CDA-AMC Health Technology Review

Federal, Provincial and Territorial Coverage of Diagnostic Sleep Studies

Environmental Scan

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Questions or requests for information about this report can be directed to Requests@cda-amc.ca

Abbreviations

CPAP	continuous positive airway pressure
ES	Environmental scans
ESS	Epworth sleepiness scale
HSAT	home sleep apnea tests
ICSD	International classification of sleep disorders
OSA	obstructive sleep apnea
PSG	polysomnography

Key Messages

- This Environmental Scan aims to identify how sleep diagnostic studies are publicly funded across Canada. A review of published and grey literature was conducted, and survey responses were gathered from 46 individuals, including 8 public payers and 38 service providers (sleep clinics) across Canadian jurisdictions. This report presents available information on public payer coverage of the four levels (I-IV) of diagnostic sleep studies including details of public plan's coverage, patient eligibility criteria, funding mechanisms, costs, out-of-pocket expenses, wait times, and patient prioritization.
- Information, albeit limited in some instances, is available for Alberta (AB), British Columbia (BC), Manitoba (MB), New Brunswick (NB), Newfoundland and Labrador (NL), Non-Insured Health Benefit (NIHB), Nova Scotia (NS), Ontario (ON), Quebec (QC), Saskatchewan (SK), and Veterans Affairs Canada (VAC). No literature was identified, nor were survey responses collected for Northwest Territories (NWT), Nunavut (NU), Prince Edward Island (PEI), or the Yukon (YT).
- Most public payers cover Level I and Level III sleep studies, but coverage for Level II and Level IV studies is more limited and tied to specific conditions.
- Level I, III and IV sleep studies are funded through hospital global budgets in AB, QC, ON (only level I and IV), and SK, while BC, MB (only level I and III) and NS (only level I and III) rely on a fee-for-service mechanism. Some jurisdictions, like QC and ON, use a combination of both methods, with variations in practitioner payment methods for professional and technical services.
- Costs of sleep studies vary by jurisdiction, for example, Level I professional fees up to $298 in Saskatchewan and technical fees up to $379 in British Columbia. No co-payments are required for any of the publicly funded diagnostic sleep tests across the jurisdictions. If not publicly funded, out-of-pocket costs for sleep studies are relatively expensive and, for example, can cost up to $2,000 for a Level I sleep study.
- Eligibility criteria for reimbursement is often tied to facility accreditation and physician qualifications, with requirements varying across the country. In most cases, only hospital-based or accredited diagnostic facilities are eligible for reimbursement, clinics and home testing are often excluded from reimbursement, unless they meet specific provincial standards.
- Survey respondents reported significant wait times for patients to see a sleep specialist as well as the sleep test. Wait times reported varied within the same jurisdictions, likely due to differences between rural, remote, and urban locations. The patient prioritization criteria to address the impact of wait times on high-priority patients varies across reporting provinces. Patient prioritization criteria considered factors such as severity of symptoms, co-morbidities, and occupation. A provincial benchmark for wait-times was reported in BC for Level I sleep studies.
- Based on the information available within the literature identified and payer and provider survey, there are substantial differences in coverage for diagnostic tests of sleep conditions across Canadian jurisdictions.

Context

Sleep is an essential component of daily life. The influence of sleep influences various physiological processes, impacting cognitive performance, mood regulation, and emotional stability.[1] Despite its importance, research indicates that up to one-third of people living in Canada are not getting enough sleep, and many suffer from insomnia or other sleep-related disorders.[2] Sleep disorders are a group of conditions that disrupt normal sleep patterns, leading to poor sleep quality, timing, and quantity. These disturbances often result in daytime impairments such as fatigue, mood swings, and reduced cognitive functioning, making sleep disorders one of the most common clinical issues among adults.[3-5]

The International Classification of Sleep Disorders (ICSD) categorizes sleep disorders into six broad groups, each encompassing a range of specific conditions. These include sleep-disordered breathing such as obstructive sleep apnea (OSA); central disorders of hypersomnolence; sleep-related movement disorders, including restless legs syndrome; parasomnias circadian rhythm sleep-wake disorders, and insomnia.[3,4] OSA is one of the most prevalent and under-diagnosed sleep disorders in Canada. In 2016-2017, 6.4% of people living in Canada reported receiving a diagnosis of sleep apnea from a healthcare professional.[6] However, a 2019 study estimates that 24.5% of people living in Canada have some form of OSA[7], underscoring the widespread prevalence and estimated under-diagnosis across the country.[8]

Sleep studies, or polysomnography (PSG), are essential tools used to diagnose various sleep disorders, with tests categorized based on their technical complexity and resource requirements. Depending on the level of the sleep studies multiple physiological channels or biophysical signals are assessed. The most complex, Level I sleep study, involves in-laboratory, technologist-attended PSG and is considered the gold standard for diagnosing sleep-disordered breathing such as OSA, along with other sleep disorders like parasomnias and hypersomnolence. Level I sleep study involves collection of seven or more data channels, including electroencephalogram and electrooculogram for sleep staging, electromyogram, electrocardiogram and respiratory channels. [9] These tests are considered expensive and require significant resources, including specialized staff and equipment, and are often conducted in hospitals or dedicated sleep clinics.[8,10]

Less resource-intensive options include Level II tests, which are full PSG that are unattended and conducted at home; and Level III tests referred to as home sleep apnea tests (HSATs), which involve portable monitoring with three or more channels, including pulse oximetry and heart rate. Level IV studies only use one or two channels which typically only measure oxygen levels or airflow. [11-14] Level I and III tests are the primary diagnostic tools in Canada. Coverage for Level II and IV studies is not universally available under public healthcare plans.[14] In Ontario, a Level I PSG is often required to access reimbursement for continuous positive airway pressure (CPAP) devices, a common treatment for OSA.[11] Table 1 provides details of features of the various levels of sleep studies.

Table 1: Features of sleep study levels

Features		Level I (PSG, attended)	Level II (PSG, unattended)	Level III HSAT	Level IV Oximetry
Location	At – home	-	√	√	√
	In a lab/center	√	-	-	-
Observed by	Technologist (RPSGT)	√	-	-	-
Monitors	Breathing Activity	√	√	√	-
	Snoring	√	√	√	-
	Airflow	√	√	√	√
	Oxygen Levels	√	√	√	√
	Heart rate (ECG)	√	√	√	-
	Brain Activity (EEG)	√	√	-	-
	Muscle Activity (EMG)	√	√	-	-
	Sleep Quality[1]	√	√	-	-
Diagnosis	Sleep Apnea	√	√	√	-
	Leg and Body/PLMD	√	√	-	-
	Narcolepsy[2]	√	√	-	-
	REM Sleep Behavior Disorder	√	-	-	-

HSAT = home sleep apnea test; PLMD = periodic limb movement disorder; PSG = Polysomnography; REM = rapid eye movement; RPSGT = Registered Polysomnographic Technologist

[1] onset time, efficiency, REM and non-REM, sources of disturbance

[2]Multiple sleep latency test is required to complete diagnosis of Narcolepsy

Source: Government of British Columbia[11]; Careica Health (2023)[12]; CPAP Online[13]

It is recognised that access to registered sleep clinics varies depending on factors such as geographic location and is complicated by a patient's financial and personal situations (e.g. caregiving responsibilities). The limited availability and the restricted capacity of polysomnography facilities, specialist training requirements, and uneven distribution of sleep specialists, often results in long wait times and may contribute to the underdiagnosis of OSA in certain areas. It is expected that rural patients often bear additional costs of travel and accommodation, and while home sleep testing can improve accessibility, its cost remains a challenge for many.[15-19]

A 2023 study comparing OSA care between rural and urban adults found that rural patients face longer wait times and higher costs. Rural patients experience delays from initial assessment to diagnosis and from diagnosis to treatment, receive less government funding for diagnostic tests or CPAP, and incur additional appointment-related expenses, leading to higher overall care costs.[20] The COVID-19 pandemic exacerbated these challenges as in-clinic PSG testing was paused in Canada, increasing wait times and emphasizing access challenges, particularly for rural and remote populations. Additionally, reimbursement models across provinces differ, with some regions offering more public funding than others, leading many patients to seek care in private clinics when public options are limited or unavailable.[17] The Environmental Scan (ES) aims to gather evidence to better understand the variability in public payer reimbursement models for diagnostic sleep studies across Canada.

Objectives

The key objectives of this Environmental Scan (ES) are to gather information on:

1. Details of public plans' coverage of diagnostic sleep studies including:
    a. name of public plan covering the cost of the sleep studies,
    b. levels of sleep studies covered, and
    c. patients' and sleep clinics' eligibility criteria for reimbursement,
2. Funding mechanism and cost of diagnostic sleep studies in Canadian provinces and territories,
3. Other considerations such as out-of-pocket costs, wait-times, and patient prioritization criteria.

The ES intends to gather information on all four levels of diagnostic sleep studies

Level I – polysomnography (PSG), in lab attended
Level II - polysomnography (PSG), at home unattended
Level III - home sleep apnea test (HSAT), at home unattended
Level IV - sleep apnea screening with oximetry, at home unattended

For the purposes brevity, hereafter, Level I – polysomnography (PSG), in lab attended are referred to 'Level I sleep study', Level II - polysomnography (PSG), at home unattended will be referred as 'Level II sleep study'; Level III - home sleep apnea test (HSAT) be referred as 'Level III sleep study'; and Level IV - sleep apnea screening with oximetry as 'Level IV sleep study' only.

For the purposes of the ES, **'Public Payer'** refers to federal, provincial, or territorial government bodies that reimburse the full or partial cost of the sleep studies. **'Provider'** refers to sleep clinics or sleep labs that perform sleep studies. These studies may be conducted at the clinic's facility or at patient's home with the necessary machine/devices provided by the sleep clinic. The sleep clinic may be privately operated independent healthcare facilities or publicly funded facilities which operate within a hospital, health authority or a health region.

This ES does not include an assessment of the clinical or cost-effectiveness of various level of the sleep studies. Thus, conclusions or recommendations about the value of the various levels of the sleep studies outside of the scope of this report.

Research Questions

To address the objectives, we asked and answered the following research questions. Questions that are only relevant to payers or providers have been indicated as such.

