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# **NON-INSURED HEALTH BENEFITS PROGRAM**

## **CLUSTER EVALUATION**

### **Final Report**

Approved by

Executive Committee

Finance, Evaluation and Accountability (EC-FEA)

Health Canada

November 23, 2010

Canada 



# **TABLE OF CONTENTS**

- **Management Action Plan for Non-Insured Health Benefits Program - Cluster Evaluation**
- **Non-Insured Health Benefits Program - Cluster Evaluation - Final Report**



## NON-INSURED HEALTH BENEFITS PROGRAM - Cluster EVALUATION MANAGEMENT ACTION PLAN

Recommendations	Actions	Responsible Manager	Planned Completion Date
<p>Recommendation #1: That the Non-Insured Health Benefits (NIHB) Program should re-define the issue of Program sustainability to focus on two critical issues relating to the management of the Program:</p> <ul style="list-style-type: none"> <li>▪ NIHB's ability to forecast its own expenditures and live within its Parliamentary allocations; and</li> <li>▪ NIHB's success in managing its benefit and administration expenditure growth relative to other similar payers of benefits.</li> </ul>	<ul style="list-style-type: none"> <li>• NIHB will: <ul style="list-style-type: none"> <li>▪ Update the Program's simulation model generated by Health Canada's Applied Research and Analysis Directorate (ARAD);</li> <li>▪ Finalize negotiation of a data sharing agreement with the Canadian Institute of Health Information (CIHI) to facilitate benchmarking within the rules of NIHB's data sharing guidelines;</li> <li>▪ Conduct an external study to synthesize and develop a benchmark of the Program's expenditure growth relative to other similar payers of benefits; and</li> <li>▪ Undertake an external review of the Program's forecasting models in order to validate current processes and / or make improvements as required.</li> </ul> </li> </ul>	<p>Director, Program Policy and Planning Division (PPPD) and Director, Program Analysis Division (PAD), Non-Insured Health Benefits Directorate (NIHB), First Nations and Inuit Health Branch, FNIHB</p>	<p>March 2011</p> <p>March 2011</p> <p>April 2012</p> <p>April 2013</p>
<p>Recommendation #2: Improve administrative data in non-HICPS benefit areas (medical transportation, vision care and mental health) in order to support Program management and policy decisions regarding the most effective use of resources.</p>	<ul style="list-style-type: none"> <li>• Consistent with the authority granted by Treasury Board, NIHB will develop a business case to evaluate the cost effectiveness of potentially centralizing or outsourcing claims processing under the vision care benefit as part of the current claims processing contract.</li> <li>• In the medical transportation benefit area, NIHB will: <ul style="list-style-type: none"> <li>▪ Link the Medical Transportation Reporting System (MTRS) with the Department's financial system (SAP) for processing of payments;</li> <li>▪ Assess progress achieved in the collection of Medical Transportation for Operationally Managed MT Benefits and benefits delivered under contribution agreements against the multi-year strategy targets and identify key quality and integrity issues; and</li> <li>▪ Update the medical transportation multi-year data collection targets by region and implement measures to increase data collection coverage while improving quality and integrity.</li> </ul> </li> </ul>	<p>Director, Operational Services and Systems Division (OSSD), NIHB, FNIHB and Director, PAD, NIHB, FNIHB</p>	<p>April 2012</p> <p>March 2011</p> <p>March 2011</p> <p>April 2011</p>

Recommendations	Actions	Responsible Manager	Planned Completion Date
<p>Recommendation #3: Review benefit administrative processes surrounding prior authorization and predetermination to assess the potential for greater efficiencies through streamlining or additional automation and to ensure alignment with costs of other payers.</p>	<ul style="list-style-type: none"> <li>NIHB will: <ul style="list-style-type: none"> <li>Explore ways to streamline Program policy and undertake a two-phase predetermination requirements review in the dental benefit area to improve accessibility of the benefit for clients while reducing the administrative demands on both Program staff and benefit providers <ul style="list-style-type: none"> <li>Phase 1 – endodontic treatments</li> <li>Phase 2 – other dental procedures, such as dentures</li> </ul> </li> <li>Assess opportunities to implement the use of automated limited use codes and automated prior authorization in the pharmacy benefit area to reduce prior approval requests / call volumes in the NIHB Drug Exception Centre (DEC); and</li> <li>Work with provincial / territorial counterparts to identify further opportunities for alignment, integration and streamlining processes where possible.</li> </ul> </li> </ul>	<p>Director, Benefit Management Division (BMD), NIHB, FNIHB, Director, OSSD, NIHB, FNIHB and Director, Benefit Review Services Division (BRSD), NIHB, FNIHB</p>	<p>March 2011 March 2012  March 2011  Ongoing</p>
<p>Recommendation #4: Explore the potential for additional linkages/synergies with other FNIHB programs, for example, how the Children's Oral Health Initiative (COHI) supports uptake of NIHB dental benefits.</p>	<ul style="list-style-type: none"> <li>NIHB agrees and will support the Primary Health Care and Public Health Directorate (PHCPHD) to improve the quality of COHI data: <ul style="list-style-type: none"> <li>Develop a joint work plan with PHCPHD; and</li> <li>NIHB to provide a list of data elements to integrate into the teleform.</li> </ul> </li> </ul>	<p>Director, BMD, NIHB, FNIHB</p>	<p>December 2010 March 2011</p>
<p>Recommendation #5: Expand audit activities into benefit areas not covered by current audits.</p>	<ul style="list-style-type: none"> <li>NIHB will conduct audits of operational medical transportation, vision care and crisis mental health services in regions using the approved and piloted audit guides for these areas.</li> <li>Specifically, NIHB will develop a medical transportation audit action plan in British Columbia and Saskatchewan and undertake audits of the vision care benefit in Quebec and the mental health benefit in Manitoba.</li> </ul>	<p>Director, PAD, NIHB, FNIHB</p>	<p>March 2011 and ongoing</p>



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# **Non-Insured Health Benefits Program**

## **Cluster Evaluation**

### **Final Report**

August 2010

Canada 





# Table of Contents

Executive Summary .....	iii
1. Introduction.....	1
1.1 Background and Context.....	1
1.2 Program Description .....	2
1.3 Program Mandate and Principles .....	2
1.4 NIHB Benefit Areas.....	3
1.5 Eligible Population.....	5
1.6 Expenditure Overview .....	6
1.7 Administration .....	7
1.8 Program Delivery.....	9
1.9 Similar Programs .....	10
2.0 Evaluation Context.....	11
2.1 Evaluation Objectives and Scope.....	12
2.2 Evaluation Issues .....	12
2.3 Evaluation Design.....	13
3.0 Methodology .....	14
3.1 Program Logic Model .....	16
3.2 Evaluation Questions .....	18
3.3 Data Sources .....	19
3.4 Limitations and Challenges.....	19
4.0 Findings.....	20
4.1 Relevance.....	20
4.2 Performance Measures.....	29
4.3 Efficiency and Economy .....	38
5.0 Overall Conclusions.....	46
6.0 Recommendations.....	48
Annex A The Pharmacy Benefit and the Management of Diabetes.....	49
Annex B FN/I Access to Dental Care .....	55
Annex C Profile of Client Safety Initiatives .....	60
Annex D Bibliography .....	62



# EXECUTIVE SUMMARY

The Non-Insured Health Benefits (NIHB) Program of the First Nations and Inuit Health Branch (FNIHB) provides a limited range of medically necessary goods and services not provided through private insurance plans, provincial/territorial health or social programs, or other publicly funded programs to registered First Nations and recognized Inuit (FN/I), regardless of income or place of residence in Canada. NIHB benefits include: prescription and certain over-the-counter drugs, medical supplies and equipment, transportation to access medically necessary services, dental care, vision care and short-term crisis intervention mental health counselling. Health Canada and its predecessor department (National Health and Welfare) has administered the NIHB Program since 1945. The program logic is based on health policy objectives that aim to reduce the disparity in health status between FN/I and the general Canadian population.

The eligible FN/I population has grown steadily at an average rate of 2.0% over the past decade from 656,377 in 1998 to 815,800 in 2009. The annual growth rate of the eligible NIHB population has been consistently higher than that of the general Canadian population. This growth, combined with other factors such as increases in costs of health products and services, has led to average annual expenditure increases of 6.1% for the NIHB Program, ranging from 9.6% in 2002/03 to 4.7% in 2008/09. NIHB expenditures were \$940.2M in 2008/09.

## The Evaluation

The evaluation is the first program level evaluation of NIHB. It is national and comprehensive in scope, and meets the Government of Canada requirements under the 2009 Policy on Evaluation, including the new Core Issues. It also meets the requirements of the departmental five-year evaluation plan.

The evaluation examined the following core issues:

Relevance:

- **Issue 1 - Continued need for program, policy or initiative:** Assessment of the extent to which the NIHB Program cluster continues to address a demonstrable need and is responsive to the needs of First Nations and Inuit.
- **Issue 2 - Alignment with government priorities:** Assessment of the linkages between program objectives and (i) Federal Government priorities and (ii) departmental strategic outcomes.
- **Issue 3 - Consistency with federal roles and responsibilities:** Assessment of the role and responsibility for the federal government in delivering the program.

Performance:

- **Issue 4 - Achievement of expected outcomes:** Assessment of progress towards immediate, intermediate and ultimate outcomes with reference to performance targets and program reach, program design, including the linkage and contribution of outputs to outcomes.

- Immediate Outcomes included:
    - Access by eligible clients to NIHB
    - Efficient and cost-effective centralized and regional processing of NIHB
    - Compliance with program requirements
    - Informed policy and program development
  - Intermediate Outcomes included:
    - Efficient and cost-effective management of access to NIHB
    - Sustainable First Nations and Inuit NIHB
  - Final Outcome included:
    - Access to NIHB contributes to improved health status of First Nations and Inuit Clients
- **Issue 5 - Demonstration of efficiency and economy:** Assessment of resource utilization in relation to the production of outputs and progress towards expected outcomes.

## Methodology

Multiple lines of evidence were gathered from different data sources and through different methods in a series of research reports, including a detailed study of NIHB benefits coverage compared to that of other plans, and a benchmarking analysis of NIHB administrative costs compared to other payers. Two case studies were conducted to profile specific benefit areas and issues. An external study situated NIHB's client safety activities relative to those of other payers. A total of 57 key informant interviews were conducted to support analysis of core issues. Detailed document and file reviews were also conducted. Administrative databases provided details on eligible populations and benefits paid, including trends and comparisons for benchmarking and identifying diabetes treatment outcomes in one of the case studies.

## Conclusions and Findings

The evidence shows an on-going need for and relevance of NIHB benefits. The health status of FN/I continues to be lower than the general Canadian population, including a greater disease burden and lower life expectancy. Since each NIHB benefit is based on a medical need, the approach of NIHB to improve the health status of FN/I is relevant and responsive to the needs of FN/I. The benchmarking of benefits across Provinces and Territories provided evidence that the additional benefits provided to NIHB clients meet needs that are unique to FN/I, including, for example, transportation to access medical services for clients living in isolated or remote areas. The benchmarking also showed that the NIHB Program responds to the challenges of the client base in accessing health care that other plan populations do not face.

The evaluation also concluded that NIHB is aligned with Federal government priorities and departmental strategic objectives, and is consistent with Federal government roles and mandates. The evaluation found that there is no duplication or overlap between NIHB and other medical benefit plans with respect to intended coverage of recipients. This includes additional efforts by the Program to enforce NIHB as a payer of last resort whenever possible, and to ensure that claims eligible under Provincial and Territorial plans are not made through NIHB.

With respect to access by eligible clients, NIHB conducts activities to promote awareness and facilitate access to NIHB benefits. The uptake of the Program among the eligible population is a good indicator of awareness of and accessibility to NIHB benefits; the percentage of the eligible population that has accessed to at least one of the NIHB benefits has remained at approximately 72% annually over the past 10 years. The Access to the medical transportation benefit by FN/I living in remote and isolated areas is a positive indicator of accessibility, since these groups are in greater need of transportation for medical services. In 2007/08, 42% of total operating expenditures on medical transportation were made to provide access to health services for the 15% of clients registered as living in remote and isolated communities where there would otherwise be little to no health care services. The evaluation also found that mental health crisis counselling utilization rates and expenditures have decreased steadily since 2005/06. A significant factor contributing to this decrease has been the increased utilization of crisis mental health counselling services through the Indian Residential Schools Resolution Health Support Program which is delivered in communities and administered by another directorate within FNIHB.

The evaluation found overall high levels of client and health care provider compliance with NIHB Program requirements. NIHB conducts on-going compliance audits, and pursues audit recoveries for claims that do not meet billing requirements. For those activities funded under contribution agreements, FNIHB and NIHB require FN/I organizations to engage independent external auditors. Audit recoveries amount to less than 0.4% of NIHB benefits in each expenditure area however, there is an unquantifiable deterrent effect on inappropriate billings. Mechanisms such as the Drug Use Evaluation Advisory Committee (DUEAC) have been put in place to identify potential issues of compliance with appropriate drug use and safety issues and to make recommendations for Program policy changes or provide communications.

The evaluation found that it is not possible to evaluate NIHB from a “sustainability” perspective. In the context of the NIHB Program, sustainability is most often thought of as whether or not the Program is able to live within its reference levels and contain its growth compared to other benefit plans. As the evidence in this evaluation shows, the fact that NIHB has sought and obtained annual supplemental funding over and above its reference levels (which grow at ~2.2%) in order to fund Program growth (which increases at ~6%) demonstrates that NIHB is not sustainable within the current envelope growth. The evaluation also concluded that this focus on supplemental funding as sustainability is also not a useable measure of Program management.

As with most health interventions, it was not possible to assess whether the Program has directly improved the health status of FN/I. However, given that each benefit claim is based on a medical need, it is reasonable to attribute to NIHB some contribution to the improved health status of FN/I. For example, the case analysis of diabetes treatment over time illustrates that these treatments improved the quality of life of FN/I with diabetes by preventing complications such as blindness, stroke and limb amputations.

The evaluation had strong lines of evidence to assess the efficiency and economy of the Program. The recent benchmarking of administrative costs in the NIHB Program found that NIHB is most comparable to privately funded plans. It showed that the Program has higher administrative costs

than privately funded plans. This higher cost can be explained by NIHB's application of adjudication rules to assess each claim for medical necessity, which other plans do not include. NIHB expends 5.0% of paid claims on adjudication, compared to 3.8% among private benefit plans. On the other hand, in terms of overall policy management, administration costs under the NIHB Program are lower by 0.3% of expenditures/paid claims than under privately funded plans.

## **Recommendations**

The evaluation recommended that the NIHB Program should:

1. Re-define the issue of Program sustainability to focus on two critical issues relating to the management of the Program:
  - NIHB's ability to forecast its own expenditures and live within its Parliamentary allocations; and
  - NIHB's success in managing its benefit and administration expenditure growth relative to other similar payers of benefits.
2. Improve administrative data in non-Health Information and Claims Processing Services (HICPS) benefit areas (medical transportation, vision care and mental health) in order to support Program management and policy decisions regarding the most effective use of resources.
3. Review benefit administrative processes surrounding prior authorization and predetermination to assess the potential for greater efficiencies through streamlining or additional automation and to ensure alignment with costs of other similar payers.
4. Explore the potential for additional linkages / synergies with other FNIHB programs, for example, how the Children's Oral Health Initiative (COHI) supports uptake of NIHB dental benefits.
5. Expand audit activities into benefit areas not covered by current audits.

# **1. INTRODUCTION**

The Non-Insured Health Benefits (NIHB) Program provides a limited range of medically-necessary health-related goods and services not provided through private insurance plans, provincial/territorial health or social programs or other publicly funded programs to registered First Nations and recognized Inuit (FN/I), regardless of income or place of residence in Canada.

The benefits funded under the NIHB Program include prescription drugs, certain over-the-counter medications, medical supplies and equipment, transportation to access medically necessary services, dental care, vision care and short-term crisis intervention mental health counselling.

## **1.1 Background and Context**

Health Canada has administered the NIHB Program for several decades. The Program evolved out of what were initially informal and ad hoc arrangements through which the Government of Canada provided health services to First Nations and Inuit. In 1904, the Department of Indian Affairs appointed a general medical superintendent to start medical programs and develop health facilities for First Nations and Inuit. Beginning in the 1920s, the Department of Indian Affairs developed more formal programming arrangements, and provided health services until the responsibility was transferred to the newly created Department of National Health and Welfare in 1945. The Medical Services Branch was formed in 1962 by merging Indian Health and Northern Health Services with other independent federal field services. In 2000, Health Canada's Medical Services Branch was renamed the First Nations and Inuit Health Branch (FNIHB) within which the NIHB Program is currently located.

The rationale of the NIHB Program cluster and its legacy programs have been based consistently in a health policy context with the objective of equality of health status between FN/I and other Canadians. Moreover, the key program criteria of medical necessity represents a standard that ensures each claim is an intervention that contributes to improved health of the recipient, and in so doing, ultimately contributes to the health status of the FN/I population. The Program's design, policy-base and accountabilities centre around improving client health by providing access to evidence-based and cost-effective health benefits.

## 1.2 Program Description

Provinces and Territories are responsible for delivering health care services, as guided by the provisions of the Canada Health Act. Health care services include insured hospital care and primary health care, such as physicians and other health professional services. As with other residents of Provinces and Territories, FN/I access these insured services through Provincial and Territorial governments. However, there are a number of health-related goods and services that are not covered by Provinces and Territories or private insurance plans.

Access to medically necessary benefits and services through NIHB is an approach based in health policy, with the aim to improving the health outcomes of FN/I. To support First Nations people and Inuit in reaching an overall health status that is comparable to other Canadians, Health Canada's NIHB Program provides coverage for a limited range of additional health-related goods and services (see section 1.4 below). The Program is designed as a payer of last resort for these benefits in the event that eligible clients are not insured elsewhere.

As with other public and private medical benefit plans, NIHB does not provide direct services to clients but relies on physicians or other authorized prescribers, pharmacists and other providers to deliver services to clients. NIHB, with the assistance of a third party claims processing contractor and other mechanisms, reimburses providers for the cost of eligible services. Eligible benefits are 100% covered for clients and no co-payments, premiums, or deductibles are required from clients in order to access benefits.

NIHB is in the unique position of being both a Program, Program Activity Architecture (PAA) and a Cluster. The "Supplementary Health Benefits" cluster was established in 2005/06, when the Branch (FNIHB) renewed its authorities with Treasury Board. The implications for the evaluation include the need to take a cluster-based approach to evaluation design and focus, including the need to consider the overall impacts of the program cluster as opposed to the impacts of the individual components, as well as to contextualize findings and recommendations at the level of cluster program objectives and activities.

## 1.3 Program Mandate and Principles

The mandate of the NIHB Program is to provide non-insured health benefits to registered First Nations and recognized Inuit people in a manner that:

- is appropriate to their unique health needs;
- contributes to the achievement of an overall health status for FN/I people that is comparable to that of the Canadian population as a whole;
- is sustainable from a fiscal and benefit management perspective; and
- facilitates FN/I control at a time and pace of their choosing.



The NIHB Program operates according to a number of guiding principles:

- All registered First Nations and recognized Inuit normally resident in Canada, and not otherwise covered under a separate agreement with federal, provincial or territorial governments, are eligible for non-insured health benefits, regardless of location in Canada or income level;
- Benefits will be provided based on professional medical or dental judgement, consistent with the best practices of health services delivery and evidence-based standards of care; (This directive of medical necessity dates back to the 1979 Indian Health Policy, one of the pillars upon which the federal government provides FN/I with health services, which states that "uninsured benefits" would be provided to FN/I based upon "professional medical and dental judgement.")
- There will be national consistency with respect to mandatory benefits, equitable access and portability of benefits and services;
- The Program will be managed in a sustainable and cost-effective manner;
- Management processes will involve transparency and joint review structures, whenever agreed to by First Nations and Inuit organizations; and
- When an NIHB-eligible client is also covered by another public or private health care plan, claims must be submitted to the client's other health care/benefits plan first. NIHB will then coordinate payment with the other payer on eligible benefits.

