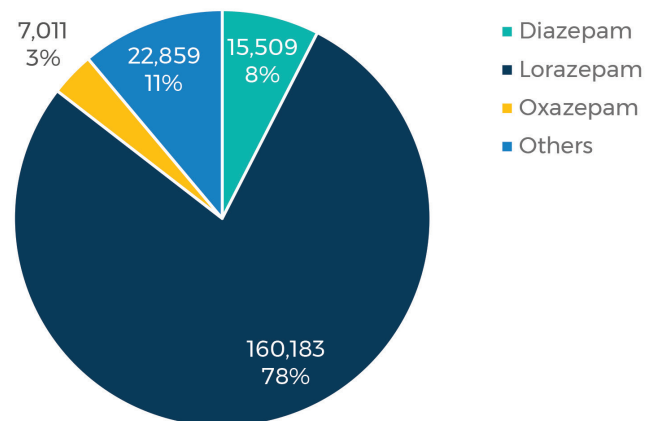


Figure 2. Type of Benzodiazepines Prescribed

- By far, the most frequent benzodiazepine prescribed was Lorazepam, which has a half-life of 10–20 hours.

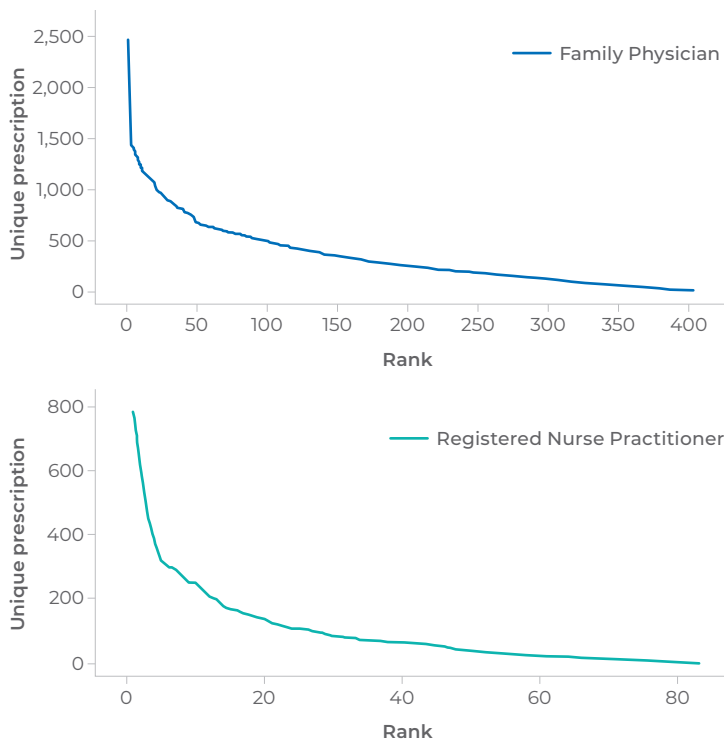


Figure 3. Number of Prescriptions of Benzodiazepines by individual FPs and Nurse Practitioners (NPs) ranked by the Number of Prescriptions Provided by Each Individual Provider

- 80% of the prescriptions by FPs were provided by 33% of the FPs.
- 80% of prescriptions by NPs were provided by 27% of the NPs.
- In 2018/19, the number of unique patients who received a prescription for a benzodiazepine was 44,117 and in 2019/20 it was 43,213.
- The average number of prescriptions/person was 2.4.
- The number of patients who were taking benzodiazepines for longer than three months in 2019/20 was 18,668.

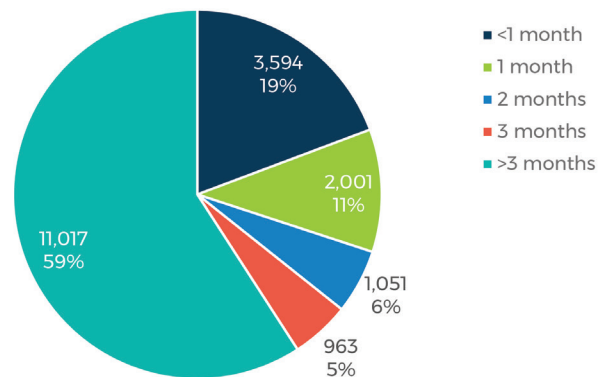


Figure 4. Duration of Benzodiazepine Prescriptions Provided to People During the Last Quarter, 2019/20

- The prevalence of benzodiazepine use in the last quarter of 2019/20 was 18,626 people.
- In prevalent patients, the majority of prescriptions were for longer than three months.
- The incidence of patients not on benzodiazepines in 2018/19 who received a prescription in 2019/20 was 17,261.