Objective 1: Details of public plans' coverage of diagnostic sleep studies

1. Which public plans covers the cost of any of the four levels (Level I -IV) of diagnostic sleep study?

2. What levels of diagnostic sleep study are provided by the facility? *(For service providers only)*
3. What is the type of the sleep clinic (e.g., sleep clinic at a hospital, publicly funded; sleep clinic (independent health facility) and publicly funded; privately owned and publicly funded; or privately owned and not publicly funded etc.)? *(For service providers only)*
4. What are the patient eligibility criteria for coverage (e.g., test must be ordered by a specialist, low-income status, on social assistance, etc.), for each of the four levels of sleep studies that is funded by the public payer?
5. What (if any) are the specific requirements for a sleep clinic to receive reimbursement under the public plan? *(For public payers only)*
6. What is the name of the accrediting/licensing body that has certified the sleep clinic? *(For service providers only)*

Objective 2: Funding mechanism and cost of diagnostic sleep studies in Canadian provinces and territories

7. Under what funding mechanisms are the sleep studies are funded by the public drug plan (e.g. global budget, fee for service etc.)?
8. What are the billing codes and its dollar value, including details of professional fee, technical fee or cost in other units and its dollar value, for each of the four levels of sleep studies that is funded by the public payer?
9. How many diagnostic tests covered in given time period (e.g., once in a lifetime), for each of the four levels of sleep studies that is funded by the public payer?
10. What (if any) are the co-payment requirements for each of the four levels of sleep studies that is funded by the public payer?

Objective 3: Other considerations such as out-of-pocket costs, wait-times, patient prioritization criteria.

11. What are the cost and relevant details of alternate funding mechanisms for each of the four levels of diagnostic sleep studies (e.g., out-of-pocket, private insurance, or reduced/no fee if patient's purchases CPAP machine etc.), if the provincial or territorial public plan does not cover the cost of the diagnostic sleep studies or if a patient is not eligible for coverage under provincial or territorial public plan?
12. How long do patients typically wait to see sleep specialist / any health care professional who orders the sleep studies in the jurisdiction?
13. How long do patients typically wait for the different levels of diagnostic sleep studies that are covered by the public plan, once they have been ordered by sleep specialist / any health care professional who orders the sleep studies in the jurisdiction?
14. Given the wait-times, are there any patient prioritization criteria based on the severity of symptoms for sleep studies?

Study Design

We conducted an Environmental Scan (ES) to gather information on public payer coverage of diagnostic sleep studies across Canadian jurisdictions. Using a staged approach, we initially performed a limited search and review of grey and published literature. The literature informed the development of a survey distributed to two key stakeholder groups: public payers and service providers (sleep clinics). This report is now open for stakeholder feedback, comments will be collected, reviewed and incorporated into this document. A detailed description of the methods is available in Appendix 1, and survey questions are provided in Appendix 2.

Findings

A total of 527 citations were identified in the electronic literature searches. Following screening of titles and abstracts, no potentially relevant reports from the electronic search were retrieved for full-text review. Limited information was identified from grey literature such as clinical practice guidelines, websites including that of public payers' and sleep clinics', one past report on similar topic, news articles, and other sources of information that addressed the research questions. [8,11,14,21]

The findings presented in this ES are based on a limited search and review of published and grey literature and survey responses received by September 2, 2024, at 11:59 PM. Survey responses were received from 46 individuals representing public payers or service providers from Alberta (AB), British Columbia (BC), Manitoba (MB), New Brunswick (NB), Newfoundland and Labrador (NL), Nova Scotia (NS), Non-Insured Health Benefit (NIHB), Ontario (ON), Quebec (QC), Saskatchewan (SK), and Veterans Affairs Canada (VAC). An additional 8 respondents opened the survey yet did not respond to any of the survey questions. These responses were removed from the analysis. Survey respondents also provided literature and documents with relevant information which supplement

the findings of the grey literature review.[8,11,14,17,21-24] A list of the survey respondents' organizations is provided in Appendix 3. In some instances, multiple individuals from the same organization have responded to the survey.

Among the 46 respondents, 8 represented public payers and 38 represented providers. Among the 8 respondents representing six public payers, four were provincial payers (BC, NS, ON and SK) and two were federal payers (VAC and NIHB). Notably, survey respondents from two public payers (NIHB and NS) stated that they do not cover any diagnostic sleep studies. However, review of the recently published Nova Scotia's Physician's Manual 2024 states that Level I, II and III have health service codes under Nova Scotia's Health Insurance Programs.[25] Therefore, the information regarding public payer coverage of sleep studies in NS is based on the manual, instead of the survey response. The 38 respondents representing providers were from eight provinces: AB (10), BC (4), MB (1), NB (1), NL (1), ON (13), QC (6), and SK (2). No survey responses were collected for Northwest Territories (NWT), Nunavut (NU), Prince Edward Island (PEI), or the Yukon (YT) (Appendix 3).

The findings presented here address the research questions and are presented by the objectives of the report.

Objective 1. Public Plan Coverage

Ten public payers cover the cost of Level I sleep studies (AB, BC, MB, NB, NL, NS, ON, QC, SK and VAC). There are no sleep labs that conduct Level I sleep studies in the Yukon.[26]

As per the survey respondents, Level II sleep studies were covered by 3 public payers (MB, NS and QC). Funding for Level II sleep studies in Manitoba began in February 2023 on a short-term contract basis between Manitoba Health's Diagnostic and Surgical Recovery Task Force and Cerebra, a Winnipeg based medical technology company, to address the waitlist for Level I sleep studies due to the COVID-19 pandemic. The initial contract was for one thousand in-home PSG (Level II sleep studies).[21,27,28] However, the Diagnostic and Surgical Recovery Task Force is no longer accepting patient or provider referrals.[29]

Eight public payers cover the cost of Level III sleep studies (AB, BC, MB, NB, NS, QC, SK and VAC).

Five public payers cover the cost of Level IV sleep studies (AB, BC, ON, QC and SK). The respondent from AB noted that coverage is provided for sleep studies conducted in an Alberta Health Services (AHS) sleep lab and only for part of the pediatric labs. (Table 2).

Table 2: Levels of sleep studies covered by public payers and name of the public payer

	Level I	Level II	Level III	Level IV	Name of Public Payer
Alberta	Yes	Not funded	Yes	Yes[b]	Alberta Health Services
British Columbia	Yes	Not funded	Yes	Yes	Medical Service Plan
Manitoba	Yes	Yes[a]	Yes	Not funded	Manitoba Health
New Brunswick	Yes	Not funded	Yes	Not funded	New Brunswick Medicare
Newfoundland and Labrador	Yes	Not funded	Not funded	Not funded	Newfoundland Medical Care Plan
Non-Insured Health Benefit	Not funded				
Nova Scotia[c]	Yes	Yes	Yes	Not funded	Medavie Blue Cross[d]
Ontario	Yes	Not funded	Not funded	Yes	Ontario Health Insurance Program
Quebec	Yes	Yes	Yes	Yes	Régie de l'assurance maladie du Québec
Saskatchewan	Yes	Not funded	Yes	Yes	Saskatchewan Health Authority
Veterans Affairs	Yes	Not funded	Yes	Not funded	Veterans Affairs Canada
Prince Edward Island	Information not available				

Northwest Territories	Information not available
Nunavut	Information not available
Yukon	Information not available

[a] Only funded on a short term contract for pandemic wait list. No longer accepting patient of provider referrals. [21,27-29]
[b] Only covered in AHS sleep lab and only for the part of the pediatric labs
[c] Information is base on Nova Scotia's Physician's Manual 2024.[25]
[d] The Medical Services Insurance Programs are administered by Medavie Blue Cross on behalf of the Nova Scotia government.[30]

Eligibility Criteria

Patient Eligibility Criteria – Referring health care professional

The referral requirements, that is, healthcare providers that are authorized to order diagnostic sleep studies, for public plan reimbursement of sleep tests vary by province and test level. Survey respondents noted the following requirements.

- For Level I sleep tests, most provinces require referrals from sleep specialists (AB, BC, MB, NB, ON, QC, SK), with some variations and additional restrictions. AB also allows referrals from sleep providers, respirologists, or limited psychiatrists. One respondent from BC also noted requirements for referrals from sleep specialists at the facility, NB requires referrals from sleep specialists affiliated with a sleep center. ON allows referrals from physicians, nurse practitioners, or physician assistants. SK only allows referrals from specialists or physicians with Saskatchewan Health Authority sleep lab privileges.
- For Level II sleep tests, MB requires sleep specialists.
- For Level III sleep tests, AB requires referrals from specialists or sleep lab-affiliated physicians, while MB requires referrals from specialists. BC, and NB permits referrals from "practitioner", "physician", "MDs" or nurse practitioners. QC permits referrals from "MDs". SK only allows referrals from specialists or physicians with Saskatchewan Health Authority sleep lab privileges.
- For Level IV sleep tests, British Columbia requires referrals from "practitioners", while Quebec requires referrals from "MDs". One respondent from Ontario noted that there were no specific referral requirements. Saskatchewan requires referrals from sleep specialists.

Other than the requirements related to the referring physician, no additional patient criteria (for example, income status, age etc.) were specified by the respondents as criteria for reimbursement eligibility. One respondent from QC noted there was no restriction on who could be referred for a sleep test.

Provider (health care professional and sleep clinic) Eligibility Criteria

Among the 38 respondents that represented providers (sleep clinics), 34 offered Level I, and 25 offered Level III sleep studies at their facilities. 26 sleep clinic respondents noted that they represented a sleep clinic at a hospital and were publicly funded, four were publicly funded independent health facilities and four were privately owned and not publicly funded. Table 3 provides details of the level of sleep studies provided by the providers that responded to the survey and type of sleep clinics.