## 1.4 NIHB Benefit Areas

The NIHB Program provides supplemental health benefit coverage in the following benefit areas:

### Pharmacy

NIHB provides coverage for prescription drugs listed on the NIHB Drug Benefit List and approved over-the-counter medications, as well as certain medical supplies and equipment such as audiology items, wheelchairs and prosthetics. The objective is to provide eligible clients with access to pharmacy services in a fair, equitable and cost-effective manner that:

- Contributes to improving the overall health status of First Nations and Inuit clients recognizing their unique health needs and the context of health service delivery; and
- Provides coverage for drug benefits and services based on professional judgement, consistent with the current best practices of health services delivery and evidence-based standards of care.

The NIHB Pharmacy and Medical Supplies and Equipment Benefit Policy Framework provides details about the coverage and limitations of this benefit area.

## **Medical Transportation**

NIHB Medical Transportation benefits assist eligible recipients to access medically required health services that cannot be obtained on reserve or in the community of residence. The benefits cover medical transportation costs for both eligible clients and escorts when necessary including:

- Ground Travel (private vehicle, commercial taxi, fee-for-service driver and vehicle, band vehicle, bus, train, snowmobile taxi, and ground ambulance);
- Air Travel (scheduled flights, charter flights, helicopter, air ambulance and Medevac);
- Water Travel (motorized boat, boat taxi, and ferry);
- Living expenses (accommodations and meals), and
- Transportation costs for health professionals to provide services to isolated communities.

The Medical Transportation Policy Framework provides details about the coverage and limitations of this benefit area.

## **Dental**

The NIHB dental program reimburses a broad range of dental services including; diagnostic, emergency, preventive, restorative, endodontic, periodontic, prosthodontic, oral surgery, orthodontic and adjunctive services. Coverage for NIHB dental services is determined on an individual basis, taking into consideration current oral health status, recipient history, accumulated scientific research and evidence-based standards of care, and the availability of treatment alternatives.

Some NIHB dental services require predetermination prior to the initiation of treatment while other are subject to frequency limitations. Predetermination is a review to determine if the proposed dental services are covered under the Program's criteria, guidelines and policies. During the predetermination process, the NIHB Program reviews the dental services submitted against its established Dental Policy Framework which outlines clear definitions of the types of benefits available to clients.

## **Vision**

Vision care benefits are covered in accordance with the policies set out in the NIHB Vision Care Framework. The NIHB Program covers: eye examinations (when they are not insured by the Province or Territory), eyeglasses that are prescribed by a recognized vision care provider, eyeglass repairs, eye prosthesis (an artificial eye), and other vision care benefits depending on specific medical needs of the recipient.

## Short Term Mental Health Crisis Intervention Counselling

NIHB benefits include a short-term, mental health crisis counselling benefit, which provides access to professional mental health counselling during times of crisis and, as appropriate, until arrangements are made to transition clients to an alternative service.

### Premiums

The NIHB Program also pays provincial health premiums for eligible clients living in British Columbia. The Program paid these premiums in Alberta until January 1, 2009 when the provincial government eliminated these premiums for all residents.

## 1.5 Eligible Population

All registered First Nations and recognized Inuit normally resident in Canada are eligible for non-insured health benefits regardless of location in Canada or income level, provided they are not otherwise covered under a separate agreement with Federal or Provincial governments or through a separate self-government agreement.

The NIHB client base has been growing steadily at an average rate of 2.0% over the past ten years. As of March 31, 2009, 815,800 FN/I clients were eligible to receive benefits under the program. The total NIHB eligible population for both First Nations and Inuit grew from 656,377 as of March 31, 1998 to 799,213 as of March 31, 2008. The levels and trends of the NIHB eligible client population across Provinces and Territories for the selected years vary considerably (see Table 1). Ontario has had the largest eligible client population throughout the history of the program, and Yukon has consistently reported the smallest population.

**Table 1**  
**Eligible Client Population by Type and Region - March 1998, 2003, 2008**

	1998			2003			2008		
	FN	I	Total	FN	I	Total	FN	I	Total
Atlantic	26501	5315	32514	29821	5568	35389	32964	397	33361
Quebec	48433	501	48905	52486	628	53114	56372	856	57228
Ontario	143207	415	143603	160043	453	160496	172510	504	173014
Manitoba	98695	35	98725	113107	73	113180	127876	134	128010
Saskatchewan	98463	18	98481	112300	25	112325	126418	41	126459
Alberta	78665	236	78901	90074	282	90356	100848	393	101241
BC	105301	174	105475	114997	207	115204	118954	212	119166
Yukon	7000	63	7063	7507	64	7571	7844	79	7923
NWT/NT	14413	28297	42710	15684	32110	47708	16823	35988	52811
<b>Total</b>	620678	35699	656377	695983	39360	735343	760609	38604	799213

The annual rate of growth of the NIHB eligible population has exceeded the annual rate of growth of the Canadian general population since standardized data were first collected in 1991 (see Table 2). While the annual growth rate of the Canadian population was 1.3% as of March 31, 1991, the annual growth rate of the eligible client population was 2.9% at the same period. The largest differential between the growth rates was in March 31, 2000, when the annual growth rate of the eligible client population was 2.7%, which was a full three times higher than the growth rate of the general Canadian population at 0.9%.

**Table 2**  
**Annual Population Growth, Canadian and Eligible Client Population**

Year	Rate of population growth	
	Canadian	NIHB Eligible Client
1991	1.3	2.9
1992	1.4	2.6
1993	1.5	3.4
1994	1.2	2.8
1995	1.2	3.4
1996	1.1	2.9
1997	1.1	3
1998	0.9	2.5
1999	0.9	2.4
2000	0.9	2.7
2001	1	2.3
2002	1.1	2.1
2003	0.9	2
2004	1	2
2005	0.9	2
2006	1	2
2007	1.1	2.3
2008	1.1	0.8

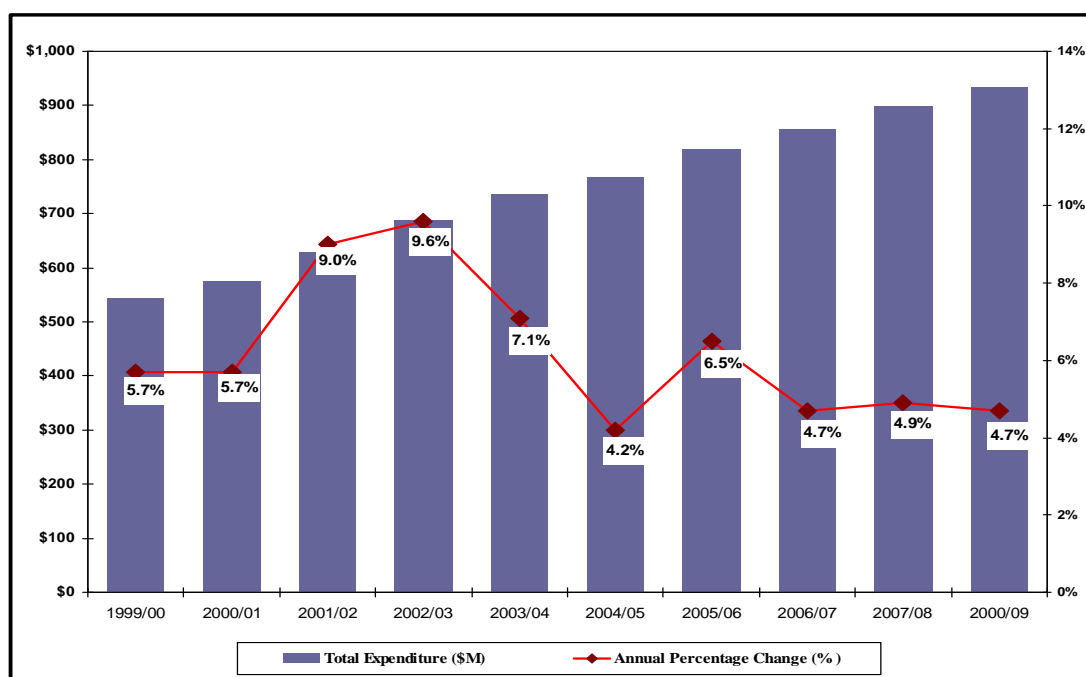
\* The decrease in NIHB Program client population in 2008 is mainly attributed to the removal of the Labrador Inuit Association (LIA) population in the Atlantic Region who transitioned to the Nunatsiavut self-government agreement.

## 1.6 Expenditure Overview

The NIHB Program's expenditures by benefit area are also available through annual reports. Currently, the three largest benefit areas - pharmacy, medical transportation and dental - account for over 90% of Program spending. Program expenditures have grown consistently in recent years, ranging from \$507.7 million in 1997/98 to \$688.1 million in 2002/03 and to \$940.2 million in 2008/09. There have been annual increases in the order of 4.2% to 9.6% over the past 10 years (see Figure 1).

The growth rate of the eligible client population is one of several factors that have contributed to the annual growth of total expenditures of the program (see Table 2 above). Additional factors that impact expenditures have included policy changes designed to improve access to the Program, such as efforts to raise awareness among eligible clients. Other factors include an expanded range and increased costs of health products and services, rising demand for health products and services overall, and changes within provincial and territorial health systems that have resulted in both increased availability of services, as well as increased costs of these services.

**Figure 1**  
**Expenditures and growth rates 1999/00 to 2008/09**



## 1.7 Administration

NIHB benefit areas are delivered through both National Headquarters (HQ) in Ottawa as well as regional offices across the country. NIHB HQ is responsible for the development of national policies, including defining eligible benefits and operational procedures for all benefit areas working in consultation with the regions. Headquarters also performs ongoing expenditure analysis to ensure that NIHB continues to operate within its Parliamentary allocations.

NIHB HQ supports the Health Information and Claims Processing Services (HICPS) system and is responsible for the development and maintenance of the national Medical Transportation Reporting System (MTRS), a key administrative mechanism for the medical transportation benefit. Finally, HQ adjudicates claims for drugs with restrictions and all orthodontic care

through a national Drug Exception Centre (DEC) and the Orthodontic Review Centre (ORC). Provider audits and fee negotiations are undertaken jointly between HQ and regions, and negotiations may be undertaken jointly with other federal departments.

Regional offices are responsible for operationalizing and managing claims payments for medical transportation, vision, short term mental health crisis intervention, and premiums. To accomplish this, regional offices have dedicated teams and have developed and implemented systems specific to the medical transportation and vision care benefits to adjudicate claims. Some regions have also established call centres and centralized services to manage vision care benefits and medical transportation services. NIHB regional offices have teams providing dental predetermination services where the Program has placed limitations on certain procedures. Finally, the regions work with those FN/I and territorial governments that deliver benefits on behalf of NIHB through contribution agreements. As detailed further below, both NIHB HQ and regional offices are responsible for working with FN/I organizations as well as professional associations.

The allocated funding levels for administration in each region and NIHB HQ in 2008/09 were:

**Table 3**  
**Allocated funding levels salary and operating expenditures for each Region and HQ in 2008/09 (000's of dollars)**

	Atlantic	Quebec	Ontario	MB	Sask.	Alberta	BC	Northern Region	HQ	TOTAL
Salary	\$1,320	\$1,664	\$3,376	\$2,251	\$1,806	\$2,661	\$1,498	\$1,309	\$8,717	\$24,602
Capital	\$0	\$0	\$0	\$0	\$0	\$350	\$0	\$0	\$0	\$350
EBP	\$264	\$333	\$675	\$450	\$361	\$532	\$300	\$262	\$1,743	\$4,920
Operating	\$141	\$137	\$704	\$347	\$235	\$516	\$205	\$245	\$3,468	\$5,998
Sub-total	\$1,725	\$2,134	\$4,756	\$3,048	\$2,402	\$4,059	\$2,002	\$1,816	\$13,929	\$35,871
<b>Claims Processing Costs</b>										<b>\$26,213</b>
<b>Total Administration Costs</b>										<b>\$62,084</b>

\*\* A one-time \$2.9 million charge is included in the claims processing costs reported above.

This charge is associated with the Program's activities to tender and develop a system to support its electronic processing of claims in the pharmacy, dental, and medical supplies and equipment benefit areas. Actual costs for claims processing in 2008/09 were therefore approximately \$23.3 million.

It should be noted that this is the first year that NIHB has begun to report statistics on administrative costs at a disaggregated regional/HQ level. This increased reporting is the result of a 2008 exercise to ensure the consistency of financial coding across HQ and regional offices. It is not possible to reproduce this data retroactively. As a result, these figures will be used as a baseline for future years in looking at the Program's administrative costs.

## 1.8 Program Delivery

The delivery of the NIHB Program is complex, involving service arrangements with health care providers, territorial governments, the private sector, and First Nations and Inuit. Most (60%) of NIHB is delivered through service arrangements with registered providers such as pharmacists and dentists, etc. In these cases clients are not charged upfront, as providers bill the NIHB Program directly for the payment of pharmacy, medical supplies and equipment and dental claims through the Health Information and Claims Processing Services (HICPS) system. HICPS includes a full range of claims processing and payment services, provider audit, registration and communications services as well as audit recovery services on behalf of the federal government. The delivery of HICPS services has been contracted out by NIHB to the private sector for the past 17 years in order to leverage efficiencies of private sector capacity and innovation in claims processing.

The remainder of NIHB is delivered through Health Canada's regional offices and/or through contribution agreements with either FN/I organizations to administer the NIHB Program directly at the community level, (in which case providers bill the community), or the governments of the Northwest Territories and Nunavut directly for the delivery of vision and medical transportation benefits.

NIHB benefits are delivered through either a centralized, shared or decentralized model.

**Table 4**  
**Delivery Model by Type of NIHB Benefit Areas and Expenditures**

Type of Benefit	Benefit Areas	Expenditures (2008/09)
Centralized	Pharmacy and Orthodontics	\$393.7M in pharmacy \$6.1M in orthodontics 42.8% of expenditures
Shared	Dental and MS&E	\$24.8M in MS&E \$170.3M in dental 20.1% of expenditures
Decentralized	Medical Transportation, Vision and Mental Health	\$275.0M in medical transportation \$26.5M in vision \$11.4M in mental health 33.4% of expenditures

As a result of the long experience of the Department in delivering this Program, the administration and delivery of some benefits are centralized, others are shared and others were set up and remain decentralized. For example, pharmacy is a dynamic field, with dozens of new therapies entering the market annually. Centralization provides adaptability and flexibility and has helped the Program achieve economies of scale - NIHB processes millions of pharmacy claims electronically and having benefit determination and adjudication done centrally ensures the efficient and consistent application of policy. The orthodontic benefit is also centralized, in this case because it is a highly specialized field that requires expert review of cases to determine coverage.

Dental and medical supplies and equipment are shared responsibilities with regional offices. While most claims in this benefit area are processed through HICPS without restriction, some must be pre-determined or prior approved in regional offices. In some cases, regions can call on the advice of a centrally administered review centre. In the case of dental, sharing responsibility with regions has helped the Program maintain relations with dental providers and thus helped ensure they remain registered with NIHB and provide services to its clients. These local relationships are also integral to adapting the delivery model to regional contexts and the increasing efforts of NIHB to promote the cost-effective delivery of this benefit area by engaging dentists under contract to go to remote/isolated communities to provide dental care, as opposed to bringing clients to dental practices in urban areas. Finally, sharing responsibility for the dental care benefit has helped the Program move towards its goal of facilitating FN/I control over NIHB, as nearly 8% of dental expenditures under NIHB are made through contribution agreements.

Last, three benefit areas are decentralized in that, while benefit policy is determined nationally, benefit adjudication is the sole responsibility of the regional offices. In the case of MT in particular, the management and delivery of this benefit requires detailed knowledge of the provincial health system infrastructure and availability of health professionals. It also requires arrangements with local providers (such as bus and air lines, taxi companies, etc), knowledge of local conditions (such as whether or not there is an ice road to a community for part of the year, or whether it must be accessed by boat or air), and relationships with FN/I organizations. It is unlikely that such a benefit could ever be centralized in a cost-effective manner.

The vision and mental health benefits have remained decentralized for many years, in part due to the reliance on regional office knowledge of local providers, the relatively small size of the benefit areas, and the fact that, in the case of vision, electronic adjudication of claims by the vision care provider industry has not been possible until relatively recently.

## **1.9 Similar Programs**

Five other federal departments (Correctional Services Canada, Department of National Defence, Veterans Affairs Canada, Citizenship and Immigration Canada, and the Royal Canadian Mounted Police) provide supplemental benefits to other defined eligible client populations. Activities between NIHB and these departments are coordinated through the Federal Healthcare Partnership (FHP).

With the exception of medical transportation, all Provinces and Territories (P/Ts) administer some form of health benefits similar to those of NIHB. These programs are generally targeted to seniors and individuals in need of financial assistance. In addition, employer sponsored drug benefits (such as the Public Service Health Care Plan) as well as benefits purchased by individuals, are available through various private sector companies.

The main differences between these plans and those offered through the NIHB Program activity/cluster is the health policy basis for NIHB. While other Provincial, Territorial and Federal plans are often statutory, NIHB is based on the long-standing Federal practice and commitment (through the 1979 Indian Health Policy) to help FN/I improve their health status relative to other



Canadians, as well as in long-standing policies to improve access to medical services as a way of achieving this objective. As such, the NIHB requirement that benefit coverage is based on medical necessity is balanced against the need to manage expenditures in a sustainable manner, a central aspect of the NIHB mandate since 1997. In addition, unlike private benefit plans, NIHB does not include an element of risk-sharing through client contributions for plan members.

While the current evaluation is the first formal evaluation made under a Treasury Board commitment for NIHB, the Program has undergone several audits by the Office of the Auditor General (OAG) including:

- 1993 audit to determine whether NIHB was efficiently managed in accordance with its authorities and that the Program's effectiveness was measured and reported;
- 1997 audit to assess Health Canada's management of First Nations health programs and to determine if an appropriate accountability framework was in place for the transfer of health services to community control;
- 2000 audit to determine progress made by Health Canada on the observations and recommendations made in the 1997 audit;
- 2004 audit of the federal drug/pharmacare programs; and
- 2006 October and November audits to assess the progress Health Canada made in implementing recommendations made in previous reports on First Nations programs and to identify factors that enabled or impeded federal organizations in their efforts to implement the OAG's recommendations.

The 2004 value-for-money audit of the five federal pharmacy benefit plans included NIHB. It made a number of recommendations that have been actioned, including measures to improve client safety. It also suggested that these five plans strengthen program objectives and performance measurement through collaboration across the plans, which has been carried out in large part through NIHB membership in the FHP.

## 2.0 EVALUATION CONTEXT

In accordance with Treasury Board accountability requirements, an evaluation strategy for the NIHB Program was designed, guided by a Results-based Management and Accountability Framework (RMAF) including the Logic Model presented in Section 3.1. The RMAF for NIHB is designed to facilitate departmental tracking, monitoring and reporting on progress in meeting the objectives of the First Nations and Inuit Health Branch RMAF under the Supplementary Health Benefits Authority.

Government of Canada Evaluation Policy requires the specification of evaluation issues, identification of data sources, and methods of collection and analysis. This strategy used for this evaluation, which draws upon multiple research methods, is elaborated in detail below.

The findings of this evaluation in conjunction with ongoing Program monitoring and audits will assist policy makers and program managers to make future decisions on the design and delivery of NIHB. In addition, it will enable NIHB to introduce changes to improve the management of the Program, and to make it more responsive and relevant to its clients. Audiences for this report include central agencies, senior managers at headquarters and in regional offices, as well as First Nations and Inuit stakeholders.

