

CADTH Reimbursement Recommendations for Drugs to Treat Mental Illness: 10-Year Trends in Relation to Non-Mental Illness Drugs and Recommendations from Other HTA Bodies

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Background

- Mental illness is increasingly prevalent in Canada, with 14% of Canadians experiencing a major depressive episode and 13% experiencing generalized anxiety disorder in their lifetime.¹
- 1 in 3 Canadians with mental illness report an unmet or partially met need for mental health care services, including medications.¹
- Drug therapy is a key component of managing mental illness, and a positive Health Technology Assessment (HTA) reimbursement recommendation from Canadian Agency for Drugs and Technologies in Health (CADTH) is generally necessary for public reimbursement of new therapies in all Canadian jurisdictions except Quebec.

Objectives

- To examine trends in CADTH Do Not List (DNL) recommendations for mental illness drugs (MID) and non-mental illness drugs (nMID) between 2012 and 2022.
- To compare the DNL rate (DNLR) for MID at CADTH with those of the Institut national d'excellence en santé et services sociaux (INESSS)(Quebec), the National Institute for Health and Care Excellence (NICE)(UK), the Scottish Medicines Consortium (SMC)(Scotland), and the Pharmaceutical Benefits Advisory Committee (PBAC)(Australia).

Methods

Figure 1. Search Strategy and Extraction of HTA Recommendations

CADTH recommendations searched from January 1, 2012 – December 31, 2022

Submissions related to schizophrenia, narcolepsy, bipolar disorder, attention-deficit/hyperactivity disorder (ADHD), and depression were identified.

Reasons for DNL recommendations were compiled.

Recommendations for the same product/indication pairs were compared between CADTH and INESSS, NICE, PBAC and SMC using Cohen's kappa.

Conclusions

Overall, CADTH was significantly less likely to recommend reimbursement for MID over nMIDs, primarily due to issues regarding uncertain clinical benefit with the former.

Results

Trends in CADTH Recommendations

- CADTH reviewed a total of 13 MID submissions and 384 nMID submissions from 2012 to 2022. (Figure 2).
- Overall, MID had a greater DNLR rate than nMIDs (54% [7/13] vs. 17% [67/384], $p < 0.001$) (Figure 3).

Figure 2. Trends in CADTH DNLR for MID and nMID from 2012 to 2022

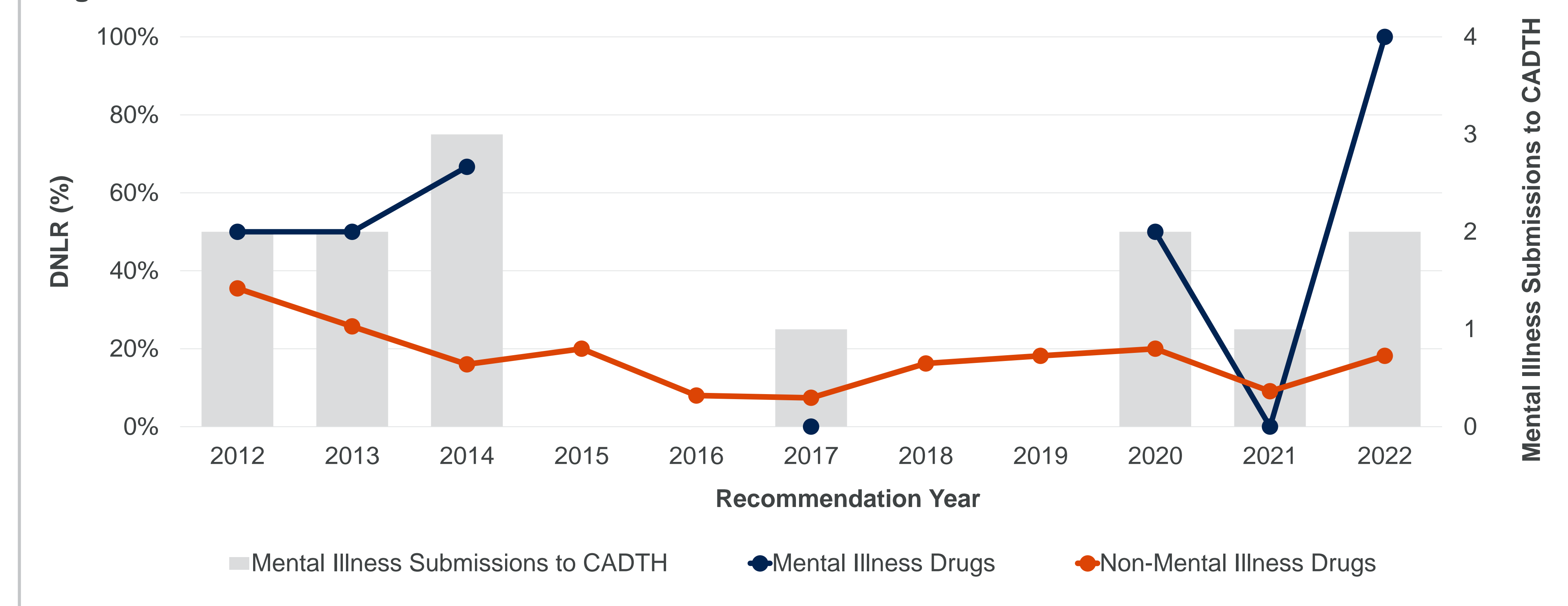
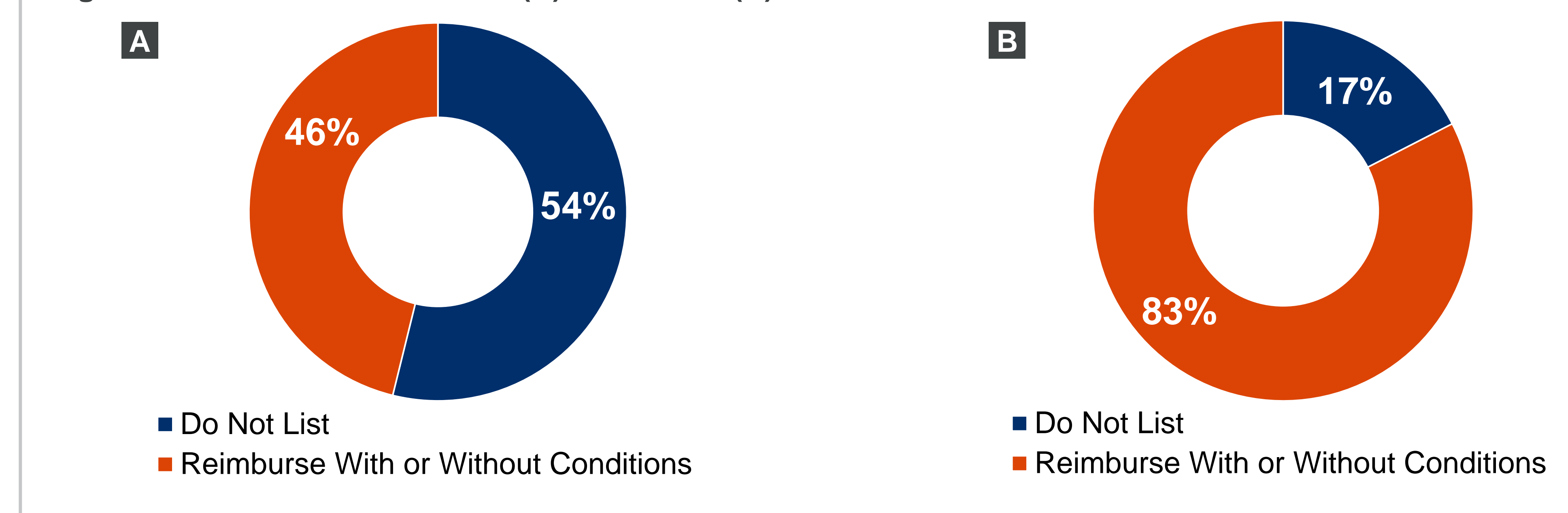