Table 3: Details of service providers that responded to the survey: levels of sleep studies offered by the sleep clinic and type of sleep clinic

Province of Service Provider	Number of responses to the question on levels of sleep studies offered by	Number of respondent's facility that provide the following levels of diagnostic sleep studies				Type of sleep clinic			
		Level I	Level II	Level III	Level IV	Sleep clinic at hospital,	Sleep clinic (IHF),	Privately owned, not	Others

	the sleep clinic and type of sleep clinic					publicly funded	publicly funded	publicly funded	
Alberta	10	10	0	9	1	9			1[a]
British Columbia	4	3	1	3	4	2			2[b]
Manitoba	1	1		1		1			
New Brunswick	1	1		1		1			
Newfoundland and Labrador	1			1				1	
Ontario	13	12		2	6	8	4		1[c]
Québec	6	6	3	6	4	4		2	
Saskatchewan	2	1		2	1	1		1	
Non-Insured Health Benefit	Not applicable (federal plan)								
Veterans Affairs Canada	Not applicable (Federal Plan)								
Nova Scotia	No response from any providers in the province								
Northwest Territories	No response from any providers in the territory								
Nunavut	No response from any providers in the territory								
Prince Edward Island	No response from any providers in the province								
Yukon	No response from any providers in the territory[d]								

IHF = Independent Health Facility

[a] Multiple facilities hospital and private clinics
[b] One respondent noted that they represent a regional hospital pulmonary function lab, and one respondent noted that she/he is involved in the oversight and regulation of sleep clinics in BC.
[c] One respondent noted that they work with surrounding sleep labs to obtain studies: Firestone Sleep Clinic, Hamilton Sleep Disorders Sleep Clinic, Etobicoke Brampton Sleep Clinic
[d] There are no sleep labs that conduct level I sleep studies in the Yukon.[26]

Accreditation Standards and Physician Qualification Requirements

Information on regulations for sleep clinic accreditation and physician qualifications was available for AB, BC, MB, NB, NL, NS, ON, QC and SK from the survey and supplemented by information available in literature.[23,25,31]

Alberta:

Level I sleep studies must be conducted at AHS specified hospitals (e.g., Foothills Medical Center, Alberta Children's Hospital) to be eligible for reimbursement. Sleep studies conducted in private labs are not reimbursed. All ten respondents representing sleep facilities in Alberta noted that they were accredited and were a part of sleep clinic in hospital setting and publicly funded. Of the ten, four respondents noted they were accredited by College and Physicians and Surgeons of Alberta (diagnostics) and one respondent noted that they were accredited by Accreditation Canada. The other five respondents did not specify their accrediting entity.

One provider from Alberta commented that access to Level IV testing outside Alberta Health Services (AHS) laboratories has decreased since the implementation of CPSA accreditation, as some laboratories no longer accept testing requests for children, even if ordered by a pediatric specialist.

British Columbia:

Three of the four respondents representing sleep facilities in British Columbia noted that they were accredited. All three respondents specified they were accredited by Diagnostic Accreditation Program (DAP), College of Physicians and Surgeons of British Columbia.

A respondent from BC noted that to receive reimbursement under the public plan, a sleep clinic must meet two key requirements: first, the diagnostic facility must have the necessary accreditation from the Diagnostic Accreditation Program (DAP) of the College of Physicians and Surgeons of British Columbia. Second, the physicians involved must hold the appropriate credentials relevant to the diagnostic services proposed. For physicians exclusively working at and affiliated with private facilities, credentials from the College are required. However, for physicians affiliated with public diagnostic facilities, even if they work at private facilities, must have credentials from a health authority. The Medical Services Commission may approve facilities that have not yet met these requirements, provided accreditation and credentialing are completed before services are offered.

A respondent from British Columbia noted that prior to 2022, home sleep apnea testing (HSAT) was unregulated and were performed by CPAP providers. Sleep clinics offering HSATs are now accredited.

Manitoba:

The one respondent for Manitoba noted that their center is accredited. The respondent did not specify the name of the accrediting entity.

New Brunswick:

Only sleep tests conducted thorough the Hospital Sleep Centre are eligible for reimbursement through NB Medicare. The one respondent did not specify the name of the accrediting entity.

Newfoundland and Labrador:

Level 1 sleep studies are conducted at only one center, and public funding only applies to "in-hospital" diagnostics, which excludes the sleep studies conducted by private vendors. There are also private homecare companies that do Level 3 sleep tests, but this is not covered by Medicare. The one respondent did not specify the name of the accrediting entity.

Nova Scotia:

Based on the 2024 physician's manual, the Nova Scotia Health Authority requires physicians to meet specific qualifications to claim health service codes for interpreting sleep studies. For Level I sleep studies, physicians must have completed formal fellowship-level training and be credentialed by the NS Health Authority to interpret such studies. Similarly, for Level II and III sleep studies, physicians are required to have completed fellowship-level training, including the interpretation of sleep studies, to claim the corresponding health service codes.[25] There were no respondents from Nova Scotia who represented a provider.

Ontario:

One respondent noted that Ontario Health Insurance Plan (OHIP) reimburses insured sleep studies at private clinics that have been accredited by Accreditation Canada and at hospital-based clinics. Eight out of the thirteen respondents representing sleep facilities in Ontario noted that they were accredited. Two respondents noted that they were accredited by College of Physicians and Surgeons of Ontario (CPSO), one respondent noted they were accredited by their hospital accreditation body and two respondents noted they were accredited by IHF Standard specified by Ministry of Health, Ontario. One respondent noted that hospital sleep labs do not go through accreditation. A respondent from Ontario noted that a formal accreditation program for community facilities has been in place for the last 20 years, standardizing the care patients receive. The other two respondents did not specify the name of the accrediting entity.

The professional component of a sleep study is eligible for payment only if the following conditions are met: the physician interpreting the study must meet the qualifications outlined in the CPSO Standards for sleep medicine, or if delegated, the physician must also meet these standards. Additionally, a qualified physician must be accessible throughout the sleep study to make decisions about the

patient and ensure that all technical aspects, including setup and monitoring, are properly conducted. The technical component of a sleep study is eligible for payment if it meets the following requirements: it adheres to conditions set out under “Diagnostic Services Rendered at a Hospital", is performed at a hospital or off-site location, a technician is present throughout the study, the technical staff meet CPSO Standards, and all equipment and test components comply with CPSO Standards.[23]

Quebec:

One of six respondents noted that their center is accredited. The respondent did not specify the name of the accrediting entity.

Saskatchewan:

One respondent noted that only hospital-based sleep clinics are eligible for public funding and the billing code is limited to physicians with Saskatchewan Health Authority sleep lab privileges. The second respondent from SK noted that they were accredited but did not report the accrediting entity.

Objective 2. Funding mechanisms

Funding Mechanisms by study level and payer

Information on public payer funding mechanism for sleep studies was available for AB, BC, MB, ON, QC and SK from the survey and supplemented by information available in literature (e.g., statement of benefit, physician payment schedule). VAC, a federal public plan that funds Levels I and III sleep studies, follows the rate set by the province for provincially insured service. VAC may also approve the full cost of Level I and III sleep study if it is not covered by the provincial health system. Information on funding mechanism for sleep studies for NS was gathered from grey literature (payment schedules) [14,25] (Table 4).

- **Level I sleep studies** were funded through hospital global budget in AB, ON, QC and SK, and through fee for service mechanism in BC, MB and NS. ON and QC also noted fee for service mechanism, in addition to being funded through hospital global budget. In ON, professional and technical fees are paid as fee for service. In AB, practitioners are paid as per PSG interpreted. The cost of Level I sleep studies vary between jurisdictions and with a maximum cost up to $298 for professional fees (SK) and $379 (BC) in technical fees.

  Veterans Affairs Canada (Level I):
  - For "A" Clients, if the sleep study pertains to the client's Medical Pension Code (MPC), the request may be approved up to the rate set by the province for that provincially insured service. If the service is not covered by the provincial health system, then the full cost of the service may be approved.
  - For "B" Clients, if a demonstrated health need exists and the service is not offered by the provincial healthcare system, the request may be approved accordingly.

- **Level II sleep studies** in NS and QC are funded through fee for service mechanism. Funding mechanism for Level II sleep studies is not applicable in MB as it is only offered on short-term contract basis to address the pandemic waitlist; and is paid at $600 (combined profession and technical fee), which is higher than the cost of a Level I sleep study (Professional fee $216.50).

- **Level III sleep studies** were funded through hospital global budget in AB, QC and SK, and through fee for service mechanism in BC, MB, and NS. QC also noted fee for service mechanism, in addition to being funded through hospital global budget. The cost of Level III sleep study varies between jurisdiction and ranges up to $142 for professional fees (MB) and $82 (BC) in technical fees.

  Veterans Affairs Canada (Level III):
  - For "A" Clients: If the sleep study is related to the client's MPC, the request may be approved up to the provincial rate established for provincially insured services. If the service is not covered by the province, it can be approved in full.
  - For "A/B" Clients: If the sleep study is related to the client's MPC or, if not related to the MPC but there is a demonstrated health need and the service is not provided by the provincial healthcare system, the request may be approved up to the rate established for provincially insured services. If not covered, the service can be approved in full. For clients pensioned for PTSD, requests can be approved by the analyst without a consultant's recommendation. All other requests must be sent to a consultant for review.

- For "B" Clients: If a demonstrated health need exists and the service is not offered by the provincial healthcare system, the request may be approved.
- Requests from a POC 09 (Oxygen therapy) provider for a sleep study, the request must be processed under POC 05 (Hospital Services) using a Miscellaneous Provider ID. Interpretation fees are reimbursed only if interpreted by a Specialist (e.g., respirologists, ENT specialists, neurologists, psychiatrists, or general internists with specialized sleep medicine knowledge). WatchPat (a Level III at-home sleep study device interpreted by a Specialist) can also be processed under POC 05.

- **Level IV sleep studies** were funded through hospital global budget in AB, ON, QC and SK, and through fee for service mechanism in BC. ON and QC also noted fee for service mechanism, in addition to being funded through hospital global budget. The cost of Level IV sleep study varies between jurisdiction and ranges up to $30 for professional fees (SK) and $17 (ON) in technical fees.

Of note, AB and SK do not have technical fees for any level of sleep studies, as it is funded through a hospital global budget. In AB, all costs including interpretation cost are covered through the hospital global budget. In NS sleep study related service is assigned a certain number of Medical Service Units (MSUs), which represent the total fee for service.[14,25]

All survey respondents noted that there were no **co-payments** required for the publicly funded diagnostic sleep tests.