## 2.1 Evaluation Objectives and Scope

This evaluation is the first program level evaluation of NIHB. In the past, there have been several targeted evaluations of various NIHB activities. In addition, numerous studies and program reviews have been conducted on NIHB benefit areas and operations. These evaluations and reviews have been used to develop policy options and future strategic directions for NIHB. In addition, they have been used to make targeted program changes intended to facilitate clients' access to benefits, promote client safety, and create efficiencies.

The current evaluation, on the other hand, meets the Government of Canada requirements under the 2009 Policy on Evaluation, which requires that specific evaluation issues and questions (see Section 2.2 below) as well as consideration of the risks faced by the NIHB Program. As a result, the evaluation is national and comprehensive in scope, and it addresses the requirements of the departmental 5-year evaluation plan, as well as meeting Government of Canada requirements for coverage of the issues outlined below.

## 2.2 Evaluation Issues

The core evaluation issues specified in the April 2009 Government of Canada Evaluation Policy are:

**Relevance:** Issue 1 - Continued need for program, policy or initiative: Assessment of the extent to which the NIHB Program cluster continues to address a demonstrable need and is responsive to the needs of Canadians.

Issue 2 - Alignment with government priorities: Assessment of the linkages between program objectives and (i) Federal Government priorities and (ii) departmental strategic outcomes.

Issue 3 - Consistency with federal roles and responsibilities: Assessment of the role and responsibility for the federal government in delivering the program.

**Performance:** Issue 4 - Achievement of expected outcomes: Assessment of progress towards immediate, intermediate and ultimate outcomes with reference to performance targets and program reach, program design, including the linkage and contribution of outputs to outcomes.

Issue 5 - Demonstration of efficiency and economy: Assessment of resource utilization in relation to the production of outputs and progress towards expected outcomes.

## 2.3 Evaluation Design

This evaluation comprises multiple lines of evidence and was planned as a series of integrated and progressive components designed to build on and complement each other. The analysis and recommendations of the report are supported by secondary analysis of NIHB Program administrative data and numerous studies by researchers and reviewers external to Health Canada, and is complemented by interviews with program area representatives. Its findings address the core issues above, and are also intended to assist policy makers and program managers in making future decisions on the design and delivery of NIHB. As such, the evaluation provides recommendations on program changes to further improve program quality and management.

The external analyses supporting this evaluation include:

### **Comparison of Health Canada, Non-Insured Health Benefits Program to Publicly and Privately Funded Health Benefit Plans**

This review of NIHB's benefit areas was conducted in 2009 as a main component of the current evaluation. The study compares the NIHB cluster benefit areas to other publicly and privately funded health benefit plans. As such, it sought to answer four questions specific to the current evaluation, and worked to meet the need for baselines in order to best assess Program performance:

- What does each public and select private plan fund / cover?
- Do any NIHB health benefits duplicate the publicly funded plans coverage?
- Which benefit(s) is (are) offered exclusively through the NIHB Program?
- Do any publicly funded programs specifically exclude FN/I?

### **Client Safety Initiatives in the Pharmacy Benefit Area**

This external study was conducted in 2008 to provide NIHB with information on what measures other public payers of pharmacy benefits had in place in the area of client safety. The objective of the study was to situate NIHB's activities relative to those of other payers, as well as to provide recommendations for future enhancements in the area of client safety. As a main area of performance and outcome for the program cluster, this benchmarking of client safety initiatives was planned as a key element of the evaluation design.

### **Comparison of NIHB's Administration Costs Relative to Other Payers**

This external analysis was conducted in 2009 to provide NIHB with benchmarking information on how its administration costs compare to those of other similar payers. As this portion of expenditures is within the sphere of influence of the NIHB Program, it is a main area for analysis of efficiency and economy of the program.

### **Review of Medical Transportation Benefit Programs in Provinces and Territories**

This 2008 external study provided a current environmental scan to determine the scope of medical transportation covered by various P/T programs.

### **Assessment of Alternate Service Delivery Models for the NIHB Program**

In 2005, NIHB engaged a consultant to assess alternative service delivery models for the NIHB Program's key benefit areas. The review was intended to determine the most efficient way to deliver these benefits, and contributes to assessments of program performance in the areas of efficiency and economy. While it was not planned for the current evaluation cycle, and is not as current as the other four reports, this assessment was included as an additional line of evidence.

### **Health Information Claims Processing - Final Report**

As with the assessment on alternate service delivery models above, this 2004 external analysis was not planned for the current evaluation cycle but has been included as an additional line of evidence.

## **3.0 METHODOLOGY**

Multiple lines of evidence were gathered from different data sources and through different methods in each of the studies cited above. The design worked to maximize the triangulation of these lines of evidence, while maintaining a strategic focus based on the risks and characteristics of the Program. For instance, each of the external assessments focussed on a key dimension of the Program. The reports were designed to provide the benchmarks needed to make evidence-based assessments of program performance through comparisons to real-world baselines.

In addition, in order to provide some detailed assessments in the areas of program outcomes, two case studies (The Pharmacy Benefit and the Management of Diabetes, as well as Access to Dental Care) were conducted for approval and review by independent experts. An internal analysis of the medical transportation benefit and access to health services found inadequate data, and so was limited to a Program description that was not reviewed externally.

## Interviews

A total of 54 formal, semi-structured interviews were conducted in each of the four main studies. Three supplemental interviews with NIHB Program area representatives were also conducted, for a total of 57. These were focused at the national level, and worked to gain perspectives and opinions of these representatives to support analysis of core issues at the level of the program cluster.

## Document Review

In addition to the documents reviewed for the external analyses described above, main policy documents and performance measurement reports were reviewed for the evaluation, including:

- The Report on Client Safety which provides an overview of actions taken by the Program to improve client safety and monitor prescription drug use under its drug benefit program.
- The Non-Insured Health Benefits Program Annual Reports. These reports provide information on the NIHB Program, including a range of consistently reported statistics on the recipient population, benefits and expenditures.
- The NIHB Program Information Booklet which provides specific details on the Program, how to access services and what is expected of eligible recipients.
- NIHB's Benefit Policy Frameworks, which define the policies and benefits under which the NIHB Program will fund eligible registered First Nations and recognized Inuit (clients) with health benefits. These include: Dental (2005); Medical Transportation (2005); Vision (2005); Medical Supplies and Equipment; and The NIHB Drug Benefit List.
- NIHB Results-Based Management and Accountability Framework provides a plan for measuring and reporting on outputs and outcomes of the services provided.
- NIHB 2006-07 Performance Measurement Report describes the key operational results of the NIHB Program in relation to the expected outputs, and immediate and intermediate outcomes as described in the RMAF.
- NIHB compliance audits provide details on audit findings and suggested areas of improvement. They provide a strong indicator of the extent to which program recipients and providers are compliant with program requirements.
- Various Bulletins published by the Program announcing benefit policy changes.

These sources provided a series of basic descriptive data for the evaluation, including, most notably, secondary trend data gathered through the Annual Reports.

## **File Review**

A number of file reviews provided key lines of evidence for the current evaluation. The reviews of Provincial and Territorial health benefit plans conducted for the scan of transportation services in 2008, and for the benchmarking of the NIHB Program's benefit areas to other publicly and privately funded health benefit plans in 2009 gathered critical information for baseline comparisons. The 2008 assessment of patient safety initiatives, as well as the 2009 assessment of administrative costs in comparable plans also included extensive file reviews.

## **Case Studies**

In order to accommodate the complexity of the Program, and to improve the scope of the evaluation to address the most relevant issues around activities and outcomes, case studies were incorporated into the design of the evaluation, and were conducted as main lines of evidence to support the main conclusions and recommendations. The studies on Access to Dental Care and Management of Diabetes were reviewed and approved by independent experts and provide advice to the Program about whether FN/I needs are addressed with respect to each area. The study on dental care asks the question of whether or not access to dental care is limited among NIHB recipients. This study was reviewed by Health Canada's Chief and Assistant Chief Dental Officers. These two case studies are included in the current report as annexes A and B:

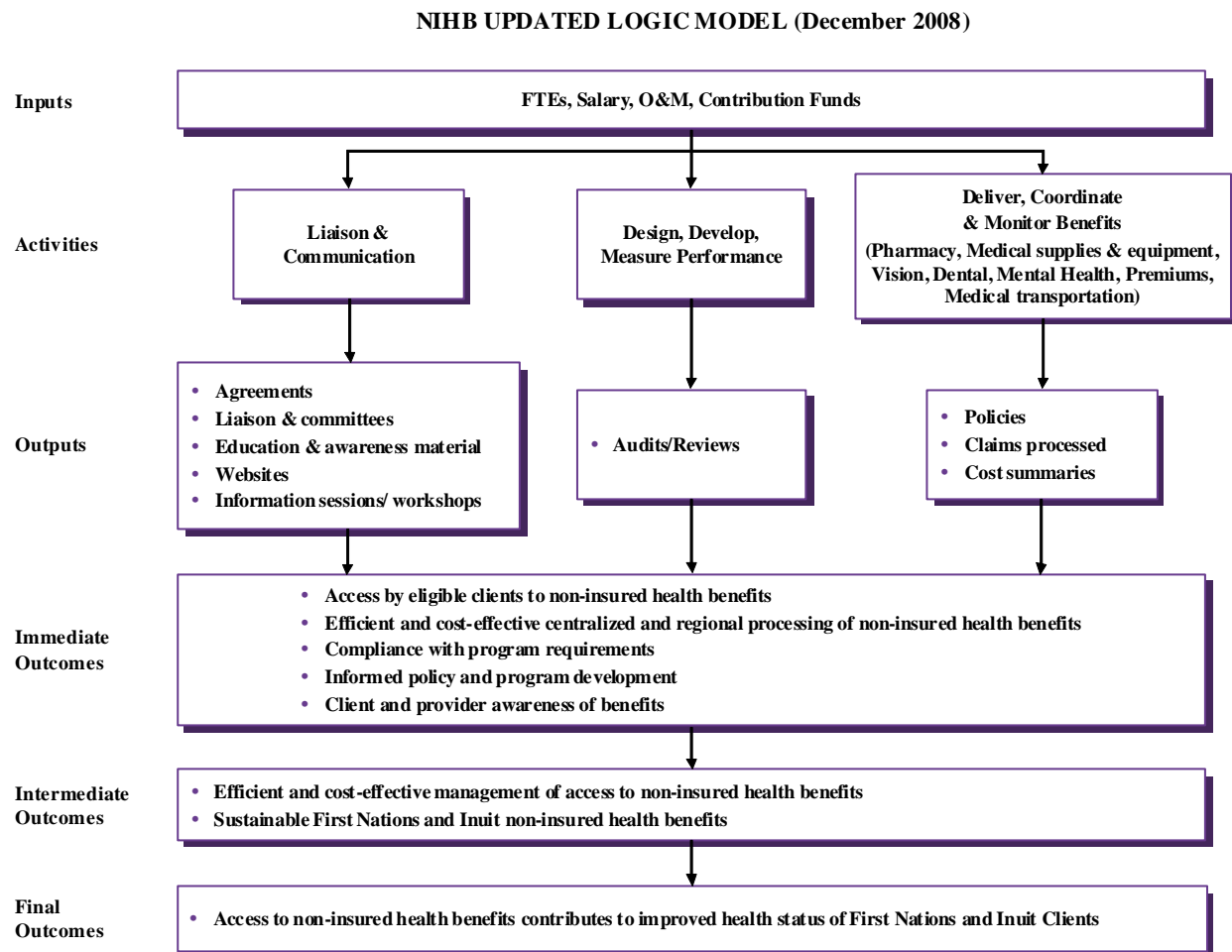
- Annex A: The Pharmacy Benefit and the Management of Diabetes
- Annex B: FN/I Access to Dental Care

The Annex C provides a profile of NIHB's client safety initiatives which focus on promoting the appropriate use of medications covered by the Program.

## **3.1 Program Logic Model**

The NIHB Logic Model, presented below illustrates how the inputs, activities, and outputs of NIHB are expected to lead to the achievement of specified outcomes. The Logic Model governs the management of NIHB and is the basis for ongoing performance measurement and evaluation of the Program. As per the Government of Canada requirements for evaluation coverage, the current evaluation bases its research questions in the logic model developed for the Program.

**Figure 2**  
**NIHB Logic Model**



The logic model is a useful starting point for the evaluation, and requires some context in order to understand the implications for the evaluation scope and approach. As with all programs, the activities and outputs are the main mechanisms for achieving the desired outcomes. As with many health programs, the final outcome of contributing to the improved health status of First Nations and Inuit clients is more difficult to assess, particularly with respect to the specific links between activities and this final outcome.

It is necessary to keep in mind that the program rationale includes the assumption that the coverage of individual claims is based on the judgement of a medical professional. The health benefits of each claim are managed through the relationship between the practitioner and the recipient, and not between the recipient and NIHB. As such, this evaluation of NIHB focuses on the final outcomes of the Program, such as access to non-insured health benefits and the contribution of the program cluster to improved health status, as opposed to the effectiveness of individual or specific NIHB interventions. While the indicators of effective benefit management and effective individual interventions are closely related, the current evaluation focuses on the former.

## 3.2 Evaluation Questions

**Table 5**  
**Evaluation Questions and Sub-Questions by Section**

	Questions		Sub-Questions	Section
Relevance				
R.1	Does the NIHB program cluster continue to address a demonstrable need of FN/I?	R.1.1	What is the health status of FN/I compared to other Canadians?	4.1.1
		R.1.2	Does NIHB address medical needs of FN/I?	4.1.2
R.2	Are NIHB objectives aligned with (i) GoC priorities and (ii) Health Canada strategic objectives?	R.2.1	Is NIHB aligned with Federal Government priorities?	4.1.3
		R.2.2	Is NIHB aligned with Departmental strategic objectives?	4.1.4
R.3	Is NIHB consistent with federal roles and responsibilities?	R.3.1	To what extent are NIHB objectives consistent with federal government roles and mandate regarding FN/I?	4.1.5
		R.3.2	Are the programs and services duplicated elsewhere and/or do they overlap?	4.1.6
Performance				
P.4	Has NIHB achieved its outcomes?	P.4.1	What are the levels of client access to NIHB?	4.2.1
		P.4.2	Is there compliance with NIHB program requirements?	4.2.2
		P.4.3	Is the development of programming and policy evidence-based?	4.2.3
		P.4.4	Is NIHB sustainable?	4.2.4
		P.4.5	Has NIHB contributed to improved health status of FN/I?	4.2.5
P.5	Does NIHB demonstrate efficiency and economy?	P.5.1	What are the NIHB cost drivers?	4.3.1
		P.5.2	Is the processing of claims efficient and economical?	4.3.2
		P.5.3	Is the management of access efficient and economical?	4.3.3

The evaluation questions have been designed to address the logic model outcomes within the context of the 2009 Government of Canada Policy on Evaluation core issues for evaluations. The sub-questions incorporate the relevant features of NIHB design and delivery, with the aim of aligning findings with both core issues as well as current strategic management concerns and directions.

For the purposes of this evaluation, the NIHB logic model outcomes of efficient and cost-effective claims processing and overall management of access to non-insured health benefits have been addressed in a separate section (P.5) as part of evaluation questions on economy and efficiency.

The logic model outcome (immediate) of client and provider awareness of benefits is covered in part under the issue of access, but was otherwise not covered in depth as a part of this evaluation. As the NIHB Program undertakes Program specific awareness-raising activities the results of which are evident in other Program outputs and immediate outcomes (i.e. the majority of eligible clients access NIHB benefits which speaks to their awareness of the Program).



### **3.3 Data Sources**

Much information in this report is extracted from various administrative databases held by NIHB Program. These include the Status Verification System (SVS), which contains information on the eligible FN/I population. SVS data on FN clients are based on information provided by Indian and Northern Affairs Canada. SVS data on Inuit clients are based on information provided by the Governments of the Northwest Territories and Nunavut, and Inuit land claims organizations including the Inuvialuit Regional Corporation, Nunavut Tunnavik Incorporated and the Makivik Corporation.

In addition, several Health Canada data systems provide information on expenditures and selected benefit utilization. The Framework for Integrated Resource Management System (FIRMS) is the source of expenditure data, while the NIHB Health Information and Claim Processing Services (HICPS) system provides detailed information on the pharmacy and dental benefit areas. In addition, information on operating expenditures in the medical transportation benefits is drawn from the Medical Transportation Data Store (MTDS). Data on the two smallest benefit areas – vision care and mental health – is kept at the regional level, however, this data is limited, paper-based in the case of mental health, and is not captured in such a way as to allow trend analysis on which management decisions can be based.

Other data gathered for the current report come from scans, file reviews and document reviews. This includes a range of published statistics such as population estimates from official sources, as well as policy and program information gathered from other organizations such as insurance payers and Provinces and Territories.

### **3.4 Limitations and Challenges**

#### **Complexity of the Program**

The evaluation was challenged by the complexity of the NIHB Program cluster. The Program involves thousands of service arrangements with health care providers, territorial governments, the private sector, and First Nations and Inuit bands and communities. The majority (60%) of NIHB is administered through agreements with registered providers (e.g., dentists, pharmacists, etc.) through the HICPS system that allow providers to claim reimbursement for services delivered to NIHB clients. In 2008/09, there were approximately 7,900 pharmacy, 15,000 dental and 1,600 medical supplies and equipment providers providing services to approximately 504,500 active clients receiving pharmacy / medical supplies and equipment related products, and 286,700 active clients receiving dental services through the HICPS system. The remainder of NIHB is delivered through Health Canada regional offices and/or through contribution agreements with FN/I organizations to administer the NIHB Program directly at the community level, where providers bill the community directly and NWT and Nunavut governments for the delivery of vision and medical transportation benefits.

The complexity of the Program required a careful triangulation of research and different lines of evidence, as well as supplementation with capstone interviews and analysis at the level of the program cluster. The evaluation design used selected case studies to focus on relevant issues based on the program profile and previous reviews. These included client safety, diabetes, dental benefits, and compliance profiles based on systematic audits. On the other hand, while the Program activities are complex, and the reach of the Program is extensive, the outcomes specified in the program logic model are measurable and reportable, and serve as a useful guide for managing the complexity, and so provide a series of useful indicators of program relevance and performance.

## **Privacy**

The evaluation was limited by the lack of access to health data (e.g., diagnosis, hospitalization records, etc.) that link health outcomes to the receipt of Program benefits. While user data can be aggregated to show, for instance, changes in drug use patterns that indicate positive outcomes, they cannot be linked to specific data such as treatments not covered by NIHB, nor to specific health outcomes, such as illness or mortality.

## **Links Between Activities and Outcomes**

Finally, it should be noted that, because NIHB holds only administrative data from processing benefit claims, this evaluation is not designed to identify clear causal relationships between the provision of each benefit and specific FN/I health outcomes - particularly at the population level.

Alternatively, and as shown in the document review, NIHB has worked to ensure that its payments of benefits are based on sound medical and clinical evidence such that positive health outcomes can reasonably be attributed to NIHB interventions. The Program is mandated to provide only medically necessary benefits and to do so based on professional medical or dental judgement. Recipients are, therefore, provided with access to an evidence-based benefits package to which it is reasonable to attribute some improvement in their overall health.

# **4.0 FINDINGS**

The presentation of findings of the evaluation are structured according to the core issues of Relevance and Performance (Effectiveness and Efficiency).

## **4.1 Relevance**

All sources of information were examined to determine if “the NIHB Cluster addresses the needs of FN/I.” The findings presented are grouped around looking at whether or not FN/I have other supplemental benefit coverage other than NIHB; the health status and needs of FN/I (including

how FN/I access health care); how NIHB meets these needs with three case examples; the linkages between these needs and activities delivered; and the consistency of NIHB Programming with the Government of Canada's government-wide objective of healthy Canadians including supporting FN/I health as outlined in Canada's Performance Report 2008-2009.