Table 1. Number and Rate/1,000 People Prescribed Benzodiazepines in 2019/20

Demography	Number of Prescriptions	Population	Rate/1,000
Women	28,895	264,148	109
Men	14,316	257,955	55
0-19 Years	505	96,958	5
20-64 Years	27,630	308,917	89
65+ Years	15,449	116,228	133
Urban	22,766	287,526	79
Rural	20,204	232,190	87

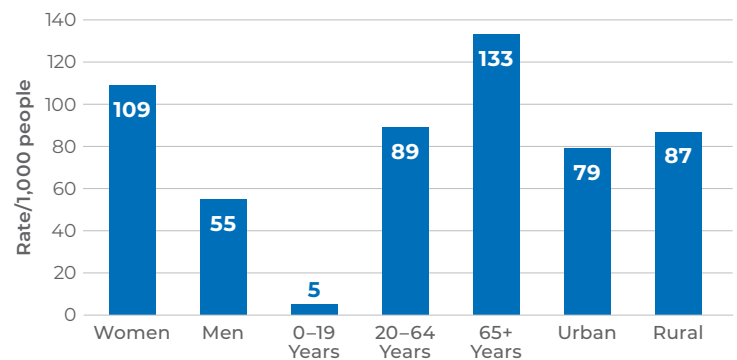


Figure 5. Rate of Benzodiazepine/1,000 People in Subgroups by Gender, Age, and Location in 2019/20

- The rate of benzodiazepine use was twice as high in women compared to men.
- The rate of prescriptions increased by age.

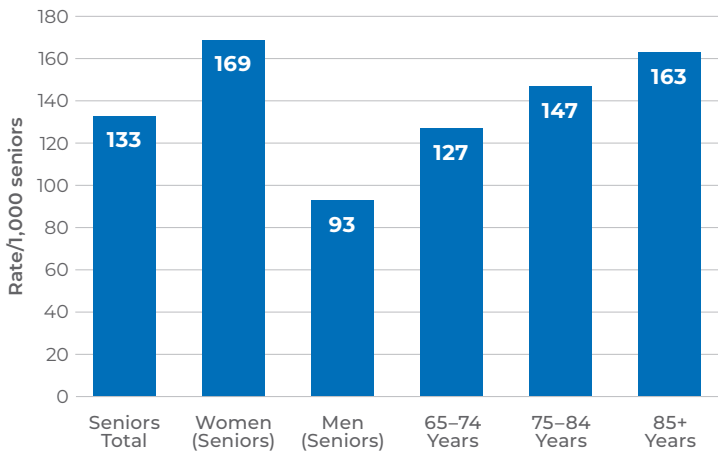


Figure 6. Rate of Seniors Given Benzodiazepines per 1,000 Seniors by Gender and Age Groups

- Among seniors, there was a correlation between older age and use.
- In those 65-74 years the rate/1,000 people was 127, in those 75-84 years it was 147, and in those ≥85 years it was 163.

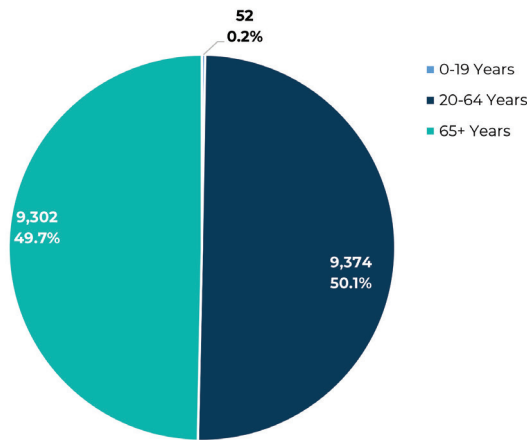


Figure 7A. Distribution of People Taking Benzodiazepines for Longer than Three Months by Age

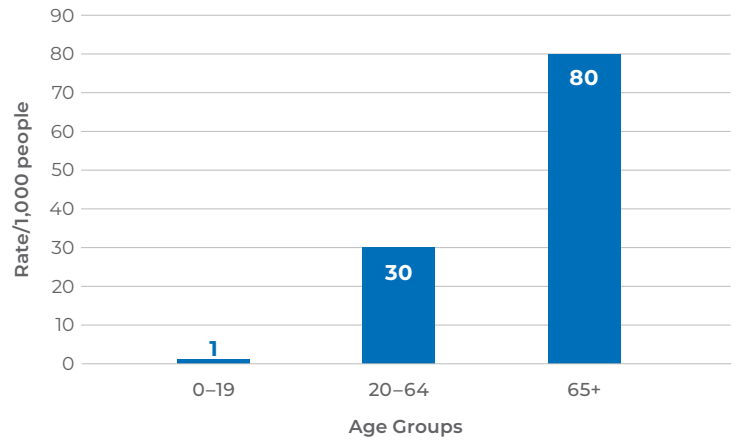


Figure 7B. Rate of People/1,000 Population Taking Benzodiazepines for Longer than Three Months by Age

- Although more adults aged 20-64 years were prescribed benzodiazepines for longer than three months, the rate/1,000 people was higher in seniors.

Conclusions

1. The use of benzodiazepines in NL was high with 13% of adults ≥ 65 years receiving at least one prescription.
8% of the seniors in the province took benzodiazepines for longer than three months. 60% (9,186) of seniors on benzodiazepines (15,449) took them for longer than three months.
2. 80% of the prescriptions by FPs were provided by 33% of the FPs. The intermediate duration of action benzodiazepine Lorazepam was the most frequently prescribed.
3. In view of the fact that the benefits:harm ratio in seniors is adverse, tapering, and discontinuation of long-term benzodiazepines is recommended, together with decreased initiation of benzodiazepines for insomnia, agitation, and delirium.