Across provinces, the **number of diagnostic sleep tests** funded by the public payer varies in restrictions.
- AB, MB, NB, and QC it was noted that there are no limits on the number of diagnostic sleep tests in any given period.
- In BC, no formal restrictions exist. For Level I and Level III - to align with clinical best practices - retesting and referral for retesting of previously diagnosed patient for the purpose of replacement device coverage is not funded by the Medical Service Plan (MSP).
- ON allows initial Level I diagnostic tests once per lifetime. Repeat Level I diagnostic studies are limited to one per patient, per facility, per 12-month period except where prior approval has been given. Repeat Level I diagnostic sleep studies performed in the same facility that performed the initial diagnostic study are not eligible for payment in the 12-month period following an initial diagnostic study except where prior approval has been given.[23] In ON, Level IV tests can be conducted without any restriction on the number of test but require the facility to maintain permanent medical records, and it must be done without a sleep study conducted simultaneously.
- In SK, repeat Level I and Level III sleep tests within 42 days require a physician's explanation.

Table 4: Public payer funding mechanism, costs and billing codes

	Funding Mechanism	Cost (Public Payer) Professional Fee:	Cost (Public Payer) Technical Fee	Billing Code
Level I				
Alberta	GB[a]	$140 - $150	None	None
British Columbia[b]	FFS	$164.17	$379.57	ST 11915 (Professional Fee); ST 11916 (Technical Fee)
Manitoba	FFS	$216.50	*Information not available*	8872
Nova Scotia[c]	FFS	60 MSU at $2.84 per MSU		03.19C
Ontario[b]	GB and FFS[d]	$97.50[e]	$370.75[e]	J896 (Initial), J897 (Repeat)
Quebec	GB and FFS	~$45 or ~$150[f]	*Information not available*	8475, 08475
Saskatchewan[b]	GB	$298.30 Specialist) 268.40 (GP)	not applicable[g]	281D Diagnostic (includes visit)
Non-Insured Health Benefit	*Not funded*			
Veterans Affairs	*As per the rate set by the province for the provincially insured service*			
New Brunswick	*Information not available*			
Newfoundland and Labrador	*Information not available*			

Northwest Territories	*Information not available*			
Nunavut	*Information not available*			
Prince Edward Island	*Information not available*			
Yukon	*Information not available*			
Level II				
Manitoba	Not applicable[h]	Fee: $600[i]		Not applicable (on contract)
Nova Scotia[c]	FFS	35 MSU at $2.84 per MSU		03.19F
Quebec	FFS	~$150	*Information not available*	8475
Alberta	*Not funded*			
British Columbia	*Not funded*			
New Brunswick	*Not funded*			
Newfoundland and Labrador	*Not funded*			
Non-Insured Health Benefit	*Not funded*			
Ontario	*Not funded*			
Saskatchewan	*Not funded*			
Veterans Affairs	*Not funded*			
Northwest Territories	*Information not available*			
Nunavut	*Information not available*			
Prince Edward Island	*Information not available*			
Yukon	*Information not available*			
Level III				
Alberta	GB	~$75	None	None
British Columbia[b]	FFS	$82[j]	$82.25[j]	PS 11925 (Professional fee), PS 11926 (Technical fee)
Manitoba	FFS	142.40	*Information not available*	8875
Nova Scotia [c]	FFS	25 MSU at $2.84 per MSU		03.19G
Quebec	GB and FFS	$100; 25$ [f]	*Information not available*	8472
Saskatchewan [b]	GB	$55.70 (Specialist); $50.20 (GP)	not applicable	284D Portable sleep study
Veterans Affairs	*As per the rate set by the province for the provincially insured service*			
Newfoundland and Labrador	*Not funded*			
Non-Insured Health Benefit	*Not funded*			
Ontario	*Not funded*			
New Brunswick	*Information not available*			
Northwest Territories	*Information not available*			
Nunavut	*Information not available*			

Prince Edward Island	*Information not available*			
Yukon	*Information not available*			
Level IV				
Alberta	GB [k]	*Information not available*	None	*Not specified*
British Columbia[b]	FFS	$27.36[j]	$15.32[j]	S00910 (Professional fee); S00911 (Technical fee)
Ontario[b]	GB and FFS	$11.35	$17.60	J332
Quebec	GB and FFS	$25; $10[f]	*Information not available*	8489
Saskatchewan[b]	GB	$30 (Specialist; GP)	*Information not available*	280D
Manitoba	*Not funded*			
New Brunswick	*Not funded*			
Newfoundland and Labrador	*Not funded*			
Non-Insured Health Benefit	*Not funded*			
Nova Scotia	*Not funded*			
Veterans Affairs	*Not funded*			
Northwest Territories	*Information not available*			
Nunavut	*Information not available*			
Prince Edward Island	*Information not available*			
Yukon	*Information not available*			

FFS = Fee for service; GB = Global Budget; GP = General Practitioner; MSU = Medial Service Unit
[a] MDs are paid per PSG interpreted
[b] Based on information from survey response and grey literatures – British Columbia[22], Ontario[23] and Saskatchewan[31]
[c] Based on information from grey literatures[14,25]. The Health Service Codes for sleep testing are not divided into "professional" and "technical" fees. Instead, each service is assigned a certain number of Medical Service Units (MSUs), which represent the total fee for service.[14,25]
[d] Specialized in-patient sleep studies in hospitals are covered through global budget. Professional and technical fee are covered through fee for service.
[e] Professional fee and technical fee applies to initial diagnostic study, repeat diagnostic studies and sleep studies conducted for therapeutic purposes.
[f] For pediatrics in Quebec under mixed renumeration, there is no cost for the services.
[g] Services occurring within a provincially designated sleep laboratory are not eligible for technical fees.
[h] Service provided on short-term contract to address the pandemic waitlist. No longer accepting patient of provider referrals.[21,27-29]
[i] The fee includes combined professional and technical fee to company providing the service on contract
[j] must be performed at sleep labs only
[k] only in AHS Sleep Lab, only for part of pediatric labs

Note: *Not specified* means that the respondent has not provided the information. It does not necessarily mean there is no cost or funding mechanism.

Objective 3. Out-of-pocket Costs, Wait-times and Patient Prioritization

Out-of-pocket costs

When diagnostic sleep studies are not covered though public plans, **alternate funding mechanisms** include out-of-pocket payments or private insurance. The cost of such tests can be expensive. Survey respondents reported the following:

For **Level I sleep studies**:
- In AB, the costs for studies ranges from $1,000 to $2,000,
- In ON, the cost can be 2.7 times higher than the publicly funded rate, with technical fees around $1,000.
- In QC, Level I sleep studies may cost over $1,500 at private providers.

- In NL, as noted by one respondent, most sleep studies are performed by private CPAP vendors, with patients typically covering the costs themselves, as public funding is restricted to the one 'in-hospital' diagnostics, excluding studies conducted outside the hospital.

For **Level II sleep studies:**
- The cost can range from $1,000 to $1,500 in QC at private providers.

For Level III sleep studies,
- The cost in ON and QC can go up to $250 and $699, respectively.
- Private providers in AB charge up to $200, however, the test might be covered in the cost of CPAP machines.

A 2019 report indicates that private sleep clinics providing Level III testing are present in all the Canadian jurisdictions reviewed in the report (AB, BC, MB, NS, QC and SK). These tests are often offered at no cost, with the expectation that some patients will later purchase CPAP devices or other sleep-related products from the clinic. [14]

For Level IV sleep studies:
- Privately funded **sleep studies** in AB and QC can cost up to $50 and $150, respectively.

The reliance on out-of-pocket payments or private insurance for diagnostic sleep studies highlights a significant barrier to access for many patients, given the prohibitive costs associated with these tests. In provinces like Alberta, Ontario, and Quebec, the expenses for Level I and II studies can be considerable, potentially limiting access for individuals who may not have the financial means. While some private clinics offer Level III tests at no upfront charge, this approach often places the onus on patients to purchase related products, which may not be feasible for everyone.

Wait Times for referral to health care professional and diagnostic testing

Survey respondents have reported sub-optimal wait times to see a health care specialist that can order sleep studies as well as to conduct the sleep test. There is considerable variation in the wait times noted by respondents from the same jurisdictions, this may likely be due to where the respondent is located such as rural or remote location or in an urban setting within the same province.

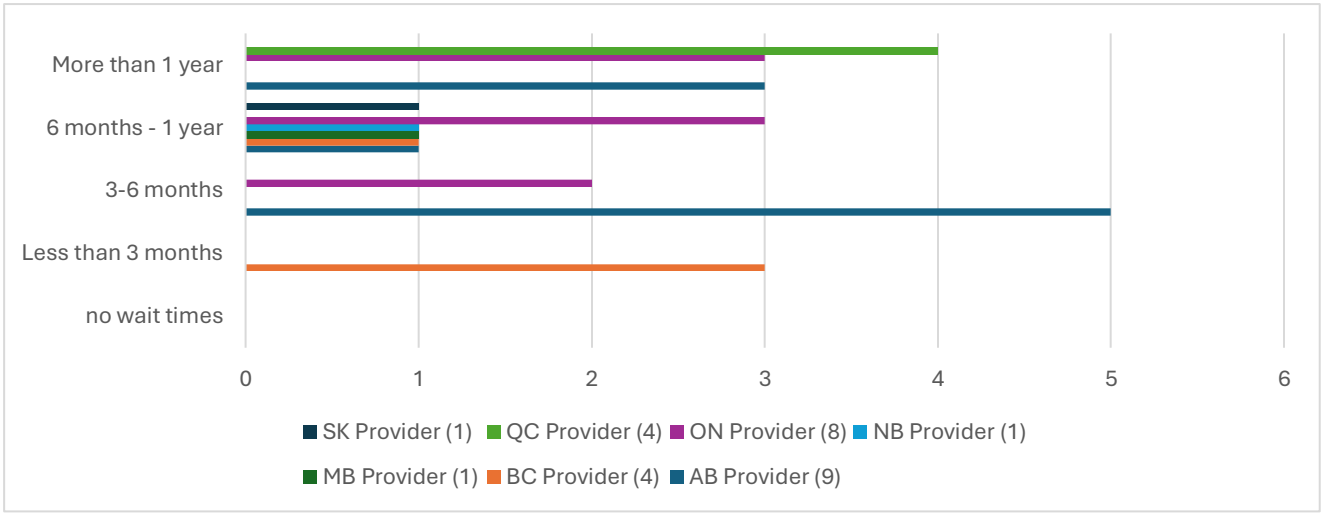
Of the 28 respondents who answered the question on wait times to see a sleep specialist or a health care professional who orders the sleep studies, 18 respondents reported wait times between 6 months to a year or more than one year (AB, BC, MB, NB, ON, QC, SK). To see a sleep specialist or a health care professional in AB, ON, and QC reported wait times are more than one year (Figure 1)

Following referral, wait times for Level I sleep study were up to 2 years (QC), for Level II sleep study up to 3-6 months (ON), and for Level III and IV sleep studies from 6 months to 1 year (QC). Due to the variation in responses regarding wait times, it is difficult to determine a specific or consistent estimate for this information. Responses from BC noted that the province is not currently collecting wait times for polysomnography services except for Level I studies (see below for benchmarks based on priority). Respondents from MB and ON also noted standard timeline to see a sleep specialist and to conduct the sleep studies. However, it remains unclear whether the standard timelines apply to specific levels of sleep studies and if these timelines are set by the respondent's sleep clinic or represent a province-wide standard for all publicly funded sleep studies. Respondents representing VAC noted that they do not have control over wait times.