#### **4.1.1 The Health Status of First Nations and Inuit (R.1.1)**

The ultimate or final outcome of the NIHB Program rationale is to improve access to medical interventions for the FN/I population as a means to support them in improving their health status in the long term. A variety of studies, including the *First Nations Regional Longitudinal Health Survey*, have documented the demographic and epidemiological evidence to demonstrate the continued need for health services by FN/I. They have found that the health status of First Nations and Inuit is consistently lower than that of the non-Aboriginal population of Canada. These populations face serious health-related challenges, such as greater disease burdens and lower life expectancy. These challenges are being compounded by a "transformation" of the disease profile of FN/I over the last decades, with a shift from a high prevalence of infectious diseases to chronic conditions all of which, in combination with on-going socio-economic issues, affect both life expectancy and quality of life for FN/I (refer to text boxes below).

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##### **First Nations**

- The overall life expectancy at birth for First Nations is 70.4 years for men and 75.5 years for women, compared to 77.0 years for men and 82.0 years for women in the general Canadian population (Indian and Northern Affairs Canada, 2004).
  - In the year 2000, suicide was among the leading causes of death in First Nations for those aged 10 to 44 years. Suicide accounted for 22% of all deaths in youth aged 10 to 19 years and 16% of all deaths in individuals aged 20 to 44 years. The rate of First Nations youth suicide (10 to 19 years) was 4.3 times greater than for Canada.
  - Compared to the general Canadian population, First Nations adults (aged 18 and over) living on-reserve report a higher prevalence of arthritis/rheumatism, high blood pressure, diabetes, asthma, heart disease, cataracts, chronic bronchitis and cancer (First Nations Information Governance Committee. *First Nations Regional Longitudinal Health Survey*, 2002-2003).
  - The self-reported prevalence of heart disease is 1.4 times higher among First Nations living on-reserve than the general Canadian population.
  - The self-reported prevalence of diabetes among First Nations adults living on-reserve (19.7%) is 3.8 times higher than that of the general Canadian population (5.2%).
  - First Nations adults living on-reserve report injuries at a rate of almost three times the Canadian average. Almost one-third of First Nations adults living on-reserve reported injuries requiring treatment, which is twice the Canadian average.
  - FN have a higher rate of dental decay and oral disease than the general Canadian population. Factors that may influence this outcome include a change from traditional diets to a diet high in sugary foods, less effective oral health prevention and lack of access to treatment services. The last two factors are particularly evident in remote regions of the country because of a lack of water fluoridation and dental services.
  - There is extensive evidence of the linkage between poor oral health and life threatening conditions such as heart disease, diabetes and low birth weight. Costs to the health care system of treating these serious conditions are significant.
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### Inuit

- The life expectancy at birth for residents in Inuit-inhabited regions\* was 66.9 years, in comparison to 79.5 years for the general population in Canada.
- Life expectancy in Inuit-inhabited regions declined slightly between 1991 and 2001 (67.8 to 66.9) while it has increased in the general population (77.8 to 79.5) (Wilkins et al. 2008).
- Rate of suicide for residents of Inuit-inhabited regions was 112.3/100,000 population and for the general population in Canada was 9.7/100,000 population for the period 1999-2003.
- Rate of suicide in Inuit-inhabited regions has increased since 1989 (59.6 to 73.2 in 1998 to 112.3 in 2003) and has remained stable in general population.
- Infant mortality rate in Inuit-inhabited regions has declined from 1989 to 2003 (25.6 to 21.9 in 1998 to 18.5 in 2003). The rate in the general population also declined over the same period (6.0 to 4.8).
- Diabetes rates are increasing among Inuit.
- The incidence rate of tuberculosis among Inuit in Canada (157.5/100,000 population) was 32.8 times higher than the Canadian rate (4.8/100,000 population) in 2008.

Inuit have a higher rate of dental decay and oral disease than the general Canadian population. Factors that may influence this outcome include a change from traditional diets to a diet high in sugary foods, less effective oral health prevention and lack of access to treatment services. The last two factors are particularly evident in remote regions of the country because of a lack of water fluoridation and dental services.

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\* Inuvialuit region of the Northwest Territories; Nunavut; Nunavik (northern Quebec); and Nunatsiavut (northern coast of Labrador)

#### 4.1.2 Medical Needs Addressed by NIHB (R.1.2)

The level and types of interventions that are received through the Program provide an indicator of the medical needs being addressed, since each is medically necessary by requirement of the Program eligibility. This is shown through the use of secondary program data and file reviews that indicate the types of needs that are addressed, including case studies on diabetes and access to dental care. The range of needs that are met, the focus on unique needs such as isolation from medical services, and the evolution of the Program over time to meet emerging needs and priorities also indicates the responsiveness of NIHB benefits to client needs. In addition, responsiveness to client needs is indicated by alignment with reviews, input and priorities of stakeholders such as the Assembly of First Nations and Inuit Tapiriit Kanatami, as well as client appeals of denied benefit claims. These indicators are found in external and internal document reviews, file reviews and Program performance data, as well as interviews with policy experts.

Further, since the NIHB Program funds only benefits that are medically necessary, the Program does not cover services that are considered cosmetic such as dental bleaching or veneers or “lifestyle” drugs.

The Program is mandated to meet the unique health needs of eligible FN/I clients at the population level. For instance, since many NIHB clients live in remote or isolated areas with no access to health care providers in their home communities, they must travel to larger centres in order to access care. This medically required travel and access to care is therefore provided under

the Program's medical transportation benefit. There are no comparable P/T programs in terms of scope and scale that assist with travel costs, however, given the income profile of NIHB, access to health benefits might not be affordable without the MT benefit.

Moreover, the evaluation found that overall NIHB clearly addresses a range of medical needs that are not provided for by other plans. Consistent with the Federal role and Program mandate (see Section R.3 below) NIHB provides medically necessary benefits that are not otherwise provided by Provincial or Territorial health benefit plans, other public or private coverage (including transportation services which address a unique need of limited/no access to medical services in remote/isolated communities). Because each of the benefits is oriented to providing access that would otherwise not be available, and the medical transportation benefit works to improve access to all medical services in general, the Program works to meet medical needs by improving access to both insured services as well as those provided through NIHB.

This benchmarking of NIHB benefits against those that are available to other Canadians through other P/T government and private plans provides a useful profile of the additional needs, unique to the FN/I population, which are being met through NIHB (as well as whether the limits of coverage are similar to other plans). This is also in line with the rationale of the Program to operate as a payer of last resort, with the assumption that the Program will only pay for products and services that bring each FN/I up to a consistent federal standard within their respective P/T contexts.

As part of this evaluation, NIHB conducted two external analyses to compare its benefits to those of other payers. First, NIHB worked with a consultant to conduct a *Review of Medical Transportation Benefit Programs in Provinces and Territories*. This study included an environmental scan of P/T programs as well as in-depth informant interviews to determine opportunities for collaboration between programs. It found that:

- The range of medical transportation benefits and programs varies considerably across the Provinces and Territories of Canada. Some jurisdictions have no provincially insured benefits for residents, while others do.
- Among the Provinces offering medical transportation benefits, most programs/benefits are small in scope and scale in recognition of remoteness factors and long distances required to access medical services for a relatively small number of residents.
- While the level of specific medical transportation benefits available through P/T programs varies from one jurisdiction to the next, in all cases, these programs only "subsidize" and do not fully fund MT costs.
- In regions where MT programs do exist, they vary in patterns of services and criteria; they are often not integrated with one another.
- In many cases, FN/I do not qualify for provincial programs. They may either be excluded from these programs as a matter of policy or, in some cases, law and regulation. Where FN/I do qualify for P/T programs, NIHB is already coordinating coverage.

Second, a quantitative and qualitative benchmarking assessment of all benefits provided by NIHB relative to other payers was conducted. This *Comparison of Health Canada, Non-Insured Health Benefits Program to Publicly and Privately Funded Health Benefit Plans* compared the NIHB Program's benefit areas to other publicly and privately funded health benefit plans, and addressed four specific questions:

1. What does each public and select private plan fund / cover?
2. Do any NIHB health benefits duplicate the publicly funded plan coverage?
3. Which benefit(s) is (are) offered exclusively through the NIHB Program?
4. Do any publicly funded programs specifically exclude FN/I?

In general, the report found that:

- NIHB's benefit areas are most comparable to those offered by private insurers. This is true both in the range of services covered by NIHB and in terms of the Program's mandate to complement other programs.
- The coverage offered by NIHB is, in general, comparable in scope to what is offered under typical private supplemental insurance plans. However, the main difference between the NIHB Program and these plans is in NIHB's application of adjudication rules. Indeed, whereas private plans tend to rely on client contributions (in the form of co-payments, deductibles, and premiums) to help to contain costs and influence clients' choices, NIHB's adjudication of benefits is grounded in evidence, both from the initial determination of whether and how to provide a benefit request and in the determination of whether to fund individual benefit requests. For example, as noted further below, the NIHB Program participates in and has established a number of processes to ensure its Drug Benefit List reflects current clinical practice and evidence. According to the study, 82% of privately sponsored insurance plans will cover any drug requiring a prescription by law, as long as it can be purchased in a Canadian pharmacy.
- The medical transportation benefit offered by NIHB is unique in that neither the public sector nor the private sector funds benefits similar to those in NIHB, though it is noted that no other plan's clients face the same or similar geographic challenges in gaining access to health services.
- Pharmacy is somewhat unique in this comparison, as many P/Ts maintain large, publicly funded drug benefit programs. As such, the NIHB pharmacy benefit could also be compared to these programs.
- The NIHB Program does not duplicate health benefits with P/T programs. In many cases, FN/I are not eligible to receive benefits in P/T programs.

These findings indicate the relevance of the NIHB Program's benefit areas with respect to the health needs of FN/I. NIHB provides access to supplemental health benefits coverage for a large portion of FN/I, many of whom would not otherwise have access.

In addition, both analyses conducted to compare NIHB's benefits to other payers of supplemental benefits found that the NIHB medical transportation benefit is unique. At the same time, both analyses acknowledged that no other plan's client-base faces the same challenges in obtaining access to health services. Other indicators also suggest a greater need for medical transportation among FN/I. For example, according to the RHS, in 2002/03, nearly half (40.8%) of First Nations living on reserve rated their access to health services as being the same as that of other Canadians. An additional 23.6 % rate their access as being better, while 35.6% rated their access to medical care as being less than that of other Canadians.

The situation for Inuit in that same year was similar. A significantly lower proportion of Inuit adults (56%), compared to adults in the general Canadian population (79%), reported having contact with a medical doctor such as a family doctor or specialist. These self-reported access rates reflect the fact many FN/I live in remote/isolated communities which do not have regular access to basic or specialized health care services (RHS, 2002-03).

In order to clearly demonstrate the relevance of the transportation benefit area in meeting the needs of its clients, NIHB undertook an internal analysis of how clients living in remote and isolated regions access the medical transportation benefit. The analysis found that expenditures in this benefit area, which is available to all eligible FN/I, are heavily weighted towards assisting clients in remote/isolated regions in accessing health services. Without NIHB, these individuals would have greatly reduced access to services to meet their health needs, confirming the relevance of this benefit.

The evaluation found in general that NIHB has remained responsive to the needs of FN/I over time, as evidenced by changes in programming, as well as increased types and levels of benefits. Recognizing the persistent and long-standing gap in health status between FN/I and the general Canadian population, NIHB has not removed a benefit since the program was created. Moreover, NIHB has evolved in a manner that reflects many of the specific challenges faced by FN/I in accessing medical care. As noted above, the Program maintains a medical transportation benefit that is unique among both public and private payers to assist clients in accessing medical care.

As well, the Program has evolved from manual processing of paper-based claims to a situation today where tens of millions of claims for health benefits are processed electronically each year. This electronic claims processing system allows NIHB to provide national coverage for FN/I through tens of thousands of providers. For example, in 2008/09, there were approximately 7,900 pharmacists, 1,400 medical service providers, and 14,000 dentists registered to provide services to NIHB across the country. Finally, as detailed further below, many of the new national policies introduced by NIHB have been designed to facilitate and improve FN/I access to NIHB's benefit areas.

The responsiveness to medical needs is also indicated by trends over time in the prescribing of different types of pharmaceuticals according to changes in health needs and medical practices around certain illness (e.g., see details on the top prescriptions tracked in Annual Reports). Other analyses have also indicated this responsiveness. For instance, Annex A details the ways that the benefits have responded to changing needs for diabetes treatment, given the availability of new drugs, and the capacity of medical professionals to control the disease's progression. The review



committees providing advice on benefit coverage and eligibility are another mechanism that has increased the responsiveness of the Program to client needs as, for instance, new drugs and other services are reviewed for inclusion on an on-going basis.

#### **4.1.3 Alignment with Federal Priorities (R.2.1)**

NIHB's alignment with Federal government priorities and departmental strategic objectives, consistent with Federal government roles and mandates vis-à-vis FN/I, is evidenced mostly by review of key policy and planning documents, supplemented by interviews with policy experts.

NIHB is clearly consistent with the priorities of the Government of Canada and Health Canada to address the disease burden and continuing gap in health status experienced by FN/I. This is indicated by the many formal commitments that the Government of Canada has made to improve the health of First Nations and Inuit, including a strong policy commitment to help FN/I improve their health status as well as to reduce the gap between FN/I health and that of other Canadians. The Government of Canada has also made significant investments to both deliver the Program, as well as to continue to address on an annual basis the gap between the Program's reference levels and expenditures.

Through previous Speech from the Throne (SFT) commitments, the Government of Canada has consistently demonstrated its commitment to improve the lives of Aboriginal peoples in Canada. Many of the commitments that the Government of Canada has made revolve around improving the health of FN/I and the FN/I health system. This includes investments in the NIHB Program and is reflected in approved funding through the Budgets to enable the Program to continue to carry out its mandate, including program integrity funding of:

- \$30M in Budget 2006
- \$51M in Budget 2007
- \$71.8M in Budget 2008
- \$239.7M in Budget 2009 covering 2009/10 (\$102.4M) and 2010/11 (\$137.3M)

The last three SFTs have focussed on addressing the determinants of health for Aboriginal Canadians with the following commitments:

The 2007 SFT committed the government to continue to improve living conditions in the North for First Nations and Inuit through better housing. It reintroduced legislation to guarantee to people living on-reserve the same protections other Canadians enjoy under the Canadian Human Rights Act. This included the presentation of legislation on specific claims and the launch of a commission for truth and reconciliation. The SFT also committed the government to continue to foster partnerships that help Aboriginal people get the skills and training to take advantage of job prospects in the North and across Canada, and to implement a new water strategy to help clean up our major lakes and oceans and to improve access to safe drinking water for First Nations.



The 2008 SFT committed the government to take steps to ensure that Aboriginal Canadians fully share in economic opportunities, putting particular emphasis on improving education for First Nations in partnership with the provinces and First Nations communities.

*Canada's Performance 2008/09* reflected the government-wide objective of Healthy Canadians, including the federal government's role in supporting First Nations and Inuit Health.

The most recent 2010 SFT committed the government to work hand-in-hand with Aboriginal communities and provinces and territories to reform and strengthen education, and to support student success and provide greater hope and opportunity. This included additional action to address the disturbing number of unsolved cases of murdered and missing Aboriginal women, to continue to build on its historic apology for the treatment of children in residential schools, to introduce new legislative measures to further the goal of making safe drinking water and effective waste-water treatment on-reserve a national priority, as well as to take steps to ensure the equitable distribution of real property assets in the event of death, divorce or separation. It also committed to the introduction of legislation to comply with a recent court decision in order to address gender inequality under the *Indian Act*, and to take steps to endorse the United Nations Declaration on the Rights of Indigenous Peoples in a manner fully consistent with Canada's Constitution and laws.

#### **4.1.4 Alignment with Departmental Strategic Objectives (R.2.2)**

NIHB is clearly aligned with Health Canada's strategic objective to "Improve the health outcomes of FN/I and to reduce the gap in health status between FN/I and other Canadians". For instance, the mandate of the NIHB Program, as stated in the Report on Plans and Priorities, is to provide non-insured health benefits to registered First Nations and recognized Inuit people in a manner that:

- is appropriate to their unique health needs;
- contributes to the achievement of an overall health status for FN/I people that is comparable to that of the Canadian population as a whole, living in similar areas/locations;
- is sustainable from a fiscal and benefit management perspective; and
- facilitates FN/I control at a time and pace of their choosing.

There are clear linkages between the activities and mandate of the NIHB Program and the strategic objective and mandate of the First Nations and Inuit Health Branch. NIHB complements the work of other FNIHB clusters which support the delivery of public health and health promotion services on-reserve and in Inuit communities, as well as providing primary care services on-reserve in remote and isolated areas, where there are no provincial services readily available.

NIHB's activities are reflected in the mandate of the First Nations and Inuit Health Branch which is to:

- ensure the availability of, or access to, health services for First Nations and Inuit communities;

- assist First Nations and Inuit communities to address health barriers, disease threats, and attain health levels comparable to other Canadians living in similar locations; and
- build strong partnerships with First Nations and Inuit to improve the health system.

#### **4.1.5 Consistency with Federal Role and Mandate (R.3.1)**

The NIHB Program operates under a Cabinet approved mandate, most recently renewed in 1997. Program objectives, client eligibility, and program scope are clearly defined in this mandate, helping NIHB to establish the parameters of a fiscally sustainable and viable approach to managing its benefit areas.

As a payer of last resort, NIHB addresses the Federal role in FN/I health by supplementing benefits provided by Provinces and Territories (or private payers), bringing FN/I up to a nationally consistent standard for health benefits.

The NIHB Program mandate reflects the legacy of historical program and funding decisions by successive governments intended to improve the health of First Nations and Inuit, including the 1979 Indian Health Policy. Benefits under the NIHB Program are provided on the basis of policy and funded annually through the respective *Appropriations Act*. However, from a FN/I perspective, the benefits provided through NIHB are based on a treaty right or other Federal fiduciary obligation. From either perspective, NIHB is an important feature of the relationship between FN/I and the Federal government, and is a significant part of Federal initiatives to improve the health status of FN/I.

#### **4.1.6 Overlap or Duplication with Other Programs (R.3.2)**

As part of the aforementioned report *Comparison of Health Canada, Non-Insured Health Benefits Program to Publicly and Privately Funded Health Benefit Plans*, a comprehensive environmental scan was undertaken to establish the details of coverage, including medical goods and services included and excluded, as well as limits on usage and dollar values of coverage. This information was critical in assessing the question of overlap or duplication, while at the same time providing key benchmarks.

The report found that there is no duplication or overlap between NIHB and other medical benefits plans with respect to intended coverage of recipients, due in large part to the design of the Program as a payer of last resort. Based on the findings of this report as well as the *Review of Medical Transportation Benefit Programs in Provinces and Territories* no overlap or duplication was identified. FN/I clients of the NIHB Program are, for the most part, not eligible for P/T programming. Moreover, many FN/I do not have access to private health coverage. In cases where FN/I have access to either public or private supplemental health benefit coverage, NIHB has processes in place to facilitate the coordination of benefits between programs.

This suggests that the Federal government's role in supporting these supplemental health benefits for this vulnerable population is key, since NIHB is serving a unique need of FN/I where no other similar programs exist. On the other hand, it is equally important that the Program be

supported as a payer of last resort, both to remain within the objectives and mandate of ensuring that expenditures contribute to overall health outcomes while also ensuring the ongoing sustainability of this policy-based program.