Figure 3. CADTH DNLR for MID (A) and nMID (B) from 2012 to 2022



Key Reasons for CADTH DNL Recommendations for MID:

- Uncertainty in clinical benefit (57% [4/7])
- Uncertain long-term safety (43% [3/7])
- Uncertain impact on health-related quality of life HRQoL and other key secondary outcomes (43% [3/7])
- Patient values were not met (29% [2/7])

Rejection Rates Amongst HTA Bodies and Agency Agreement.

- MID rejection rates for INESSS, NICE, SMC and PBAC tended to be lower than for CADTH ($p < 0.05$ only vs. SMC) (Table 1).
- For the same product and indication pairs, agreement rates with CADTH were 57% (Cohen's kappa = 0.16) for INESSS (n=7); 100% for NICE (n=1); 75% (Cohen's kappa = 0.5) for SMC (n=4); and 67% (Cohen's kappa = 0.25) for PBAC (n=6).

Table 1: MID Rejection Rates Across HTA Bodies from 2012-2022

	CADTH	INESS	NICE	SMC	PBAC
DNL	7	11	1	2	11
Total Recommendations	13	23	4	13	25
DNLR (%)	54	48	25	15	44

CADTH's DNLR for MID tended to be higher than those for INESSS, NICE, SMC, and PBAC, although statistical significance was only found versus SMC.

Inter-agency agreement for common MID product/indication pairs reviewed by CADTH and each of the other HTA bodies was low to moderate, however this analysis was limited by small sample sizes.

The observed trends have important implications regarding access to novel medications for patients in Canada with mental illness that deserve further study and discussion.

Abbreviations ADHD = attention-deficit/hyperactivity disorder; CADTH = Canadian Agency for Drugs and Technologies in Health; DNL = do not list; DNLR = do not list rate; HRQoL = health-related quality of life; HTA = Health Technology Assessment; INESSS = Institut national d'excellence en santé et services sociaux; MI = mental illness; MID = mental illness drug; NICE = The National Institute for Health and Care Excellence; nMID = non-mental illness drug; PBAC = Pharmaceutical Benefits Advisory Committee; SMC = Scottish Medicines Consortium.

References 1. Stephenson, E. (2023, September 22). Insights on Canadian Society: Mental disorders and access to mental health care. Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/75-006-x/2023001/article/00011-eng.htm>

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