Pediatric Patients

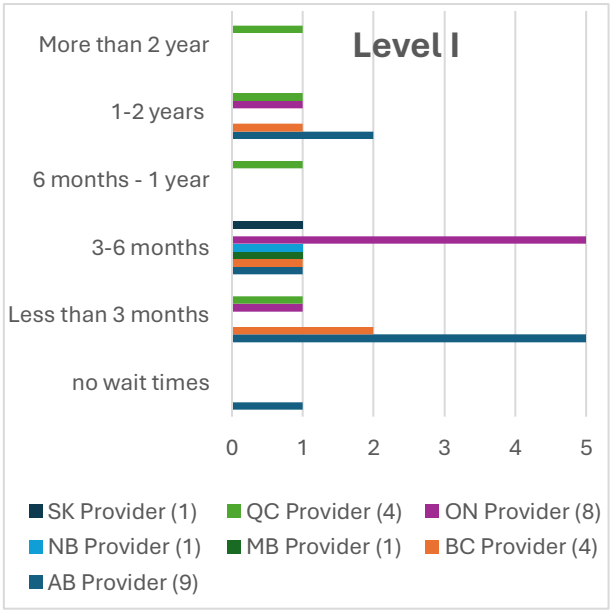
Respondents from ON and AB indicated that there is significant wait time particularly for pediatric patients. One respondent from ON representing a provider noted that inadequate funding for staffing has led to significant delays in care, with only two-night staff available for four beds, resulting in long waitlists—over two years for pediatric patients who are < 4yo, or with developmental delays, or already on therapy with PAP or trach/vent. One respondent from ON noted that the next availability for a Level I sleep study in their facility for pediatric patients in April 2026 (>18 months).

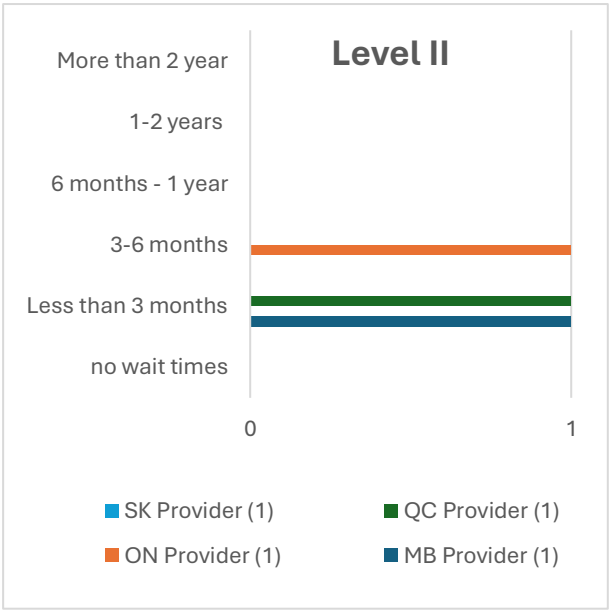
Figure 1: Wait times to see a sleep specialist or a health care professional who can order the sleep studies

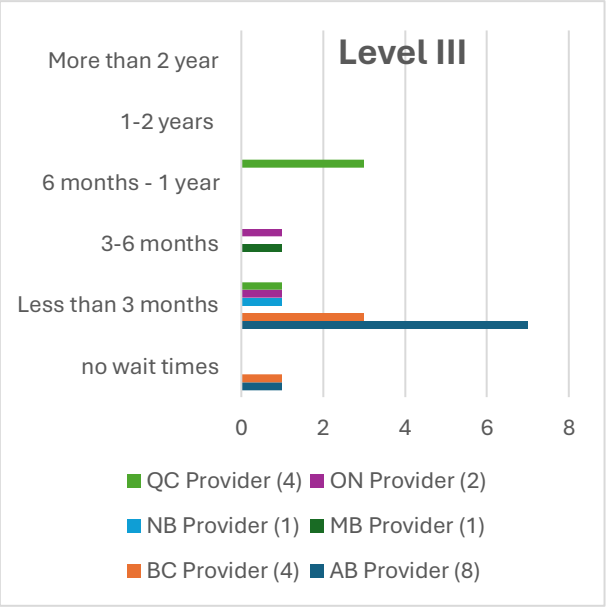


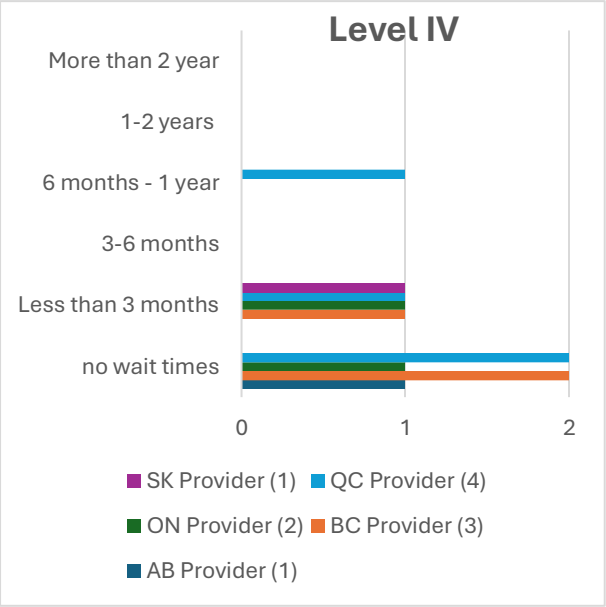
AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; ON = Ontario; QC = Quebec; SK = Saskatchewan
Note: Provider refers to individuals representing sleep clinics. The number in the parenthesis refers to the total number of responses to the questions.

Figure 2: Wait times for each level of sleep study diagnostic tests









Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; ON = Ontario; QC = Quebec; SK = Saskatchewan

Note: Provider refers to individuals representing sleep clinics. The number in the parenthesis refers to the total number of responses to the questions.

Patient Prioritization Criteria

The Canadian Thoracic Society Guidelines recommends that patients with suspected severe obstructive sleep apnea syndrome (OSAS) and those in safety-critical occupations should be treated as urgent cases and must be investigated within four weeks. Similarly, patients with specific comorbidities (e.g., unstable ischemic heart disease, cerebrovascular disease, congestive heart failure, pregnancy) should also be investigated within four weeks. All other patients should be assessed within six months.[9]

The prioritization criteria vary across jurisdictions and were reported by survey respondents from AB, BC, MB, NB, ON, QC and SK.

In **Alberta**, the prioritization criteria for addressing wait times for diagnostic sleep studies varies across different providers.

- Specialist Decision: The need for a Level I sleep study is determined by the sleep specialist based on clinical factors such as likelihood of obesity hypoventilation syndrome (OHS), major medical comorbidities, and social factors.
- HSAT: HSAT is usually done quickly for new referrals, with no specific prioritization criteria, and is used to aid triage. Triage at some centers is based on the severity of sleepiness, medical history, occupation, and HSAT results.
- Urgent vs Non-Urgent: One respondent stated that their clinic sees urgent cases within 2 months which as then tested within weeks, while non-urgent cases can wait 12 to 18 months for a specialist consultation and weeks to months for testing. Children's hospital wait times for non-urgent cases can extend over a year.
- Triage: Criteria for triage include questionnaire responses, referral questions, and HSAT findings. For severe cases, additional tests like Level III or IV sleep tests may be used.
- Urgent Prioritization: Patients with severe conditions such as hypoxia, high Epworth Sleepiness Scale (ESS) scores, or critical occupations are given priority for faster testing.

In **British Columbia**, the prioritization for diagnostic sleep studies is handled as follows:

- Triage: Sleep clinic physicians or medical director at the facilities triage all patients for sleep studies.
- Urgent Cases: Patients with urgent needs may be prioritized more quickly for sleep studies

- Provincial Criteria: Triage decisions are guided by provincial criteria, which consider factors such as patient symptoms and occupation. The wait time benchmarks for Level I sleep study are set as follows:
    - Priority 1 (urgent) patients are expected to wait 2-4 weeks and include those with suspected sleep disorders and significant daytime sleepiness (ESS ≥10) , along with additional risk factors such as co-morbid diseases (ischemic heart disease, cerebrovascular disease, congestive heart failure, obstructive/restrictive lung disease, pulmonary hypertension, hypercapnic respiratory failure) or who are in high-risk occupations (truck, taxi, bus drivers; railway engineers, airline pilots, car drivers who admit to have fallen asleep while driving within the last two years) or have or overnight home oximetry which reveals >10/hour 4% desaturations. All patients who are considered high risk are advised to cease their occupation and personal driving until after their polysomnogram has been reviewed and/or appropriate treatment has commenced) commenced)
    - Priority 2 patients, who have suspected sleep disorders and major daytime sleepiness (ESS ≥10) but no additional risk factors, have a benchmark wait time of 2 months.
    - Priority 3 patients, who may have suspected sleep disorders without major daytime sleepiness or co-morbidities or on high-risk occupation, are benchmarked to wait up to 6 months.