#### **4.1.7 Relevance Findings and Conclusions**

The evaluation found overall that the NIHB Program cluster is relevant, since there is an ongoing, demonstrable need to facilitate access to health benefits and services among the FN/I population. This is evidenced by official statistics on the comparative health status of FN/I, which indicate a diminishing but persistent gap. The approach to address this need through NIHB is supported by the 1979 Indian Health Policy and other federal policies, which aim to reduce this disparity. Although improvements have been achieved, the health status of FN/I continues to lag behind that of other Canadians and much remains to be done.

The Program contributes to the federal role in helping to address disparities in the health of this population overall by endeavouring to address individual health needs by requiring that each benefit payment addresses a medically defined need. This has also resulted in individual health interventions that meet new and changing needs, depending on the changing health problems that are presented to health practitioners and other providers, as well as on the new treatments that are available. The changing patterns of benefit claims are an indicator that new and changing health needs are addressed through the Program. The evaluation concluded that the health policy focus of the Program has been maintained, and that further efforts to link NIHB activities and objectives with other Branch work will support program objectives and the sustainability of the Program.

The evaluation also found that the NIHB cluster is closely aligned with federal government priorities and departmental strategic outcomes. Supporting FN/I to improve their health status is a key part of the Government-wide priority of Health Canadians as outlined in *Canada's Performance 2008/09*. The process of funding for the Program has ensured over the years that the Program is aligned with government-wide objectives, and that the priorities of the Program are reflected in the Speeches from the Throne.

The Program was also found to be consistent with federal government roles and responsibilities. Benefit coverage within the NIHB Program is specifically designed to cover health benefits that are not covered by P/T plans. As such, the Program works to ensure that it is the payer of last resort whenever possible, and that claims that could be covered by P/T plans are not claimed through NIHB.

## **4.2 Performance Measures**

The Program was assessed for its progress towards the outcomes specified in the program cluster logic model. The sections below are based on the immediate, intermediate and long-term outcomes, and work to describe all relevant lines of evidence that speak to each sub-question in Table 5.

### **4.2.1 Access by Eligible Clients (P.4.1)**

File reviews provide indicators of activities to support awareness and access by eligible clients. Performance measurement data provide good indicators of access by eligible clients. File reviews and performance data also support the diabetes case study, which illustrates how NIHB improves access to treatment for this illness. The profile of the medical transportation benefit also shows how this component supports overall access to medical services, including insured hospital care and primary health care through Provincial and Territorial governments as well as NIHB benefits. Overall, the evaluation found that the Program has met its outcomes of providing access to eligible clients.

#### **Activities to Promote Awareness**

As part of its efforts to improve access, NIHB has engaged in a series of activities to promote client awareness of NIHB. For example, over the course of 2006/07, NIHB generated a variety of pamphlets, information kits, training manuals and newsletters for both clients and providers that are regularly produced and distributed by NIHB and FN/I organizations. In addition, the Program delivered close to 150 presentations throughout the fiscal year to enhance awareness among clients, communities, providers, and regional/community coordinators.

#### **Activities to Facilitate Access**

NIHB has undertaken a number of initiatives to improve client access to NIHB benefits, including removal of the financial predetermination threshold for the dental benefit, which resulted in increased utilization of the NIHB dental benefit and decreased administration costs. The changes are expected to have a positive downstream impact on Program expenditures and in the oral health of clients. During the evaluation period, the Program also began funding NIHB-specific patient navigator positions within some client organizations. The 2008 Recognition of Changing Scopes of Practice initiative is similarly expected over the long-term to increase client access to medical services and expertise, especially in remote and isolated communities where no doctor is available.

#### **Levels of Access**

Program utilization data indicate high levels of overall access by eligible clients. For example, in 2008-09:

- More than 500,000 clients accessed the pharmacy benefit;
- Nearly 300,000 FN/I accessed the NIHB dental benefit;
- NIHB processed more than 18 million claim lines in the pharmacy and dental benefits through its electronic claims processing system;
- The Program spent more than \$50M on emergency travel; and
- The NIHB Drug Exception Centre (DEC) received an average of 1,100 calls per day and averaged 0.5 days in turning around individual requests.

However, the levels of access can be measured at the population level. A full 61% of the 815,800 NIHB clients accessed pharmacy benefits in 2008-09, and 36% accessed NIHB dental benefits. According to a recent calculation of the blended access to the two largest benefit areas - pharmacy and dental - the blended utilization rate has remained at approximately 72% over the last 10 years. This indicates a strong awareness, as well as a strong and consistent uptake of the Program over the long-term. As indicated by most available benchmarks, these levels of access are comparable to other benefit plans.

NIHB has also conducted special analyses to assess and respond to issues of access to NIHB benefits in key areas of diabetes, dental benefits and medical transportation.

### **Access to Diabetes Treatment**

The evaluation found overall high rates of access to NIHB benefits to meet the medical needs associated with diabetes. NIHB conducted an analysis to demonstrate how its listing and payment of diabetes and related medications reflects the prevalence and challenges of this chronic condition and how these medications contribute to the overall access to diabetes prevention and treatment services among FN/I. It was reviewed and approved by independent expert reviewers from NIHB's Drug Use Evaluation Advisory Committee (DUEAC).

The analysis, which can be found in Annex A to this evaluation, shows that diabetes is one of the key health challenges facing FN/I today. In order to maximize access to treatment through NIHB, diabetes drugs and supplies are made available without restriction in most cases. Access to NIHB benefits for diabetes treatment is significant as a result. For example, individuals identified as diabetics account for nearly 5.5% of the NIHB eligible population (and over 8% of clients who made a pharmacy claim). The expenditures on drugs and supplies used to manage diabetes for these individuals account for 8.8% of NIHB's pharmacy expenditure, with another 10% going towards drugs for the complications of this disease. This access to needed medications and supplies is critical for individuals living with diabetes.

### **Dental Access Profile**

The issue of increasing access to dental benefits has been a key concern for NIHB in recent years, and the Program has conducted specific research to improve activities in this area. NIHB conducted an analysis of how FN/I access both its dental benefit area, as well as how clients accessed other dental programs maintained through FNIHB. This analysis, which was reviewed by Health Canada's Chief and Assistant Chief Dental Officers found that the NIHB Program is the largest FNIHB dental program, both in terms of expenditures and number of clients served. Data from NIHB show that the annual access - or utilization - rate for the NIHB Program has remained at approximately 36% of eligible clients for some years.

The analysis, which can be found in Annex B, indicates that this low rate of utilization does not appear to be because FN/I do not have access to NIHB; indeed, if one considers NIHB data over multiple years, the access rate by FN/I rises to over 50% over two years and more than 70% over a five-year period. Even these figures are likely understating the reality, as they are based only on fee-for-service billings from dental providers, and do not include services paid for through

contracts with dental providers or contribution agreements. They also do not account for the access to dental care provided through other FNIHB programs such as the Children's Oral Health Initiative (COHI).

Finally, NIHB's study on dental access sought to situate FN/I access to dental care relative to that of other Canadians. While it is difficult to compare administrative data from the varying FNIHB programs to self-reported survey data on the overall Canadian rate in accessing dental care, the analysis suggests:

- the annual rate of utilization of dental care by First Nations is lower than the overall Canadian rate but a large portion of the NIHB client base has accessed the dental benefit;
- the services being accessed are similar; and
- in both cases, clients do not appear to be visiting dental practitioners frequently enough for effective preventive/routine care.

NIHB has recently taken steps through its Performance Measurement Framework to include indicators of how the dental benefit is being accessed. This includes indicators on dental utilization such as the ratio of preventative to restorative dental procedures paid for through NIHB, the number of clients who underwent dental care under general anaesthetic, and the number of clients who had general anaesthetic plus an antibiotic. The use of these indicators will help the Program to establish a baseline from which to measure how its dental benefit is being used over time.

## **Medical Transportation and Access to Services**

FN and Inuit face a number of challenges in accessing medical care. Many, particularly those living in remote/isolated communities, do not have regular access to basic or specialized health care services. This challenge is compounded by the fact that most health care professions are experiencing an ongoing and growing shortage of human resources. This in turn means that health care professionals not only choose not to live in remote or isolated regions, but they are often unwilling to travel into these areas. Consequently in situations ranging from medical emergencies to pregnancies to visits to specialists, medical transportation benefits are key to maintaining and improving the health of First Nations and Inuit in these communities.

NIHB medical transportation benefits assist eligible recipients to access medically required health services that cannot be obtained on-reserve or in the community of residence. One way to look at the relevance of this benefit is to look at how expenditures are made relative to where NIHB's clients live. The following two examples illustrate how NIHB's expenditures in this benefit help to provide access to FN/I needing medical care.

Indian and Northern Affairs Canada (INAC) has developed a classification system to identify FN bands who live in remote/isolated areas. Under this system, bands located in the most isolated/remote regions are defined as: Zone 3 - A geographic zone where the First Nation is located over 350 km from the nearest service centre with year-round road access; and Zone 4 - A geographic zone where the First Nation has no year-round road access to a service centre and, as a result, experiences a higher cost of transportation.

In 2007/08, the estimated population living in Zone 3 and Zone 4 reserve communities according to INAC was 121,724. Although not all of these individuals may be status Indians and hence have access to NIHB, the majority likely would be clients of the Program. Assuming that all individuals living in these communities had access to NIHB, they would have accounted for approximately 15% of NIHB's eligible client base in 2007/08.

In 2007/08, NIHB spent \$132.9M on MT claims processed through regional offices ("operating" expenditures). In that year, more than \$56M was spent on claims coming from individuals registered as living in Zone 3 and Zone 4 remote/isolated communities. In other words, of the total operating expenditure on MT in 2007/08, 42% of expenditures were made to provide access to health services for the 15% of clients registered as living in remote/isolated communities where there would otherwise be little to no health care services.

A second way to demonstrate how NIHB's MT benefit is relevant to the needs of clients would be to look at expenditures in the north. NIHB clients living in the north face the same challenges in accessing health services as FN/I in remote and isolated communities. Similar to the case of FN living in remote and isolated communities, NIHB's expenditures on MT are disproportionately targeted to clients in the north. By way of example, 28,469 clients were registered with NIHB from Nunavut. In 2007/08, NIHB provided \$16.2M in contribution agreement funding to the territorial government to deliver the NIHB MT benefit. Hence, approximately 3.5% of registered clients accounted for nearly 13% of contribution agreement spending by NIHB in 2007/08.

As these examples demonstrate, the expenditures in NIHB's medical transportation benefit, which is available to all eligible FN/I, are heavily weighted towards assisting clients in remote/isolated regions in accessing health services. Without this programming, these individuals would have greatly reduced access to services to meet their health needs.

#### **4.2.2 Compliance with NIHB Program Requirements (P.4.2)**

Extensive and systematic compliance audits provided strong lines of evidence to address questions of levels of compliance. The evaluation found overall high levels of compliance with NIHB Program requirements. In order to support the integrity of claims adjudication and payments, NIHB has developed a comprehensive benefit audit approach. Under the NIHB Provider Audit Program Health Canada has mandated the claims processor to carry out a range of audit activities as directed by the NIHB Program, in addition to maintaining a set of pre-payment as well as post-payment verification processes and financial controls.

The audit activities address the need of the NIHB Program both to comply with accountability requirements for the use of public funds and to ensure provider compliance with the terms and conditions of the Program. The objectives of the audit program are to detect billing irregularities, to validate active licensure of providers, to ensure that any required signatures on claim submissions are valid, to ensure that services paid for were received by eligible NIHB clients and to ensure that providers retained appropriate documentation in support of each claim. Claims not

meeting the billing requirements of the NIHB Program are subject to audit recovery. A description of the various provider audit activities can be found in the HICPS Financial Control Framework.

Under the NIHB Program, a significant portion of benefits expenditures are made through contribution agreements with FN/I. To do this, Regional Offices supported by NIHB HQ negotiate contribution agreements with recipient organizations (e.g., a FN band or tribal council) delivering specified NIHB benefits to a defined group of clients. Regional NIHB offices provide the funding for these agreements and are also responsible for monitoring the results. Each contribution agreement sets out mandatory reporting activities with associated timelines against which Regional NIHB Program managers conduct ongoing monitoring activities such as on-site visits, regular contact and assessment of financial and non-financial reports. In addition, the recipient organizations must hire independent external auditors to conduct annual financial statement audits. A description of the contribution audit management approach can be found in module 4 of Knowledge in a book entitled “Business Processes for Managing FNIHB Contribution Agreements”.

In the past, NIHB’s audit activities have focussed on benefits adjudicated within HICPS. More recently, the Program began to expand these activities into other benefit areas, including medical transportation, vision, and mental health. As part of this process, NIHB has developed audit frameworks and conducted pilot audits with these frameworks for each of these benefit areas. Through these pilots, the frameworks were demonstrated to be effective mechanisms to conduct reviews on the utilization of these benefits and their associated expenditures, and will provide the foundation for future enhanced audit activities.

The NIHB Program works with provider associations, as well as with individual providers, to raise awareness of these, and other, issues in order to promote continued improved compliance with Program rules. NIHB’s pharmacy audit program has been cited by the Office of the Auditor General as a best practice amongst the community of federally funded drug plans.

## **Summary of Audit Findings**

NIHB tracks its audit activities in a variety of ways, including reporting on the Program’s main findings in its various audits. In 2008/09, the main issues identified from on-site audits included:

- Documentation to support paid claims was either not available for audit review or did not meet the NIHB Program requirements;
- Paid claims did not match the item/service provided to the client;
- Items/services were claimed prior to client(s) receiving the services/items; and
- Overcharging of drugs/items and/or associated fees/markup.

Nonetheless, these audit recoveries represent less than 0.4% of NIHB expenditures in each benefit area annually, and the vast majority of providers are found to be billing within NIHB’s rules. However, while dental recoveries appear to be steady in terms of their overall percentage of benefit expenditures, it is difficult to discern a pattern from these findings, as audit recoveries



are a function of the number of audits conducted by NIHB and the issues (and recoveries) arising from them. Moreover, it should be noted that these figures should not be interpreted as a complete assessment of the impact of the audit process, as there is an unquantifiable deterrent effect on inappropriate billings and, therefore, on Program expenditures arising from these audit activities.

In addition to these recoveries, since 2007, NIHB has conducted an annual review of providers to identify anomalous billing patterns. Providers with unexplained anomalies can be put under a restricted billing regime or de-listed as a provider because of financial risk to the NIHB Program. In 2008/09, ten pharmacy and two dental providers were de-listed as a result of profiling.

## **Pharmacy Review**

NIHB established the Drug Use Evaluation Advisory Committee (DUEAC) in 2003 in order to ensure that NIHB drug listing practices remain consistent with related current clinical practice. The DUEAC is an advisory body of external licensed health professionals - experts in drug use evaluation and Aboriginal health issues. The membership of the Committee includes a number of FN/I health professionals.

The committee reviews drug-use trends on a priority basis arising as a result of developments in the clinical/ scientific literature, potential safety issues such as a warning on the use of a particular drug product, or issues that may be of particular interest to FN/I clients of the NIHB Program. Where issues are identified, DUEAC makes recommendations for Program policy changes or provider communications/interventions; it also assists NIHB in evaluating the impact of these interventions. The results of these analyses are sent periodically to health professionals across the country through the Drug Use Evaluation (DUE) Bulletin. NIHB has published bulletins, reviewed and approved by the DUEAC, outlining specific findings of the committee related to the use of diabetes medications, opioids, benzodiazepines, and asthma therapy.

### **4.2.3 Extent to Which Programming and Policy is Evidence-Based (P.4.3)**

Document reviews and interviews related to the various committees that provide expert medical advice on the development of programs and policy for NIHB provided evidence of the development of evidence-based programming and policy. Document reviews also illustrated management efforts to use performance measurement data to inform management decisions, including annual (performance) reports that publish expenditures and extensive data trends over time.

The evaluation found that NIHB programming and policy has a strong evidence-base. As mentioned above, benefits are listed or funded on the basis of medical or dental professional judgement. As well, NIHB relies on several expert advisory committees to ensure its payments of benefits reflect current clinical and scientific evidence. In addition, the Program is actively engaged in working with providers and clients to ensure their experiences and values are reflected in NIHB's policy and decision making.

NIHB relies on the advice of two expert committees that review research evidence in determining whether and how to reimburse a given drug product in the pharmacy benefit. These committees, the Federal Pharmacy and Therapeutics Committee and the Federal/Provincial/Territorial Common Drug Review, provide the Program with recommendations on the therapeutic and cost-effectiveness of drug products entering the Canadian market. These recommendations, and resulting Program decisions, are based on a determination of the relevance, or effectiveness, of a given product in treating a recognized condition (e.g., diabetes). In addition, in order to ensure that the Program delivers a range of benefits that remain relevant to clients' needs, NIHB created the DUEAC. The activities of this committee are described above.

Similarly, the NIHB Program participates in the Federal Dental Care Advisory Committee (FDCAC). The FDCAC is as an advisory body of oral health professionals which brings impartial and practical advice to Health Canada's Chief Dental Officer and to each of the federal departments in the Federal Healthcare Partnership. The approach is strictly evidence-based, as advice reflects dental and scientific knowledge, current best practice in all aspects of clinical practice as well as health and health care delivery appropriate to specific client health needs. The FDCAC advises NIHB on oral health policy, on best practices and evidence-based oral health as well as on specific clinical issues, including current issues, new technologies and procedures, and complementary issues that will impact on the oral and dental health of clients.

#### **4.2.4 Sustainability (P.4.4)**

An intermediate outcome of the NIHB Program logic model, sustainability has been commonly defined as the NIHB Program's ability to keep expenditures within reference levels. This evaluation has shown that NIHB has sought and obtained annual supplemental funding over and above its reference levels (which grow at ~2.2%) in order to fund Program growth (which increases at ~6%) which demonstrates that NIHB is not sustainable from this perspective. However, the evaluation found that with sustainability (defined as above) as an objective, the fact that the NIHB Program must seek annual supplemental funding is not a useful performance indicator of overall Program management. While strategies to gain efficiencies and economies through Program management are in place and result in cost avoidance (see Section 4.3), these measures alone are unlikely to be sufficient to secure the long-term sustainability of the Program as long as it continues to have an insufficient growth escalator.

#### **4.2.5 Improved Health Status of First Nation and Inuit (P.4.5)**

Official statistics indicate that the health differential between FN/I and Canadians is decreasing, but the gap remains. As with most health interventions, the ultimate outcome of improved health status at the population level is difficult to attribute to specific Program effects. Though not directly attributable to NIHB, FN/I health status has been improving over the past 20 years in some areas such as life expectancy and reduction of infant mortality.

The evaluation found overall that it is reasonable to assume that NIHB's evidence-based benefits likely contribute to improvements in the health status of FN/I. Indeed, this evaluation provides some case examples of research evidence that specific interventions, such as diabetes treatment,

have met a specific health need or reduced illness, and just as individual interventions have direct health benefits at the individual level, it is reasonable to attribute some contribution to the improved health status of FN/I as a population by the provision of medically necessary and evidence-based health benefits under NIHB. The Program has revised its annual performance measurement framework to clearly link Program outputs and immediate/intermediate outcomes to this ultimate strategic outcome of improved health status.

While it is not possible to confirm the impact, NIHB's coverage of drugs to manage diabetes, in accordance with clinical practice guidelines can be said to contribute to improvements in the quality of life of FN/I with diabetes. In addition, by helping to manage this condition through drug therapy, the Program is helping to prevent some of the downstream impacts and complications of diabetes such as blindness, strokes, and lower-limb amputations. See Appendix A for a detailed discussion of these findings.