In **Manitoba**, the prioritization for diagnostic sleep studies is based on patient's risk level, and the standard timeline to see a sleep specialist and to conduct the sleep studies are as follows

- High-Risk patients: within 3–6 months.
- Moderate-risk patients: within 6–9 months.
- Low-Risk patients: within 1 year.

It remains unclear whether the standard timelines apply to specific levels of sleep studies and if these timelines are set by the respondent's sleep clinic or represent a province-wide standard for all publicly funded sleep studies.

In **New Brunswick**

- For Level 1 sleep studies, priority given to those with severe OSA diagnosed through Level 3 sleep study, cardiac history, comorbidity, and occupation (for example, drivers for a living, pilots, heavy equipment operators, etc.)
- For Level 3 sleep studies priority given to those referred by a cardiologist.

In **Ontario**, patient prioritization for diagnostic sleep studies is guided by both provincial guidelines and individual facility practices.

- Clinical Factors: Triage is based on clinical severity, medical history, morbid obesity, cardiovascular diseases, and the frequency and severity of night and day symptoms. Age, comorbidities, and whether the Level I will inform other medical care (e.g., surgery timing) are additional consideration.
- Facility-Specific Systems: Each facility manages its own triaging system, with hospitals prioritizing hypercapnic patients, those with multimorbidity, high STOP-BANG scores, or those needing urgent interventions (e.g., surgery, cancer care, transplant). External referrals are often triaged based on available information and wait times.
- One respondent noted that patients suspected of severe sleep apnea are triaged to be seen within 4 weeks or less. Otherwise, they are expected to be seen around or within 6 months. It remains unclear whether these timelines apply to specific levels of sleep studies and if these timelines are set by the respondent's sleep clinic or represent a province-wide standard for all publicly funded sleep studies.

In **Quebec**, patient prioritization for diagnostic sleep studies is based on various clinical and occupational factors:

1. Epworth Sleepiness Scale & Driving Risk: Patients with high Epworth Sleepiness Scale scores and those whose jobs require driving or who face safety risks while driving is prioritized.
2. Clinical Criteria: Symptoms, questionnaire responses, oximetry results, and clinic visits are used for triage, typically managed by a nurse. Patients with complex conditions and comorbidities (e.g., neuromuscular disorders, Down syndrome, infants) receive higher priority.
3. CRDS System: In some cases, prioritization is handled through the CRDS (Centre de répartition des demandes de services) system, which allocates priority based on the clinical information provided at referral.

In **Saskatchewan**, patient prioritization for diagnostic sleep studies is based on a triage system that categorizes patients as urgent or non-urgent:

- Specialist Decision: The urgency of Level I testing is determined by the specialist based on the patient's condition.
- Urgent Cases: Patients classified as urgent are prioritized and receive their tests ahead of non-urgent cases.

Limitations

The findings of this Environmental Scan are primarily based on publicly available literature and survey responses from key stakeholders in participating jurisdictions. A significant limitation encountered was the lack of readily available information on public coverage for diagnostic sleep studies, necessitating reliance on a relatively small sample of survey respondents. Incomplete survey responses were included as long as at least one question was answered, which may affect the reliability of the summarized information. Any inaccuracies or biases in the survey responses may result in the findings not accurately reflecting the current landscape of sleep study coverage.

The survey was conducted in the summer which may have influenced participation and response rates. We were unable to gather information from all Territories and Prince Edward Island which limits comprehensiveness of the findings. The reported data on wait times may be skewed due to variations in the geographic locations of the respondents' facilities, particularly between remote or rural areas and urban settings. The information presented may not represent future trends in public coverage or wait times, especially as healthcare systems adapt to ongoing changes in demand and service delivery methods.

This Environmental Scan did not conduct a comprehensive systematic review and critical appraisal of all available literature on diagnostic sleep studies. As a result, this report might be missing some relevant information that could be available elsewhere. Lastly, the report is specific to the context of diagnostic sleep studies in Canada and may not be generalizable or compared to similar initiatives in other countries.

Conclusions and Implications for Decision or Policy Making

The environmental scan reveals a complex landscape for access to and public coverage of diagnostic sleep studies across Canada. These services are provided through a mix of publicly funded sleep clinics in hospitals or in the community, as well as those that are not publicly funded and are paid for through private insurance or by patients out-of-pocket. The landscape for sleep study diagnostics is currently evolving, for example, requirements for accreditation of HSATs have been introduced in BC since 2022, and Manitoba has trialed short-term Level II study contract with private provider to address COVID-19 related waitlists.

While Level I sleep studies are covered in several provinces, access to Level II, III, and IV studies is less consistent, often limited to specific jurisdictions or subject to stringent eligibility criteria. The findings of this Environmental Scan indicate that while the importance of diagnosing sleep disorders like OSA is well recognized, barriers such as geographic disparities, financial limitations, and varying provincial policies impede equitable access to these essential diagnostic tools across Canada. Most notably, the NIHB does not fund sleep studies, and territories do not have their own Level I sleep clinics, leaving residents with limited local options and the additional burden of travel expenses to access care in neighbouring provinces.

The lack of standardized prioritization criteria across provinces results in inconsistencies in how patients are triaged based on their clinical needs. While some provinces employ rigorous systems to prioritize urgent cases—such as those with severe obstructive sleep apnea or safety-critical occupations—others rely on varying protocols that may not adequately address the complexities of individual patient needs. This disparity in prioritization can lead to inequitable access to care, where some patients receive timely evaluations while others endure excessive delays. While clinical guidelines recommend timely evaluations for high-risk patients, the implementation of these guidelines is reported to vary significantly across jurisdictions. These delays can adversely affect patient outcomes, particularly seriously for those with severe obstructive sleep apnea syndrome or related comorbidities.

Moreover, the findings underscore substantial variability in wait times for accessing diagnostic sleep studies. In provinces like Alberta, Ontario, and Quebec, many respondents report wait times exceeding one year to see health care professionals that are eligible to order sleep studies or complete the necessary tests. Again, this variability may be influenced by geographical factors, with individuals in rural areas often facing longer delays compared to their urban counterparts.

The reliance on out-of-pocket payments and private insurance significantly limits access to these tests, particularly for individuals from low-income backgrounds. Costs for diagnostic sleep studies can be prohibitively high, ranging from $1,000 to over $2,000 for

Level I studies, depending on the province and provider. Such financial barriers may exacerbate existing health inequities, particularly for vulnerable populations who cannot afford these expenses.

Lack of standardized accreditation processes for diagnostic sleep study providers may contribute to variations in care quality. Accreditation standards differ across provinces, which can impact the reliability of the tests and the consistency of care. This inconsistency emphasizes the need for harmonization of standards to ensure consistent quality of care across the country.

In summary, the findings of this Environmental Scan highlight the pressing need to explore how consistency of access and appropriate public coverage of diagnostic sleep studies across Canada. Addressing the financial barriers posed by out-of-pocket costs, benchmarking wait times, setting patient prioritization criteria, and establishing consistent accreditation standards are potential steps toward enhancing access to these health services. Policymakers may consider these issues to help facilitate timely and effective diagnosis for sleep disorders for all Canadians, regardless of their financial situation or geographical location.

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Appendix 1: Methods

Literature Search Strategy

An information specialist conducted a literature search on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search approach was customized to retrieve a limited set of results, balancing comprehensiveness with relevancy. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. Search concepts were developed based on the elements of the research questions and selection criteria. The main search concept was diagnostic sleep studies. The search was completed on July 3, 2024, and limited to English-language documents. Internet links were provided, where available. Additional targeted grey literature searching was conducted on October 2, 2024, and October 9, 2024, for information on diagnostic sleep studies in jurisdictions where no information was available from the survey.

Screening and Study Selection

One reviewer screened and selected from all sources of information retrieved in the literature searches. Literatures that provided information related to the research questions was screened for selection, and those that met the inclusion criteria (Table 5) were summarized within the report.

All publication types were eligible if they were published in English.

Table 5: Components for Literature Screening and Information Gathering Through a Survey on Federal, Provincial and Territorial Coverage of Diagnostic Sleep Studies.

Component	Description
Population	Adults and children experiencing sleep disturbances or at risk for sleep apnea
Intervention	Various levels of diagnostic sleep studies: Level I – polysomnography (PSG), in lab attended Level II - polysomnography (PSG), at home unattended Level III - home sleep apnea test (HSAT), at home unattended Level IV - sleep apnea screening with oximetry, at home unattended
Settings	Federal, provincial, or territorial public plans across Canada Sleep clinics across Canada
Types of Information	**Objective 1: Details of public plans' coverage of diagnostic sleep studies** 1. Public plan that covers the cost of any of the four levels (Level I -IV) of diagnostic sleep study 2. Levels of diagnostic sleep study provided by the facility *(For service providers only)* 3. Type of sleep clinic (e.g., sleep clinic at a hospital, publicly funded; sleep clinic (independent health facility) and publicly funded; privately owned and publicly funded; or privately owned and not publicly funded etc.) *(For service providers only)* 4. Patient eligibility criteria for coverage (e.g., test must be ordered by a specialist, low-income status, on social assistance, etc.), for each of the four level of sleep studies that is funded by the public payer 5. Specific requirements for a sleep clinic to receive reimbursement under the public plan? *(For public payers only)* 6. Name of the accrediting/licensing body that has certified the sleep clinic. *(For service providers only)* **Objective 2: Funding mechanism and cost of diagnostic sleep studies in Canadian provinces and territories**

	7. Funding Mechanisms under which the sleep studies are funded by the public drug plan (e.g. global budget, fee for service etc.) 8. Billing codes and its dollar value for including details of professional fee, technical fee or cost in other units and its dollar value, for each of the four levels of sleep studies that is funded by the public payer. 9. Number of diagnostic tests covered in given time period (e.g., once in a lifetime), for each of the four levels of sleep studies that is funded by the public payer 10. Details of the any co-payments (if any), for each of the four levels of sleep studies that is funded by the public payer **Objective 3: Other considerations such as out-of-pocket costs, wait-times, patient prioritization criteria.** 11. The cost and details of alternate funding mechanisms for each of the four levels of diagnostic sleep studies (e.g., out-of-pocket, private insurance, or reduced/no fee if patient's purchases CPAP machine etc.), if the provincial or territorial public plan does not cover the cost of the diagnostic sleep studies or if a patient is not eligible for coverage under provincial or territorial public plan. 12. Wait time to see sleep specialist / any health care professional who orders the sleep studies 13. Wait times for the different levels of diagnostic sleep studies that are covered by the public plan, once they have been ordered by sleep specialist / any health care professional who orders the sleep studies. 14. Given the wait-times, details of any patient prioritization criteria based on the severity of symptoms for sleep studies.

CPAP = continuous positive airway pressure; HSAT = home sleep apnea test; PSG = polysomnography

Data Extraction

One reviewer performed data extraction directly into tables created in Microsoft Word. The information extracted included the bibliographic details (e.g., authors, year of publication, and country or Canadian jurisdiction of origin) of included papers, websites, or other sources of information and a description of the information or findings that were relevant for addressing the research questions.

Survey

Due to limited availability of recent information found in published literature, we conducted a survey to complement the findings of our literature review. Two sets of survey were developed, one each for payers (13-question) and providers (15-question). The survey was revised following internal review and pilot testing by the representative from the jurisdiction that requested the environmental scan. The survey included open-ended and close-ended questions designed to capture the information outlined in Table 5. Survey questions are presented in Appendix 2. The survey was only prepared in English.

The English version of the survey was distributed using Survey Monkey on 25 July, 2024 to the two stakeholder groups – payers and providers. The CDA posted the survey on its social media platforms (Facebook, LinkedIn, X). Meetings were held with representatives from the Canadian Sleep Society and the Canadian Thoracic Society to encourage uptake of the survey, particularly among sleep clinics (providers). The survey was sent to members of the Canadian Thoracic Society and the Canadian Sleep Society via email. Similarly, public drug plan members of the CDA-AMC Advisory Committees (Device Advisory Committee and Formulary Working Group) also supported the uptake of the survey by circulating it among the relevant individuals in their departments. Responses were collected until 02 September 2024. All respondents provided explicit permission to use the information that they provided in this report. While none of the respondents identified any specific conflict of interest, a conflict of interest is inherent and unavoidable in the context of this survey which aims to gather information from experts who are directly involved as payer or provider for diagnostic sleep studies.

Synthesis Approach

One reviewer analyzed the data collected from each of the data sources (i.e., literature search, survey). A descriptive analysis was conducted to address the research questions which in turn informed the three objectives of this report. This report incorporated findings from both the literature review and the survey to comprehensively summarize findings for all jurisdictions where possible. Any information coming solely from the literature review or survey responses was identified as such. When there is contradictory information between the literature and survey responses, both sources are presented. Both full and partial survey responses were considered in the analysis. In our synthesis approach, we present the information without specifying the frequency of each response from the survey, instead presenting the data as a range or summarizing the full scope of information provided. Of note, our survey was designed to categorize payers and providers. While two respondents categorized themselves as 'providers', one is involved in the oversight and regulation of sleep clinics (BC), and another works with surrounding sleep labs to obtain studies (AB). The report does not present their response separately and has been presented as one provider's response.

Based on the descriptive analysis, the reviewer produced a narrative summary that reflected the included data and was organized by objective. Objective 1 (i.e., details of public plans' coverage) was addressed by summarizing information answering research questions 1 to 6. Objective 2 (i.e., funding mechanism and cost) was addressed by summarizing information answering research question 7 to 10. Objective 3 (i.e., other considerations such as out-of-pocket costs, wait-times, patient prioritization criteria) was addressed by answering research questions 11 to 14.

Appendix 2: Survey Questions

Canada's Drug Agency (CDA) is conducting an environmental scan (ES) on *Provincial and Territorial coverage of Diagnostic Sleep Studies* across Canada. The ES aims to gather information on:

1. Details of public plans' coverage of diagnostic sleep studies, including name of public plan covering the tests, eligibility criteria, and reimbursement models (e.g. co-payments)
2. Cost of diagnostic sleep studies in Canadian provinces and territories
3. Other consideration such as wait-times, out-of-pocket costs, prioritization based on the severity of symptoms.

The ES intends to gather information on all levels of diagnostic sleep studies

Level I – polysomnography (PSG), in lab attended
Level II - polysomnography (PSG), at home unattended
Level III - home sleep apnea test (HSAT)
Level IV - sleep apnea screening with oximetry

The following survey is designed to gather information on if and how diagnostic sleep studies (Level I, II, III and IV) are reimbursed by federal, provincial or territorial public plans across Canada. The survey will take approximately 15-20 minutes to complete.

Definitions:

Public Payer refers to federal, provincial, or territorial government bodies that reimburse the full or partial cost of the sleep studies.

Provider, for the ES, refers to sleep clinics or sleep labs that perform sleep studies. These studies may be conducted at the clinic's facility or at patient's home with the necessary machine/devices provided by the sleep clinic. The sleep clinic may be privately operated independent healthcare facilities or publicly funded facilities which operate within a hospital, health authority or a health region.

PUBLIC PAYERS

1. Name of province/ territory

☐ British Columbia
☐ Alberta
☐ Saskatchewan
☐ Manitoba
☐ Ontario
☐ Quebec
☐ Nova Scotia
☐ New Brunswick
☐ Prince Edward Island
☐ Newfoundland and Labrador
☐ Nunavut
☐ Northwest Territories
☐ Yukon
☐ Federal Public Plan

Name of your public plan (provides coverage for sleep studies): [Free TEXT]

Public drug plan coverage of sleep diagnostic studies

2. Does your public plan in your province or territory cover the cost of any of the following levels of diagnostic sleep study:
   ☐ Level I – Polysomnography (PSG), in lab attended
   ☐ Level II - Polysomnography (PSG), at home unattended
   ☐ Level III - home sleep apnea test (HSAT)
   ☐ Level IV - Sleep Apnea Screening with Oximetry

3. What are the specific requirements for a sleep clinic to receive reimbursement under your public plan (Select all that apply).
   ☐ Sleep clinic at a hospital
   ☐ Private clinics accredited by a licensing body
   ☐ Private clinics approved by the public plan
   ☐ Others [Please specify - Free TEXT – you may also use this space to provide relevant details about the requirements for the sleep clinic to be eligible for reimbursement e.g. name of accreditation body, name of specific sleep clinics that have partnership agreements with the public plan etc.]

Cost and related details of the diagnostic sleep studies

4. How are the sleep tests funded?

Level I – Polysomnography (PSG), in lab attended: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
Level II - Polysomnography (PSG), at home unattended: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
Level III - home sleep apnea test (HSAT): ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
Level IV - Sleep Apnea Screening with Oximetry: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]

5. Please provide billing codes and its dollar value including details of professional fee, technical fee or cost in other units and its dollar value (e.g., medical service units (MSUs)

Level I – Polysomnography (PSG), in lab attended [Billing Code- Free TEXT]

Professional Fee [$- Free TEXT], Technical Fee [[$, Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

Level II - Polysomnography (PSG), at home unattended [Billing Code- Free TEXT]
Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

Level III - home sleep apnea test (HSAT) [Billing Code- Free TEXT]
Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

Level IV - Sleep Apnea Screening with Oximetry [Billing Code- Free TEXT]
Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

6. Please provide the following details of the public plans' funding mechanism for **Level I sleep study (Polysomnography (PSG), in lab attended),** including
    a. Patient eligibility criteria for coverage (e.g., test must be ordered by a specialist, low-income status, on social assistance, etc.) [Free TEXT]
    b. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    c. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

7. Please provide the following details of the public plans' funding mechanism for **Level II (Polysomnography (PSG), at home unattended)**, in lab attended), including
    d. Patient eligibility criteria for coverage [Free TEXT]
    e. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    f. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

8. Please provide the following details of the public plans' funding mechanism for **Level III - home sleep apnea test (HSAT)**, including
    g. Patient eligibility criteria for coverage [Free TEXT]
    h. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    i. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

9. Please use the space below to provide any relevant details regarding the cost and billing, funding mechanism, and other additional details of publicly funded sleep studies. [Free TEXT]

Wait times and prioritization criteria

10. How long do clients typically have to wait to see sleep specialist / any health care professional who orders the sleep studies?

☐ no wait time ☐ less than 3 months ☐ 3 - 6 months ☐ 6 months to 1 year ☐ more than 1 year

11. How long do clients typically have to wait for the different levels of diagnostic sleep studies that are covered by your drug plan, once they have been ordered by sleep specialist / any health care professional who orders the sleep studies

Level I – Polysomnography (PSG), in lab attended
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level II - Polysomnography (PSG), at home unattended

☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level III - home sleep apnea test (HSAT)
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level IV - Sleep Apnea Screening with Oximetry
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

12. Given the wait-time, are clients prioritized based on the severity of symptoms for sleep studies? If yes, please provide details of the prioritization criteria.
Patient' are prioritized for sleep studies based on severity of symptoms: ☐ Yes ☐No
Details of the prioritization criteria, please also specify the level of sleep study (Level I-IV) for the prioritization criteria [Free TEXT]

13. Please provide any other considerations you would like to share about diagnostics sleep studies to help us better understand the current and future Canadian landscape of these services, for example, out of pocket cost for patients (e.g., transportation, childcare), set up required at home (Level II-IV), barriers and inequity in accessing the tests etc., policy or guidelines related to sleep clinics operating in Canada (e.g., requirement for accreditation, wait time benchmarks etc.). You many also use this space to share links to any relevant publication. [Free TEXT]

Thank you for your input. Do you agree to being contacted by CDA by email should there be a need for follow-up questions or clarification? Agreement is completely optional. ☐ Yes ☐ No

SLEEP CLINICS – PROVIDERS

Details of Sleep Clinic

1. Name of Province/Territory:
☐ British Columbia
☐ Alberta
☐ Saskatchewan
☐ Manitoba
☐ Ontario
☐ Quebec
☐ Nova Scotia
☐ New Brunswick
☐ Prince Edward Island
☐ Newfoundland and Labrador
☐ Nunavut
☐ Northwest Territories
☐ Yukon

Name of your sleep clinic (and name of hospital/ health authority or region, if applicable): [Free TEXT]