In the case of mental health, it should be noted that expenditures in this benefit area have been shrinking in recent years, which may be attributed to the uptake of other professional counselling, transportation, and emotional supports for FN/I such as programming related to the Indian Residential Schools Settlement Agreement. Because the client base for these services overlaps considerably with the NIHB benefit, it is reasonable to assume that the upward trend in these programs may be a significant factor in the decrease in NIHB mental health crisis counselling utilization rates. As such, while it is reasonable to attribute to NIHB-specific benefits some contribution to positive health outcomes at the long-term, population health level, the specific impact of the NIHB Program cannot be isolated. There are, however, potential avenues for using NIHB Program and other data to assess the combined impact of the benefits and services available, and to coordinate intervention strategies across FNIHB program areas and clusters.

NIHB has also made some advances with respect to performance measurement linked to health outcomes. The 2007/08 NIHB Performance Measurement Framework describes performance measurement indicators linked to each of the expected outputs, and immediate and intermediate outcomes described in the Program logic model. These indicators serve to demonstrate that NIHB is meeting its immediate and intermediate outcomes, but that the final outcome of contributing to improved client health status would be difficult to measure.

Based on these findings, NIHB updated its Program performance indicators in April 2009. One of the key results of this update showed that, while NIHB is not able to demonstrate a causal link to health outcomes from its administrative data, the Program was able to demonstrate that it has a variety of processes in place to ensure the benefits are funded on the best available clinical and scientific evidence. From this, the Program identified a number of new indicators to show how the activities of NIHB contribute to meeting the final outcome of improved health status.

The new indicators, many of which were developed in consultation with outside experts, also include those outlined in NIHB's Annual Client Safety Report (such as the number of rejected claims for client safety issues, and the number of interventions by NIHB with pharmacists and

physicians where client safety issues are identified) which further reinforce that NIHB's evidence-based benefit policies (in this case, regarding appropriate and safe drug use) ensure that those benefits covered or funded by NIHB are helping clients to improve their health status.

#### **4.2.6 Performance Findings and Conclusions**

##### **(i) Effective in Meeting Immediate and Intermediate Program Cluster Outcomes**

The evaluation found that the NIHB Program cluster has been effective in meeting its immediate and intermediate outcomes with respect to Program performance. The Program has had a high level of uptake among eligible Program recipients, and has met most of its objectives with respect to Program delivery. The Program is able to efficiently process claims, its administrative expenditures are small relative to comparable plans, and the Program has a number of processes in place to promote provider and client compliance with its administrative requirements.

The analysis of NIHB Program management information has provided a strong line of evidence on key areas such as diabetes management, which would not be available without NIHB's performance measures and analysis of Program interventions.

##### **(ii) Reasonable to attribute that NIHB Benefits make a contribution to improved FN/I Health Status**

The health of FN/I has improved in recent decades. While the impact of the NIHB Program cannot be isolated and causal links cannot always be demonstrated, the evaluation found that each benefit provided by NIHB is evidence-based and represents a medically necessary intervention. Hence it is reasonable to assume that the Program has impacted positively on the population health status of FN/I in accordance with the Program's mandate and ultimate objective. Moreover, review and analysis of the treatment of specific diseases and conditions via NIHB benefits (such as the case analysis of drug utilization in accordance with clinical guidelines for treatment of diabetes) demonstrate that a specific link can be established between specific NIHB benefits and the successful treatment of certain chronic diseases.

##### **(iii) NIHB Performance Measurement Data could have other applications within FNIHB**

The evidence that NIHB interventions have had a demonstrated impact on health outcomes in the area of specific diseases and conditions is useful for NIHB performance measurement, and could also benefit other Program clusters by informing diabetes and other programming at Health Canada, for instance, the Children's Oral Health Initiative.

### **4.3 Efficiency and Economy**

The 2009 Government of Canada core issues of efficiency and economy are best supported by clear indicators based on financial data, as well as indicators based on financial and non-financial cost data, and benchmarks or other useful comparators. While the full range of potential economic analysis should be considered for each evaluation on an individual basis, the specification of economy and efficiency implies an economic perspective on the Program or possibly societal level - and not at the level of the individual. In other words, while the cost of NIHB interventions has definite benefits to individual clients, this cost-benefit ratio is less

central to the current analysis. Instead, the focus is on a program-specific cost-efficiency analysis, and assesses whether NIHB benefits could be delivered more economically, or whether the same or better results could be achieved with less cost.

Interviews, file reviews and the benchmarking studies provided strong lines of evidence for the economic analysis of program performance. Whether the claims processing and overall management are efficient and economical is also indicated by file reviews and benchmarking.

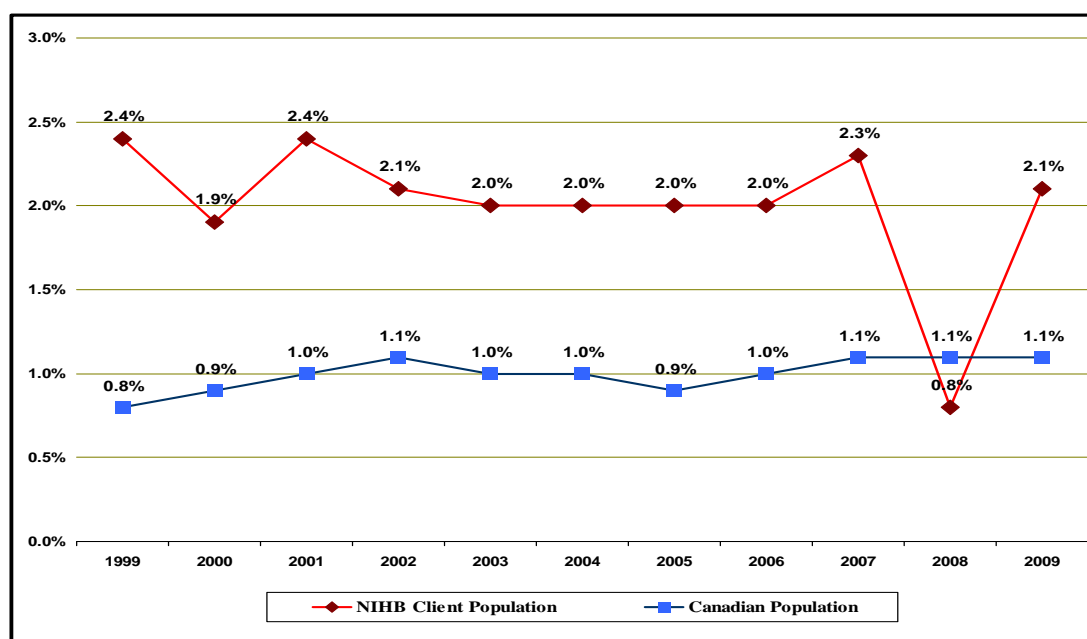
### 4.3.1 Cost Drivers

The following analysis of cost-efficiency describes the cost-drivers that underlie the Program expense profile presented in section 1.6, and examines overhead expenditures in detail, including benchmarks against those of other payers. Like other health programs, NIHB expenditures are growing at a rate that often exceeds other programming. The Program's overall expenditures, as well as its annual growth rate are shown in Figure 3.

#### Growth in Client Base

While many of the NIHB cost drivers are the same as those faced by other payers of similar benefits, NIHB also faces several unique challenges and cost drivers in the delivery of its benefits. This includes a rapidly growing client base (Figure 3), since the FN/I population has a higher growth rate compared to the Canadian population as a whole, and experiences a unique disease burden described above.

**Figure 3**  
**Comparison of Growth in NIHB's Client Population vs the Canadian Population**



## **Cost Drivers by Benefit Area**

As indicated above, the evaluation found that the few NIHB cost drivers that can be manipulated are being managed on an on-going basis. While the size of the eligible client population and availability of medical services may increase as a factor external to NIHB, some measures can and are being taken to influence costs, such as managing delivery models and overhead. Growth in NIHB expenditures can be attributed to cost drivers in each of the following benefit areas:

### **Pharmacy**

The increased role of prescription drugs in modern medicine in Canada is well documented, as more and more conditions are being treated or managed with pharmaceuticals as opposed to surgery. Through the treatment of various diseases, they have become an increasingly significant component of the health care system.

According to the Canadian Institute for Health Information (CIHI), spending on prescription drugs continues to be the fastest growing component of health care spending and is the second largest component of total health care spending in Canada behind expenditures on hospitals. According to CIHI, there are numerous factors driving this increased expenditure. The main factors, documented by CIHI and a number of other organizations studying drug expenditures, are primarily related to:

- the increased volume of drug use; and
- the entry and uptake of new, more expensive therapies.

### **Medical Transportation**

Growth in the medical transportation benefit is driven by a variety of factors, including the high demand for and increased use of health services by FN/I; the cost of providing access to medical care to a highly dispersed client population, often living in remote/isolated areas; the lack of health care providers to provide services to FN/I in remote areas; changes in provincial programming such as the increasing centralization of health services in major centres; increasing fuel costs and other inflationary pressures.

In addition, MT costs are also being driven by the changing nature of health service delivery. For example, according to CIHI:

- Acute care hospitalization in Canada was approximately 2.2 million in-patients in 2004/2005, a decline of 13.1% since 1995/1996.
- The number of days in-patients spent in acute care hospitals in Canada (excluding Quebec) decreased from 16.6 million in 1995/1996 to 14.9 million in 2004/2005, a 9.9% decrease in the last nine years; and

- The total number of days spent in a Canadian acute care facility has been steadily declining since 1995/1996. The national average length of stay decreased from 7.2 days in 1995/1996 to 7.0 days in 1998/1999 and began to increase in 1999-2000 by 0.1 day annually, reaching 7.4 days in 2002/2003. This trend reversed in 2003-2004, when the average length of inpatient stay decreased to 7.3 days.

As hospitalization rates and the length of in-hospital stays decline, the NIHB Program experiences an inflationary pressure on its Program costs, as the Program must fund the meals and accommodation for individuals who formerly would have been hospitalized when obtaining medical care (and who would have been covered by P/T Programs).

## **Dental**

Growth in the dental benefit is driven by the relatively poor oral health of FN/I, the cost of delivering dental care to a highly dispersed client population, increases in the fees charged by dental providers for their services, the increased cost and use of new therapies and procedures, and the rate at which clients access the NIHB Program. Dental costs may also be affected by the high rates of diabetes experienced by FN/I.

## **Vision**

Growth in the vision benefit is driven by the rate at which clients access the NIHB Program and changes to provincial funding for vision services for eye exams. Vision costs may also be affected by the high rates of diabetes in FN/I.

## **Mental Health**

Variances in mental health expenditures by NIHB are a function of a number of factors. First, the size of this benefit means that relatively small changes in expenditures translate into larger percentage fluctuations relative to other benefit categories. Second, expenditures in this area are 'demand driven' and hence vary from year to year. Finally, the current decrease in NIHB expenditures can be attributed to the uptake of other professional counselling, transportation, and emotional supports such as programming related to the Indian Residential Schools Settlement Agreement. Because the client base for these services overlaps considerably with the NIHB benefit, it is reasonable to assume that the upward trend in these programs may be a significant factor in the decrease in NIHB short-term crisis mental health counselling utilization rates.

## **Expenditure Growth Relative to Other Payers**

The evaluation found that NIHB expenditure growth rates compare favourably to other payers of similar benefits across the country. For example, Table 6 compares NIHB's current growth rates to various measures of national growth of pharmaceutical expenditures in Canada.

**Table 6**  
**Expenditure Growth for NIHB and Other Plans**

NIHB Pharmacy Growth Rate (2008/09)	3.9%
CIHI Estimate for Public Drug Expenditure Growth (2008 calendar year)*	7.3%
CIHI Estimate for all (Public & Private) Drug Expenditure Growth (2008 calendar year)*	7.6%
IMS Health Estimate (2007 calendar year)	6.4%
Estimate of Private Payer Expenditure Growth (2008 calendar year)	5%

\* Source: CIHI, National Health Expenditure Trends. 1975/2009.

Similarly, Table 7 provides the forecasted growth rate estimates for 2008/09 of public drug plans across the country, with an overall forecast for Canada of 7.2%. The pharmacy expenditure growth rate for NIHB in 2008/09 was 3.9%.

**Table 7**  
**Estimated Expenditure Growth Rates for NIHB and Other Plans**

British Columbia	1.0%
Alberta	6.0%
Saskatchewan	13.7%
Manitoba	2.9%
Ontario	5.7%
Quebec	8.5%
Nova Scotia	15.5%
Newfoundland	19.4%
Prince Edward Island	13.0%
New Brunswick	2.4%
North West Territories	10.6%
Yukon	3.6%
Nunavut	-5.7%

Source: In CIHI, National Health Expenditure Trends. 1975/2008. Total health Expenditure by Province/Territory and Canada, 1975/2008 - Constant Dollars. Public Sector table B.3.1.

\* The decrease in NIHB Program client population in 2008 is mainly attributed to the removal of the Labrador Inuit Association (LIA) population in the Atlantic Region who transitioned to the Nunatsiavut self-government agreement.

### 4.3.2 Efficiency and Economy of Claims Processing

NIHB manages its benefit areas through a number of electronic systems. These systems, developed in response to a rising demand for health benefits and a need for NIHB to implement a benefit management framework with common rules across the country in its benefit areas, allow for the efficient adjudication of claims. In 2008/09, for example, NIHB processed more than 15.6 million claim lines in its pharmacy benefit and more than 2.5 million claims in the dental benefit.



Of these claims, the majority of benefit requests are processed against program rules in real time, with no prior approval or pre-determination required, in order to ensure clients receive timely access to their benefits. For instance, of the millions of claim lines processed by NIHB in its pharmacy benefit in 2008/09, less than 4.5% required some form of prior approval by the Program. Similarly, less than 10% of all dental claims required pre-determination.

In cases where NIHB has implemented restrictions on certain products or procedures, the Program has developed processes that allow it to work with providers to process claims on a timely basis. For example, the NIHB Program's Drug Exception Centre (DEC) is a national toll-free call centre that processes pharmacists' requests for drug benefits that require prior approval. The DEC ensures a consistent application of NIHB's drug benefit policy across the country and therefore an evidence-based approach to funding drug benefits. The DEC, which was first established in 1997, has evolved in a manner to allow it to efficiently process prior approval requests. The DEC currently handles more than 1,100 calls per day from across Canada and averages 0.5 day in turning around individual requests.

In 2005, the NIHB Program changed its business model for DEC from using physicians on part-time contracts to full-time pharmacist consultants and technicians to handle prior approvals. This change, as well as enhancements that have been made in NIHB's various claims adjudication systems, allowed the DEC to reduce the response time between receipt of prior approval requests, once all documentation has been collected, to a decision point from a high of 1.58 days per call in July 2005 to a low of .46 day per call by the end of last fiscal year. This turnaround time far exceeds the industry standard.

NIHB's administrative expenditures are set out in Table 8. The Program's benefit expenditures have been tracked and reported separately from its administrative costs since 2006/07. This supports the transparency of expenditures for each category of spending, and shows the different rates of growth of expenditures. As the rates of total expenditures, including those made towards at the expenditures have grown faster than regular salary and O&M expenditures. NIHB incurs two main types of administrative costs in managing the Program: 1) salary / O&M and 2) payments made to the company that processes claims through HICPS.

**Table 8**  
**NIHB Expenditures on Salary/O&M, Claims Processing and Benefits**

	<b>FY 2006-2007</b>	<b>FY 2007-2008</b>	<b>FY 2008-2009</b>
Salary and O&M expenditures	\$ 34.0	\$ 36.5	\$ 35.9
Claims Processing Payments	\$ 18.3	\$ 21.1	\$ 23.3
Benefit Expenditures	\$ 837.9	\$ 877.1	\$ 908.4

The benchmarking study of overhead costs also concluded that the outsourcing options available to NIHB are similar to those of other publicly and privately funded plans, and there are no practical restrictions or limitations for NIHB using these options. Other plans effectively manage

outsourcing relationships for administrative functions without impacting program effectiveness. The report concluded that administrative costs of the NIHB claims processing would be higher if it was operated in-house.

It is important to note that, as with other payers of health benefits, NIHB has been experiencing an overall increase in the number of transactions it pays for annually. This growth in claim line payments is driven by an overall increase in demand for health services, and an increase in the number of clients accessing NIHB. This includes, in particular, growth in the number of claim lines for certain prescription drugs such as methadone, where prescriptions are dispensed daily and hence claim lines are generated each day.

### **4.3.3 Efficiency and Economy of Program Management**

#### **Activities to Promote Efficient and Cost-Effective Management**

NIHB has engaged in a number of activities to promote efficient and cost-effective Program management, including the adoption of new generic price rules in Ontario. In May 2007, NIHB adopted new pricing for generic drugs, as well as a lower tolerance or mark up paid on drug costs, to bring the Program's pricing in line with new (lower) prices paid by the Ontario Drug Benefit (ODB) Program. In doing so, NIHB became and continues to be the first and only public or private payer of drug benefits in Ontario in addition to ODB to lower its reimbursement prices for these products. The adoption of this pricing saved NIHB \$3M in the first twelve months.

NIHB also implemented a Short-Term Dispensing policy in September 2008, in response to an increase in the frequency and, therefore, costs of short term dispensing (i.e. daily and weekly dispensing). Under this policy, the Program will pay up to a maximum of one NIHB approved dispensing fee per 28 days for drugs for chronic conditions. For certain "high-risk" drugs where safety, risk of diversion and compliance are of concern (e.g., narcotics, benzodiazepines), a less than 28 day supply will be compensated. The focus of this policy was to reduce the volume and expenditures incurred by the Program related to short-term dispensing. It is expected to save the Program \$7M in 2009/10.

The NIHB Program has taken numerous steps at the national level to improve the efficiency and economy of the medical transportation benefit. This work has centred around three priority areas:

- strengthening the MT Policy Framework for consistent application across regions;
- improving the effectiveness of data reporting and collection systems to support analysis and benefit management; and
- increasing regional and community capacity to manage the MT benefit.

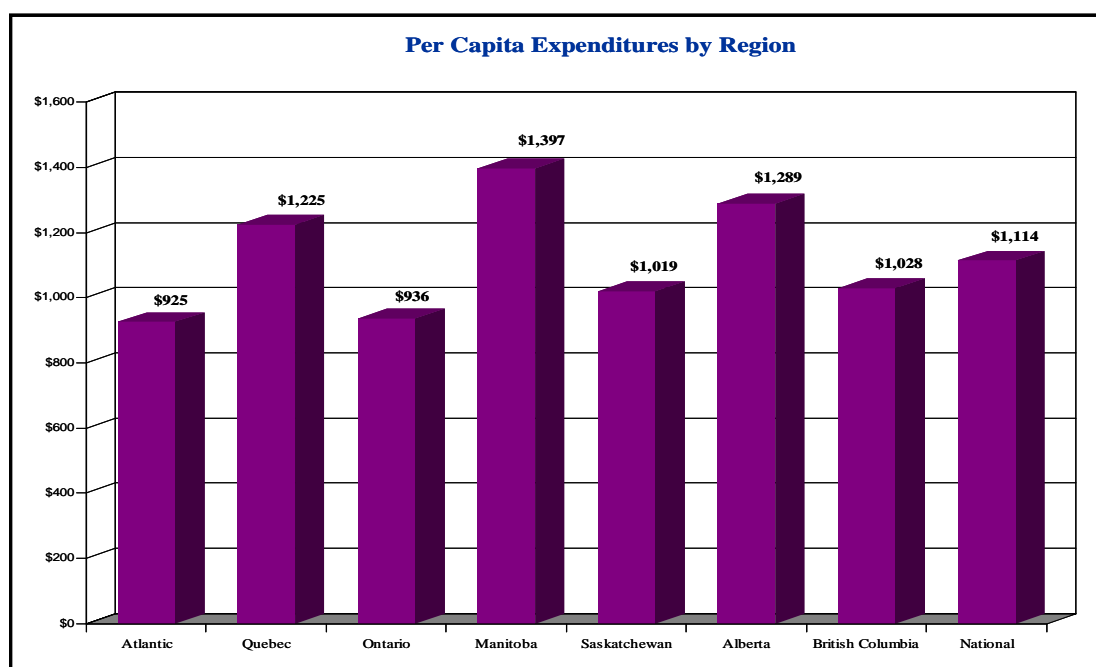
In addition, the Program has also taken steps since 2005 to increase its support for communities in their efforts to coordinate and monitor medical travel. The Program has provided funding to communities in order to purchase vans, in order to promote more co-ordinated and, therefore, cost-effective travel. Similarly, NIHB has increased its work with communities to enhance coordination of appointments and put in place other measures to increase the effective and efficient use of MT funding. The Program is also working with providers, such as airlines and

hotels, to negotiate the best rates for its clients. In all regions, opportunities are utilized whenever possible to bring health professionals (e.g., dental and vision care providers) into communities in order to lessen pressure on NIHB MT expenditures.

As found in the benchmarking study of administrative costs, NIHB expends a slightly lower proportion of paid claims on overall policy making (1.5%) compared to privately funded plans (1.8%). On the other hand, NIHB expends a higher portion of paid claims on claims adjudication (5.0%) than privately funded plans (3.8%). This is attributed to the higher proportion of claims requiring mandatory prior authorization and the higher level of information required for claims submission by NIHB, which is due to its basis in health policy objectives.

One factor in the efficiency of management is to look at variations in regional benefit expenditures relative to their administrative allocations and client base. With respect to benefit expenditures, and as shown in Figure 4, NIHB's expenditures vary considerably across each region.

**Figure 4**  
**2008/09 Per Capita Spending in NIHB**



These variations in per capita spending are the result of variations in NIHB's expenditures in individual benefit areas. For instance, the higher levels in Manitoba reflect the higher costs of medical transportation in that province. Moreover, the study found that the cost differentials experienced across P/Ts is also experienced by other plans. For instance, the mean cost of a ground ambulance trip for P/T plans is \$150 in PEI and \$45 in Ontario.

#### 4.3.4 Efficiency and Economy Findings and Conclusion

The evaluation has found overall that the delivery of NIHB is efficient and economical, as indicated by comparisons with other benefit plans and programs. The additional costs of adjudication are reasonable in the context of the health policy basis of NIHB, given that other plans and programs are not based in medical necessity. The external review of alternate service delivery models also concluded that the delivery model of outsourcing claims processing is more economical than an in-house processing model would be.

The benchmarking study on administrative costs found that the system of claims adjudication was well managed. However, given that electronic claims processing capabilities have evolved, the authors recommended that the Program consider additional process automation surrounding prior authorization and predetermination to gain administrative efficiencies through reduced time (and human intervention) spent adjudicating each claim. As well, the Program should consider streamlining claims adjudication processes when there are several payment methodologies for a single benefit area. For example, the medical transportation benefit is administered in regional offices as well as locally (within the band or community) under contribution agreements, and each group uses different procedures and payment methods. Streamlining and standardizing the processes across all locations would result in economies of scale and improve monitoring of this benefit area as data would be collected in a uniform manner.

## 5.0 OVERALL CONCLUSIONS

The evaluation was able to assess the NIHB Program against the objectives framed in the program logic model. The lines of evidence were generally strong, and a main challenge in producing the report was coordinating the evidence to address specific evaluation reporting requirements for the wide range of NIHB Program benefits.

In terms of Program objectives, logic model outcomes around Program sustainability and contribution to improved health status were found to be potentially unclear and less straightforward to measure. In the case of improved health, attribution remains an issue as causal links cannot always be demonstrated. However, the evaluation found that since each benefit provided by NIHB is evidence-based and represents a medically necessary intervention, it is reasonable to assume the Program has had a positive impact on the health status of FN/I clients.

In the context of the NIHB Program, sustainability has been commonly thought of in terms of whether or not the Program is able to keep expenditures within reference levels. This evaluation has shown, however, that NIHB has sought and obtained annual supplemental funding over and above its reference levels (which grow at ~2.2%) in order to fund Program growth (which increases at ~6%) which demonstrates that NIHB is not sustainable from this perspective. The evaluation also found, however, that with sustainability (defined as above) as an objective, the fact that the NIHB Program must seek annual supplemental funding is not a useful performance indicator of overall Program management. While strategies to gain efficiencies and economies

through Program management are in place and result in cost avoidance, these measures alone are unlikely to be sufficient to secure the long-term sustainability of the Program. Therefore, this evaluation concludes that the sustainability issue for NIHB should be re-defined to focus on two critical issues relating to the management of the Program:

- NIHB's ability to forecast its own expenditures and live within its Parliamentary allocations; and
- NIHB's success in managing its benefit and administration expenditure growth relative to other similar payers of benefits.

Similarly, the benchmarking research provided statistics showing the cost-effectiveness of the Program in comparison with other benefit plans, and provided current P/T comparisons broken down by Program components. These benchmarks, commonly absent from program evaluations, were highly informative and especially useful in addressing evaluation issues of efficiency and economy. The Program was found to be relevant overall to the health policy objective of improving the health status of FN/I. NIHB benefits were also found to meet the unique needs of FN/I clients, for example, the medical transportation benefit provides access to medical services for clients living in isolated or remote areas where there would otherwise be little to no health care services.

In terms of administrative processes, the evaluation found that the level and quality of administrative data in non-HICPS benefit areas (medical transportation, vision care and mental health) could be improved in order to provide a useful set of performance data to support management decision-making.

The evaluation also found that the Program is aligned with federal priorities identified in Speeches from the Throne, as well as with longstanding departmental strategic objectives. There are some areas of overlap with FNIHB programs, however, these are mostly positive and show potential for creating links and synergies as recommended below.

The system of claims adjudication based on evidence-based plan coverage determined with the advice of expert committees indicates that the Program has been managed well according to its evidence-based principles for intervention. The additional effort for adjudication of benefits was found to be marginally higher than it is for other benefit plans. However, this was found to be in accordance with the additional effort required to ensure that each claim is medically necessary, which is required in order to achieve the Program mandate to improve FN/I health status.

As mentioned above, the evaluation found that it is reasonable to attribute improvements in the health status of FN/I to the NIHB Program. The provision of medical benefits is typically seen as an effective way to improve health status, and the uptake of these benefits by FN/I clients is a positive indication of the Program's performance in improving the health status of its eligible population.

Overall, the evaluation found that the Program's delivery has been efficient and economical when compared to similar programs. The costs of delivery are determined mostly by the size of the eligible population and the demand for, and costs of pharmaceutical and other medical services and products. The Program has established policies and processes to reduce expenditures wherever possible, including contracting services for claims processing to a private sector contractor, and has arguably achieved most of the major efficiencies possible within its mandate. That said, specific actionable recommendations are included in the following section.

## 6.0 RECOMMENDATIONS

The NIHB Program should:

1. Re-define the issue of Program sustainability to focus on two critical issues relating to the management of the Program:
  - NIHB's ability to forecast its own expenditures and live within its Parliamentary allocations; and
  - NIHB's success in managing its benefit and administration expenditure growth relative to other similar payers of benefits.
2. Improve administrative data in non-HICPS benefit areas (medical transportation, vision care and mental health) in order to support Program management and policy decisions regarding the most effective use of resources.
3. Review benefit administrative processes surrounding prior authorization and predetermination to assess the potential for greater efficiencies through streamlining or additional automation and to ensure alignment with costs of other similar payers.
4. Explore the potential for additional linkages/synergies with other FNIHB programs, for example, how the Children's Oral Health Initiative (COHI) supports uptake of NIHB dental benefits.
5. Expand audit activities into benefit areas not covered by current audits.

# **ANNEX A THE PHARMACY BENEFIT AND THE MANAGEMENT OF DIABETES**

The statistics cited in this evaluation emphasize and confirm the need for health services by FN/I. These needs are diverse and complex; one way to demonstrate how NIHB meets these needs is to use a case study showing how one benefit area responds to the specific needs of FN/I. The following case study shows how NIHB's payment of medications in its pharmacy benefit reflects the prevalence and challenges of this chronic condition and how these medications contribute to the overall management of diabetes in FN/I. It has been reviewed and approved by independent expert reviewers from the NIHB Drug Use Evaluation Committee (DUEAC).

## **Introduction**

Diabetes and its complications are one of the most serious and growing health challenges faced by First Nations and Inuit. Through its pharmacy benefit, the NIHB Program covers a wide range of medications and supplies that assist in the management of this condition. This case study provides an overview of the challenges faced by those with diabetes as well as the contribution of drug therapy in the management of diabetes. It then goes on to provide specific details on how NIHB contributes to the management of this disease through its listings of diabetes drugs on the drug benefit list and payment of medications for diabetes and its complications. Finally, it provides a brief overview of the linkages between the NIHB Program and other areas of FNIHB, which are actively involved in educational, screening, and prevention activities.

## **Challenge of Diabetes**

Diabetes is a serious condition with potential devastating complications that affects all age groups worldwide and is characterized by the body's inability to produce sufficient insulin and/or properly use insulin. Type 1 diabetes occurs in approximately 10% of patients with diabetes, and it results when little or no insulin is produced by the body. Type 2 diabetes is a metabolic disorder caused by varying degrees of insulin resistance; the body usually produces insulin but is unable to use it properly.

When inadequately managed, diabetes is likely to result in poor glycemic control. Impaired glycemic control, if prolonged, may result in diabetes-related complications (e.g., ischemic heart disease, stroke, blindness, end-stage renal disease, lower limb amputation). As opposed to diabetes type 1, it is possible to prevent or delay the onset of diabetes type 2.

Diabetes is associated with:

- Cardiovascular disease, the leading cause of death in individuals with diabetes (2-4 fold more than non-diabetic people).
- Depression; and
- Other chronic conditions - 11% of those with diabetes have three or more chronic health conditions.

Diabetes and its complications increase cost and service pressures on Canada's public healthcare system. In 2005, federal, provincial and territorial governments spent an estimated \$5.6 billion to treat people with diabetes and its complications. In 2005/2006, approximately 1.9 million (5.9%) Canadians aged 20 years and older had a diagnosis of diabetes. However, it is estimated that 2.8% of the general adult population has undiagnosed type 2 diabetes and the true prevalence of diabetes may approach 2.0 million.

### **Diabetes in Aboriginal populations**

Type 2 diabetes has reached epidemic proportions among Aboriginal people in Canada with national age-adjusted prevalence 3 to 5 times higher than that of the general population; in some individual communities, rates have reached up to 26%. Diabetes in some Aboriginal communities is also diagnosed at a much younger age, with the result that diabetes-related complications may occur at a younger age as well. Aboriginal women have more than twice the risk of gestational diabetes compared to non Aboriginal women and have high rates of pre-existing type 2 diabetes. Pre-diabetes and metabolic syndromes are also more common in these populations. Obesity is an important risk factor for diabetes in Aboriginal communities. Contributing factors include low rates of physical activity and the replacement of traditional foods with highly refined foods.

First Nations and Inuit with diabetes face the same complications as others with diabetes and, because they are diagnosed at a younger age, can face the challenges of this condition for a longer period. This in turn raises the importance of NIHB/FNIHB programming to help in the management of these complications.

### **Guideline for optimal care for diabetes**

#### **General**

Effective diabetes care is supported by evidence-based clinical practice guidelines. This includes: regular monitoring of blood glucose, blood pressure and cholesterol levels by a team of health professionals (HP): physicians, nurses, diabetes educators, dietitians, pharmacists, etc. One of the key chronic disease management challenges of diabetes is achieving a good level of management by individuals with diabetes themselves. These patients need training, goal setting and planning skills. They also need a broad range of tools including medications, devices and supplies to achieve the recommended blood glucose, cholesterol and blood pressure targets. Without these tools, individuals with diabetes are not able to achieve optimal results from their treatments.

#### **Pharmacological management of type 2 diabetes**

The management of type 2 diabetes is slightly different from type 1 diabetes. Type 1 diabetes includes the use of insulin, while type 2 diabetes is mainly managed by oral drugs (called antihyperglycemic drugs).

#### **Steps to management:**

- When glycemic targets (blood glucose) are not achieved within 2-3 months of lifestyle management, antihyperglycemic drugs should be initiated



- Adjustments/additions of antihyperglycemic drugs should be made to attain a target for glycated hemoglobin (A1C) within 6 - 12 months
- For patients with marked hyperglycemia consideration should be given to initiating combination therapy with 2 agents or initiating insulin.

Aboriginal specific:

- Screening for diabetes in Aboriginal children and adults should follow guidelines for high-risk populations (i.e. starting earlier and at more frequent intervals) and include identification of modifiable risk factors (e.g., obesity, lack of physical activity, unhealthy eating habits).
- Culturally appropriate primary prevention programs should be initiated in and by Aboriginal communities to increase awareness of diabetes and all levels of prevention.
- Published clinical practice guidelines apply to Aboriginal patients but sections may need adaptation and sensitivity to language, and respect for the cultural and geographic issues related to diabetes care are essential.

### **Medications covered by the NIHB Program**

There are two types of benefits for drugs used to manage diabetes under the NIHB Program:

#### **Open Benefits:**

the NIHB Program currently covers 7 oral and 13 injectable drugs for diabetes as open benefits (i.e. drugs for which there are no criteria in order for clients to gain access).

#### **Limited Benefits:**

the Program currently covers 2 oral drugs for diabetes as Limited Benefits (i.e. drugs for which clients must have tried other available alternatives before NIHB will approve their use). This “stepped” therapy approach is consistent with clinical practice and evidence recommendations and a prior approval by the NIHB Drug Exception Center is needed to cover these drugs.

In other words, the large majority of drugs for diabetes covered by NIHB are available to FN/I without restriction. This coverage reflects the important role these drugs play in the management of diabetes, as well as the prevalence of this disease in FN/I. The NIHB Program's coverage of drugs for diabetes is comparable to that of other publicly funded drug benefit plans.

### **NIHB's Drug Review Processes**

In considering whether and how to provide coverage for drugs for diabetes on its drug benefit list, the NIHB Program relies on the advice of several expert advisory committees. Certain of these committees include representation by FN health professionals as well as other publicly funded drug plans. They focus both on the clinical and scientific evidence to support the use of individual diabetes drugs relative to other therapies as well as examining trends in drug use in the overall management of the disease. Their advice and guidance is invaluable to NIHB in ensuring its coverage of diabetes medications reflects developments in clinical practice.

These advisory committees include:

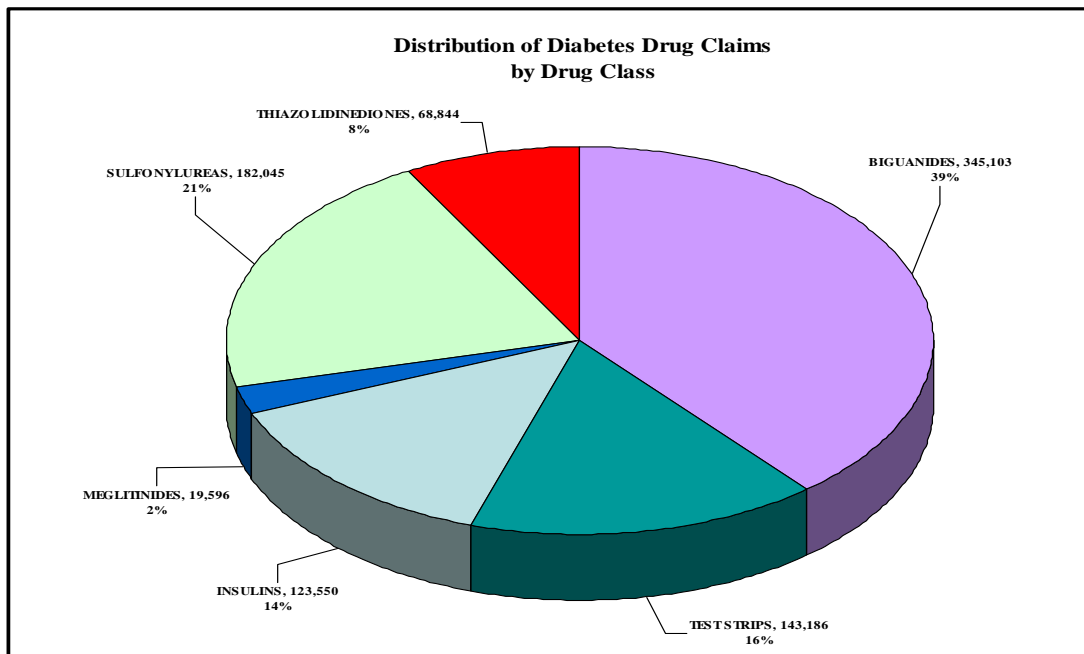
- **The Federal/Provincial/Territorial (F/P/T) Common Drug Review (CDR):** Housed in the Canadian Agency for Drugs and Technologies in Health (CADTH), the CDR provides objective clinical and cost effectiveness reviews of new drugs. The Canadian Expert Drug Advisory Committee (CEDAC) provides members of the CDR with formulary listing recommendations for a range of drug products. All P/Ts, except Quebec, participate in the CDR process.
- **The F/P/T Canadian Optimal Medication Prescribing and Utilization Service (COMPUS):** Also located in CADTH, COMPUS identifies and promotes optimal drug use by looking at the "real world" use and evidence for specific drug products. Recently, CADTH has conducted a number of analyses and studies on diabetes treatments.
- **The Federal Pharmacy and Therapeutics Committee (FP&T):** The FP&T Committee is an advisory body of health professionals managed by the NIHB Program on behalf of six federal departments. The FP&T Committee provides these programs with evidence-based pharmacy and medical advice on the formulary listing status of certain drugs. Membership of the committee includes several FN physicians.
- **The NIHB Drug Use Evaluation Advisory Committee (DUEAC):** The DUEAC is a specific committee managed by the NIHB Program to provide the Program with recommendations to promote optimal drug use. The committee has conducted several analyses of the utilization of drugs for diabetes in the NIHB Program and, in 2005, published a bulletin for health care professionals across Canada to raise awareness of certain issues.

### **The use of drugs for diabetes and related medications in the NIHB Program**

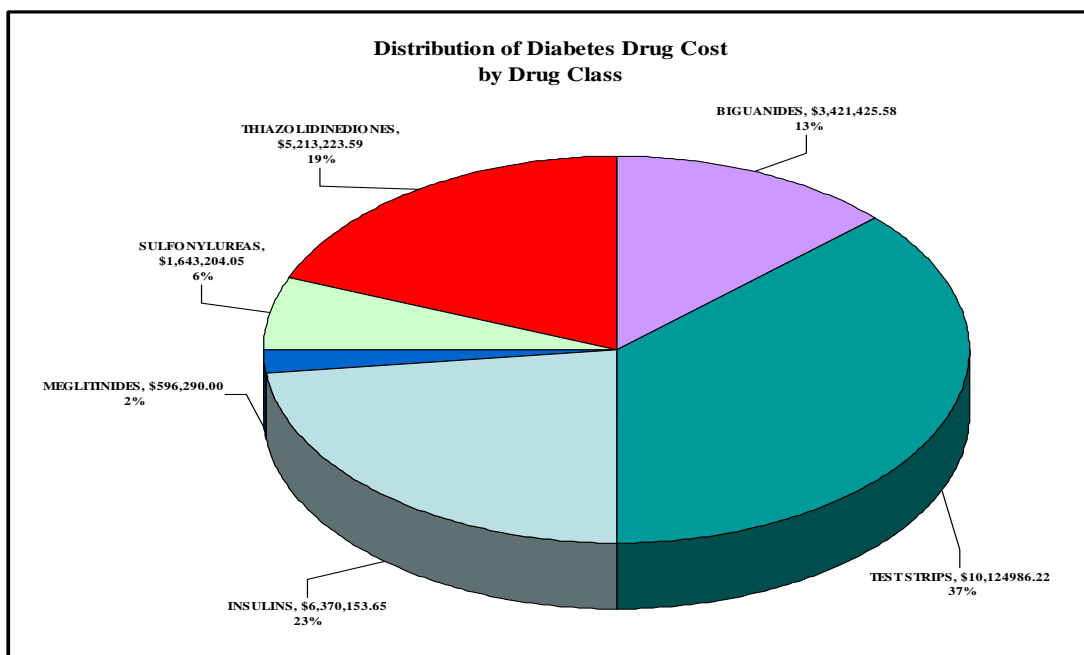
In 2008, the NIHB Program spent \$386,039,634 on pharmaceutical products. In that year, approximately, 12.5 million claims were processed in this benefit area. Of this expenditure, nearly \$34,013,243 (approximately 8.8%) was for medications and supplies to manage diabetes. With respect to claims, 882,324 (approximately 7%) were processed for individuals identified as having diabetes. These statistics are summarized in Figures 5 and 6).