2. What levels of sleep testing does your facility provide? *[Select all that apply]*
☐ Level I – polysomnography (PSG), in lab attended
☐ Level II - polysomnography (PSG), at home unattended
☐ Level III - home sleep apnea test (HSAT)
☐ Level IV - sleep apnea screening with oximetry

3. Which of the following describes your sleep study testing facility
   - ☐ Sleep clinic at a hospital, publicly funded
   - ☐ Sleep clinic (independent health facility) and publicly funded
   - ☐ Privately owned and publicly funded
   - ☐ Privately owned and not publicly funded
   - ☐ Other, *please specify* [Free TEXT]

4. Is your sleep clinic accredited? If yes, please provide name of the accrediting/licensing body.
   Accreditation: ☐ Yes ☐No
   Name of accreditation standard or licensing body: [Free TEXT]

Public drug plan coverage of sleep diagnostic studies

5. Does any public plan in your province or territory cover the cost of any of the following levels of diagnostic sleep study:
   - ☐ Level I – Polysomnography (PSG), in lab attended
   - ☐ Level II - Polysomnography (PSG), at home unattended
   - ☐ Level III - home sleep apnea test (HSAT)
   - ☐ Level IV - Sleep Apna Screening with Oximetry

6. Please provide the name(s) of the public plan in your province or territory that covers any of the following level of diagnostic sleep study (if applicable) (e.g. Hospital global budget or fee for service, Veterans Affairs Canada, Ontario Aids to Daily Living, Saskatchewan Aids to Independent Living, Régie de l'Assurance Maladie du Québec, WSIB, etc.).
   Level I – Polysomnography (PSG), in lab attended: [Free TEXT]
   Level II - Polysomnography (PSG), at home unattended: [Free TEXT]
   Level III - home sleep apnea test (HSAT): [Free TEXT]
   Level IV - Sleep Apnea Screening with Oximetry: [Free TEXT]

Cost and related details of the diagnostic sleep studies (For publicly funded sleep studies)

14. For publicly funded sleep studies, how are the sleep tests funded?

    Level I – Polysomnography (PSG), in lab attended: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
    Level II - Polysomnography (PSG), at home unattended: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
    Level III - home sleep apnea test (HSAT): ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]
    Level IV - Sleep Apnea Screening with Oximetry: ☐ Global budget ☐ Fee for service ☐ others [Please specify - Free TEXT]

15. Please provide billing codes and its dollar value including details of professional fee, technical fee or cost in other units and its dollar value (e.g., medical service units (MSUs)

    Level I – Polysomnography (PSG), in lab attended [Billing Code- Free TEXT]
    Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

    Level II - Polysomnography (PSG), at home unattended [Billing Code- Free TEXT]
    Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

    Level III - home sleep apnea test (HSAT) [Billing Code- Free TEXT]

Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

Level IV - Sleep Apnea Screening with Oximetry
Professional Fee [$ Free TEXT], Technical Fee [$Free TEXT], or other units and its dollar value [Name of units – Free Text; $ Free TEXT]

7. Please provide the following details of the public plans' funding mechanism for **Level I sleep study (Polysomnography (PSG), in lab attended),** including
    j. Patient eligibility criteria for coverage [Free TEXT]
    k. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    l. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

8. Please provide the following details of the public plans' funding mechanism for **Level II (Polysomnography (PSG), at home unattended)**, in lab attended), including
    m. Patient eligibility criteria for coverage [Free TEXT]
    n. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    o. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

9. Please provide the following details of the public plans' funding mechanism for **Level III - home sleep apnea test (HSAT)**, including
    p. Patient eligibility criteria for coverage [Free TEXT]
    q. Number of diagnostic tests covered for each individual in given time period (e.g., once in a lifetime): [Free TEXT]
    r. Details of the any co-payments (i.e., if the full cost of the sleep study covered or is there a cost that must be paid by the client) [Free TEXT]

10. Please use the space below to provide any relevant details regarding the cost and billing, funding mechanism, and other additional details of publicly funded sleep studies. [Free TEXT]

Privately funded sleep diagnostic studies

11. If your provincial or territorial public plan does not cover the cost of the diagnostic sleep studies or if a patient is not eligible for coverage under provincial or territorial public plan, please provide the cost and details of alternate funding mechanisms for each of the four level of diagnostic sleep studies (e.g., out-of-pocket, private insurance, or reduced/no fee if patient's purchases CPAP machine etc.)
    Level I – Polysomnography (PSG), in lab attended: [$ (cost of test) and details of alternative funding mechanism]
    Level II - Polysomnography (PSG), at home unattended: [$ (cost of test) and details of alternative funding mechanism]
    Level III - home sleep apnea test (HSAT): [$ (cost of test) and details of alternative funding mechanism]
    Level IV - Sleep Apnea Screening with Oximetry: [$ (cost of test) and details of alternative funding mechanism]

Wait times and prioritization criteria

Average wait times (publicly covered)

12. **How long do clients typically have to wait to see sleep specialist / any health care professional who orders the sleep studies?**
    ☐ no wait time ☐ less than 3 months ☐ 3 - 6 months ☐ 6 months to 1 year ☐ more than 1 year

13. **How long do clients typically have to wait for the different levels of diagnostic sleep studies that are covered by your drug plan, once they have been ordered by sleep specialist / any health care professional who orders the sleep studies**

    Level I – Polysomnography (PSG), in lab attended
    ☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level II - Polysomnography (PSG), at home unattended
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level III - home sleep apnea test (HSAT)
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

Level IV - Sleep Apnea Screening with Oximetry
☐ no wait time, ☐ less than 3 months, ☐ 3 - 6 months, ☐ 6 months to 1 year, ☐ 1 - 1.5 years, ☐ 1.5 - 2 years, ☐ more than 2 years

14. Given the wait-time, are clients prioritized based on the severity of symptoms for sleep studies? If yes, please provide details of the prioritization criteria.
Patient' are prioritized for sleep studies based on severity of symptoms: ☐ Yes ☐No
Details of the prioritization criteria, please also specify the level of sleep study (Level I-IV) for the prioritization criteria [Free TEXT]

15. Please provide any other considerations you would like to share about diagnostics sleep studies to help us better understand the current and future Canadian landscape of these services, for example, out of pocket cost for patients (e.g., transportation, childcare), set up required at home (level II-IV), barriers and inequity in accessing the tests etc., policy or guidelines related to sleep clinics operating in Canada (e.g., requirement for accreditation, wait time benchmarks etc.). You many also use this space to share links to any relevant publication. [Free TEXT]

Thank you for your input. Do you agree to being contacted by CDA by email should there be a need for follow-up questions or clarification? Agreement is completely optional. ☐ Yes ☐ No

Appendix 3: Information on Survey Respondents

Jurisdiction	Number of Respondents	Details of Survey Respondents	
		Type of Respondent	Name of Organization
Alberta	Payer: 0 Provider: 10	PROVIDER	University of Calgary, Alberta Health Services
		PROVIDER	Alberta Health Services[a]
		PROVIDER	University of Alberta
		PROVIDER	University of Calgary
		PROVIDER	University of Calgary
		PROVIDER	Alberta Health Services
		PROVIDER	University of Alberta/Stollery Children's Hospital Sleep Laboratory
		PROVIDER	University of Calgary
		PROVIDER	Alberta Health Services
		PROVIDER	University of Calgary
British Columbia	Payer: 1 Provider: 4	PROVIDER	Interior health
		PROVIDER	University of British Columbia (UBC)
		PROVIDER	University of British Columbia (UBC) and Vancouver Coastal Health
		PROVIDER	SkeenaGraphics LLC
		PAYER	Ministry of Health, British Columbia
Manitoba	Payer: 0 Provider: 1	PROVIDER	University of Manitoba
New Brunswick	Payer: 0 Provider: 1	PROVIDER	Atlantic Sleep Centre, Saint John Regional Hospital, Horizon Health Network
Newfoundland and Labrador	Payer: 0 Provider: 1	PROVIDER	Western Health
Non-Insured Health Benefit	Payer: 2 Provider: NA	PAYER	Non-Insured Health Benefit
		PAYER	Non-Insured Health Benefit[a]
Nova Scotia	Payer: 1 Provider: 0	PAYER	Nova Scotia (NS) Department of Health and Wellness (DHW)
Northwest Territories	Payer: 0 Provider: 0	NA	NA
Nunavut	Payer: 0 Provider: 0	NA	NA
Ontario	Payer: 2 Provider: 13	PROVIDER	Montfort Hospital[a]
		PROVIDER	McMaster University[a]
		PROVIDER	Sunnybrook Health Sciences Centre & University of Toronto
		PROVIDER	Unity Health Toronto
		PROVIDER	Children's Hospital of Eastern Ontario
		PROVIDER	Oshawa Durham Sleep Labratory[a]
		PROVIDER	McMaster Children's Hospital
		PROVIDER	The Ottawa Hospital
		PROVIDER	The Hospital for Sick Children
		PROVIDER	Private Sleep clinic[a]
		PROVIDER	University Health Network, and Women's College Hospital [a]
		PROVIDER	University of Toronto
		PROVIDER	University of Toronto
		PAYER	N/A[a]
		PAYER	Ontario Health Insurance Plan (OHIP)
Prince Edward Island	Payer: 0 Provider: 0	NA	NA

Québec	Payer: 0 Provider: 6	PROVIDER	CIUSSS Saguenay-Lac-St-Jean
		PROVIDER	Institut universitaire de cardiologie et de pneumologie de Québec (IUCPQ)[a]
		PROVIDER	McGill University Health Centre, McGill University
		PROVIDER	Clinic ASC and PSG Lab QC Inc
		PROVIDER	Centre intégré de santé et de services sociaux (CISSS) de la Montérégie-Est
		PROVIDER	Somnocor[a]
Saskatchewan	Payer: 1 Provider: 2	PROVIDER	Prairie Oxygen[a]
		PAYER	Ministry of Health
		PROVIDER	University of Saskatchewan
Veterans Affairs Canada	Payer: 1 Provider: NA	PAYER	Veterans Affairs Canada
Yukon	Payer: 0 Provider: 0	NA	NA

[a] Respondents who answered at least one question in the survey in addition to identifying themselves as payer or provider but did not 'submit' the survey.