In 2007, NIHB conducted an analysis to determine the cost of the complications caused by this condition. The study - reviewed and approved through the Drug Use Evaluation Advisory Committee - found that, in 2005/06, 39,000 out of 42,000 of those with diabetes covered under the NIHB Program, received a prescription for medications related to the complications of diabetes. Expenditures for these drugs, including drugs for diabetic neuropathy and renal failure, neuropathic pain, diabetic macrovascular complications, and diabetic-associated gastrointestinal disease, were over \$45.3M.

**Figure 5**  
**Distribution of Diabetes Drug claims by Drug Class**



**Figure 6**  
**Cost of diabetes in NIHB**



## **Other diabetes program activities in FNIHB**

In addition to the NIHB Program, a variety of programs are offered to FN/I to promote awareness of diabetes and assist in its management. These are offered through the Community Program Directorate, the Primary Health Care and Public Health Directorate and the Office of Nursing Services.

## **Conclusion**

Diabetes is one of the key health challenges facing FN/I today. The NIHB Program has developed or participates in a variety of processes to ensure its payment for medications and supplies to manage diabetes reflects current clinical practice and scientific evidence. In most cases, drugs and supplies to manage diabetes are available through NIHB without restriction. This reflects the importance of these therapies in the overall management of the disease. Because there are few restrictions on these products, and because of the overall prevalence of the disease in FN/I, a considerable proportion of NIHB expenditures are targeted to meeting the needs of the thousands of FN/I diagnosed with diabetes who require drug therapy to help in the management of their condition. For example, individuals identified as having diabetes account for nearly 5.5% of the NIHB eligible population (and over 8% of clients who made a pharmacy claim). Expenditures on drugs and supplies to manage diabetes for these individuals account for 8.8% of NIHB's pharmacy expenditure, with another 10% going towards drugs for the complications of this disease.

In addition, it should be noted that while it is not possible to quantify an impact, NIHB's payment of drugs for diabetes, in accordance with clinical practice guidelines can be said to contribute to improvements in the quality of life for FN/I living with diabetes. In addition, by helping to manage this condition through drug therapy, the Program is helping to prevent some of the downstream impacts and complications of diabetes such as blindness and amputation.

# **ANNEX B      FN/I ACCESS TO DENTAL CARE**

## **Introduction**

This paper provides information on access to dental care benefits in the First Nations and Inuit Health Branch (FNIHB) and speaks to the perceptions that (a) FN/I clients have limited access to dental care through the NIHB Program and (b) dentists are opting out of the Program due to heavy administrative requirements, lower rates of reimbursement through NIHB than other public/private plans and an overly aggressive audit program.

The paper presents an overview of the oral health status of Canadians in general and FN/I in particular and compares access to dental care for the average Canadian and FN/I through FNIHB programs. Aggregate level administrative data is presented for FNIHB programs with British Columbia (BC) used as a specific example.

It should be noted that there are limitations to comparing administrative data from the various FNIHB programs to self-reported national or regional survey data. However, these are the only data sources available as there is a paucity of oral health surveys and statistics and very little database information available at a national, provincial or territorial basis. As well, there is a lack of inter-provincial standards or uniformity of the information that is gathered and the segments of the population surveyed making inter- provincial/regional comparisons difficult.

## **Oral Health Status of Canadians**

While the dental health of average Canadians has improved greatly in the last 30 years, this is not the case for some segments of the population. Much of the burden of dental disease is concentrated in less advantaged individuals, namely elderly, low income, Aboriginal, northern dwelling, and disabled individuals who also have less access to professional health care services than society in general.

Oral health is a very important component of overall health. Poor oral health negatively affects growth, development and learning for children, nutrition, communication, self-esteem, and various general health conditions. Although oral diseases (e.g., caries, periodontal diseases and oral cancer) are largely preventable, Canadians need to be better informed of the impact oral health has on general health and their overall quality of life.

Canada-Wide Dental Access: According to the Oral Health Component of the 2007-2009 Canadian Health Measures Survey (CHMS) , 74% of Canadians aged 6-79 years had consulted a dentist in the previous year, up from the 63% estimated in the 2003 Canadian Community Health Survey (CCHS).

Education, household income and having insurance greatly influenced rates of annual dental consultations. Overall, 83.8% of people from the most affluent and 82.3% of privately insured families visited compared to 60% of people from the lower income category and 59.3% of non-insured families. As well, higher proportions of visiting for any reason within the last year are found among families with higher education, never and past smokers and those who are dentate.

In the 2003 CCHS, reasons for not seeking care among people who had not visited a dentist in the past three years varied. Thirty-one percent said they did not think it was necessary, and 27% reported wearing dentures. One in ten respondents had simply “not gotten around to it”; 5% mentioned “pain or embarrassment”, and 18% cited cost. This latter finding is consistent with the 2007-2009 CHMS which found that 17% of Canadians avoided going to a dental professional and 16.5% declined recommended care due to the cost.

Analysis of data from the 1996/97 National Population Health Survey (NPHS) indicated that most people who had visited a dentist in the past year did so for routine care, including cleaning, fluoride treatment or maintenance (43%). Reasons for seeking dental care varied considerably by household income. People in lower income households (36%) were less likely than those in high income households (48%) to mention preventive reasons. 25% of the lowest income group cited a filling or extraction, compared with 13% of the highest income group. This pattern was the same among those with and without dental insurance.

## **FNIHB’s Dental Programs**

Health Canada’s FNIHB covers dental care through several initiatives which strive to improve, and ultimately to maintain, the oral health of First Nations and Inuit (FN/I) at a level comparable to other Canadians.

### **Primary Health Care and Public Health Directorate (PHCPHD)**

Oral health activities under the Dental Division of the PHCPHD include:

- Supporting health promotion and dental treatment services provided by regional dental therapists. Currently, 106 dental therapists work either directly for FNIHB or directly for FNs or territorial governments in the regions and territories and serve approximately 170 FN/I communities;
- Supporting national development and implementation of oral disease prevention and health promotion programs such as the Children’s Oral Health Initiative (COHI); and
- Supporting community-based initiatives for communal water fluoridation systems.

## **Non-Insured Health Benefits (NIHB) Program**

Coverage for NIHB dental services is determined on an individual basis, based on current Program policies and evidence-based standards of care. Some dental services require predetermination prior to the initiation of treatment. The NIHB Program predetermination process is a review and assessment of eligibility of individual cases for coverage against NIHB policies, guidelines and criteria, which are based on clinical evidence and current research.

In 2008/09, NIHB dental expenditures amounted to \$176.4 million, accounting for 18.9% of total NIHB expenditures. Fee-for-service (FFS) dental costs paid through the Health Information and Claims Processing Services (HICPS) system represented the largest component, which accounted for \$150.7 million or 85.4% of all dental costs.

Contribution Agreements, which accounted for \$13.4 million or 7.6% of total dental expenditures, were the next highest component. Contributions costs were used to fund the provision of dental benefits through agreements such as those with the Governments of the Northwest Territories and Nunavut, and the Bigstone Cree Nation in Alberta.

Expenditures for contract dentists, providing services to clients in remote communities, totalled \$8.2 million or 4.6% of total costs. The remaining \$4.1 million or 2.3% in 2008/09 included the purchasing of dental supplies and equipment as well as NIHB headquarters costs related to automated claims payment. In 2008/09 BC region spent \$24.7 million on dental costs. Of the \$24.7 million, \$23.5 million (95.1%) were operating expenditures (FFS and contract dentists) and \$603 thousand (2.4%) were contribution costs.

### **Access by FN/I to FNIHB Dental Programs**

In terms of access to NIHB dental services, the national utilization rate published in the NIHB Annual Report for 2008/09 was 36% of eligible clients, unchanged from the previous year. In BC, the rate was 39% also unchanged from the previous year. When compared to the self-reported Canadian survey data cited above, these low rates contribute to the perception that FN/I do not have comparable access to dental care.

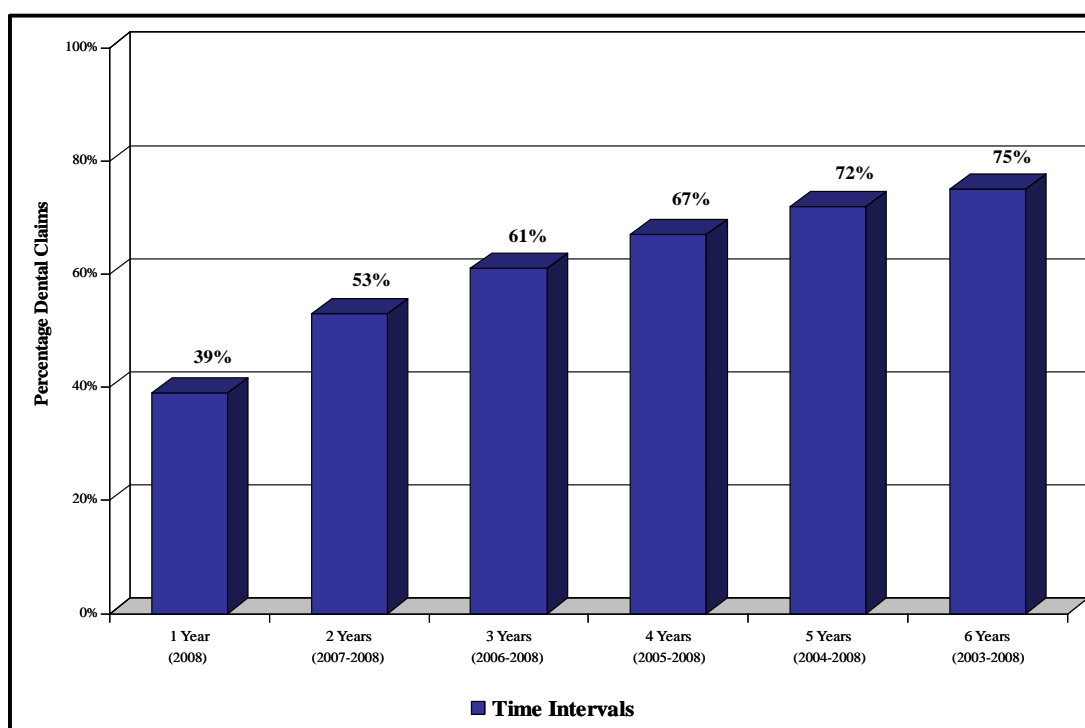
However, it should be noted that these rates understate the actual level of service received by FN/I through FNIHB initiatives. For example, if clients accessing dental services through FNIHB's dental therapy program and COHI are included, utilization rates in BC increased up to 42%. This is lower than the rate (60%) for the lowest income households found in the 2007-2009 CHMS for the general Canadian population and well below the 83.8% of highest income households across Canada or the 67% self-reported use of dental services in British Columbia alone. However, even these rates, which still exclude data from contract dental work and contribution agreements, do not provide a complete picture of FN/I access to dental care.

One way to determine whether FN/I lack access to dental care or whether they are not accessing available care is to look at varying time intervals in NIHB's fee-for-service billings. Figure 7 below indicates that if a time interval longer than one year is considered, the percentage of distinct BC clients accessing FFS dental care increased: from 39% in a one year (2008) time

period to 53% over a two year (2007-2008) period, rising to 75% over a five year (2003-2008) period. This may indicate that, similar to other Canadians (31% in the 2003 CCHS), many NIHB clients did not feel it was necessary to visit a dentist on a regular yearly basis. However, further analysis would be required on the number of visits over the five years per person to determine what percentage of clients are regular attenders (for preventive/routine care) or if they are visiting only once in the five years for emergency care.

However, given that NIHB dental expenditures in 2008/09 were highest for restorative services (fillings), followed by preventive (scaling) and oral surgery (extractions), a greater emphasis on the need for annual preventive dental care rather than visits for emergency services only may lead to better health outcomes for FN/I. In addition, since basic services, which include restorative, diagnostic, preventive, some endodontic services (i.e. root canal therapy for front teeth) do not require predetermination, clients can access them easily.

**Figure 7**  
**Percentage of BC Clients Accessing Fee for Service Dental Care by Varying Time Intervals**



A second way to look at access to dental care through NIHB is to look at how many registered providers are billing the Program. In 2008/09, of the 2,652 licensed dentists in BC, the vast majority (2,267 or 86%) were registered with NIHB and billed the Program for at least one procedure. These billings, generating several hundred thousand claims for dental services, took place despite the perception of heavy administrative requirements, an overly aggressive audit program (NIHB audited only nine of these 2,267 dentists in 2008/09) and insufficient reimbursement (NIHB reimburses dentists at 90% of the previous year's BC Dental



Association's fee guide, a rate that compares favourably to provincial rates; the BC fee schedule for eligible people on income and disability assistance and children served through the BC Healthy Kids Program is 72% of the 2007 fee guide).

There are also approximately 210 active denturists in BC who provide services to people with full or partial dentures. In 2008/09, 122 of these denturists were registered with NIHB and billed the Program for at least one procedure for 1,130 distinct clients and total expenditures of \$799,903.

A third measure of access to dental care is self-reported access. A 2002/03 Regional Health Survey conducted by the Assembly of First Nations (AFN) and funded by Health Canada, found the self-reported access rate was 57% in the past year for adults in BC, and 78% for children. These self-reported rates are comparable to the 63% rate found in the 2003 CCHS for the general Canadian population. The difference between self-reported utilization rates for adults and the actual NIHB Program utilisation rate could be explained by a number of factors:

- the self-reported rates may include access to the full range of dental services provided to FN/I not just FFS dentists;
- respondents may have accessed dental services beyond the scope of the NIHB Program (e.g., veneers, implants);
- respondents may have reported that they accessed these services in the past year when the services were, in fact, accessed in the year previous to that; or
- respondents may have private insurance plans and therefore might not access the NIHB Program.

Barriers to access cited in this survey included cost (31% said they could not afford care and 25% said cost was a factor), followed by the service not being covered by NIHB (28%) or approval from NIHB was denied (21%). Transportation costs were mentioned by 20% of respondents, 18% said wait times were too long, and 13% said the services were not available in their area. Reasons why cost of care was mentioned so frequently could include a perception by clients and providers that NIHB's \$800 threshold (removed in July 2005) was an annual coverage limit. When citing cost and coverage as barriers, respondents were most likely referring to access to more expensive dental services which are not covered by NIHB. It should also be noted that the NIHB Program currently provides medical transportation coverage on a national basis for all approved dental services. This was not the case in 2002/03 when the Regional Health Survey was conducted.

## Conclusion

It is difficult to compare administrative data from the varying FNIHB programs and self-reported survey data. However, this analysis suggests:

- the rate of utilization of dental care by FN/I is lower than the overall Canadian rate;
- the services being accessed are similar; and
- FN/I clients do not appear to be visiting dental practitioners frequently enough for effective preventive/routine care even though these services do not require predetermination under the NIHB Program and clients can access them easily.

# ANNEX C      PROFILE OF CLIENT SAFETY INITIATIVES

Building on the work of the DUEAC, the NIHB Program has placed an increasing priority on addressing the potential unsafe use of medications, including prescription drug misuse. This issue affects many Canadians and any strategy designed to address it must go beyond NIHB. However, there are many steps payers such as NIHB can take in this area and, in recent years, the NIHB Program has increased its activities in promoting the appropriate use of the medications it funds, focussing on optimal drug use - providing the right drug in the right dose to the right client at the right time. The Program's focus on client safety relates directly to FNIHB's overall mission and complements other Branch activities in working with FN/I communities, organizations and stakeholders to develop and implement strategies around awareness, promotion, prevention and treatment.

NIHB's efforts in regards to client safety include four principal elements:

- Real-time communication to pharmacists regarding drug interactions and repeat prescriptions;
- Rejection messages to pharmacists regarding client drug therapy history, and the requirement to contact NIHB's Drug Exception Centre;
- Client and Program level trend analysis of prescription drug use;
- As noted above, an external expert advisory committee - the DUEAC - which provides input, evaluations and recommendations for client safety improvements to the Program.

Each year, the NIHB Program publishes a *Report on Client Safety*. The report highlights the Program's activities in each of the elements identified above. Some of the actions taken by NIHB flowing from these pillars include: launching new point-of-sale warning and rejection messages to pharmacies concerning drugs subject to misuse; changing the formulary benefit status of certain drugs subject to misuse; and intervening directly with health care professionals in situations where clients were identified to be at risk as a result of the sub-optimal use of asthma medications.

Importantly, the Client Safety report tracks progress made by the Program in addressing priority concerns, including evaluating the outcomes of NIHB's activities. In the most recent report, the Program has been able to demonstrate a reduction in the inappropriate use of certain asthma medications as well as a decrease in the number of clients and claims for drugs subject to misuse.

Since 2004, the NIHB Program has implemented a number of interventions aimed at reducing problematic drug use. One of the main areas of concern has been benzodiazepine use. This class of drug is meant to be a short-term remedy for individuals coping with anxiety or sleep problems. There is little clinical evidence to support long-term use of benzodiazepines. Physical

addiction can often result from long-term use and can produce adverse health and social effects. The use of long-acting benzodiazepines in the elderly is of grave concern because of the link to cognitive impairment and serious injuries as a result of falls.

Based on well-documented concerns, NIHB has implemented specific point-of-sale interventions and removed a number of long-acting benzodiazepines from its Drug Benefit List. Following up on these measures, and through its DUEAC, the NIHB Program has undertaken specific evaluations of trends in benzodiazepine use to measure the effectiveness of recent interventions. For example, from this, the Program has been able to show that the number of clients accessing benzodiazepines, the number of claims approved and the number of clients exceeding the maximum recommended daily dose (equivalent to 40 mg per day of diazepam) have all declined since 2004.

Similarly, the percentage of eligible First Nations and Inuit receiving a benzodiazepine peaked at 7.6% in 2003 and began to decline afterwards. By 2008 the share of eligible clients receiving a benzodiazepine had decreased by 10.5% to 6.8%. In absolute numbers, there were nearly 6,900 fewer clients receiving benzodiazepine in 2008 than there would have been had the percentage of eligible clients receiving benzodiazepine remained at its 2003 value of 7.6%. These, and other trends, are documented in detail in the NIHB Program's annual Report on Client Safety.

In 2008, and as part of this Evaluation Process, NIHB undertook an external benchmarking study to provide the Program with information on what measures other public payers of pharmacy benefits had in place in the area of client safety. The objective of the study was to situate NIHB's activities relative to other payers, as well as to provide the Program with recommendations for future enhancements in the area of client safety.

The study, "Client Safety Initiatives in the Pharmacy Benefit Area" found that the NIHB Program compared favourably to other publicly funded drug plans in the area of client safety. The report noted that the Program has developed numerous interventions that are unique in targeting specific clinical concerns (such as the Program's dosage limit on products containing acetaminophen and the establishment of the DUEAC). This study was reviewed and endorsed by the NIHB Program's DUEAC and has helped set the direction for future activities in this area.

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