

7 PHARMACARE AND OTHER DRUG PROGRAMS

BACKGROUND

7.1 The Department of Health (DOH) manages Nova Scotia's publicly funded prescription drug programs. The net cost of these programs to the DOH has increased from \$89 million in 2000-01 to \$108 million in 2002-03, a 21% increase over this three-year period. Atlantic Blue Cross Care (ABCC) is under contract to administer the programs for DOH. The Department of Community Services (DCS) also offers a prescription drug program for certain of its clients. The cost of this program has increased from \$31 million to \$36 million, an 18% increase, over this period. This program is also administered by ABCC. Other jurisdictions, both within Canada and internationally, are also reporting significant annual increases in prescription drug expenditures for their publicly funded drug plans.

7.2 A study published in 2001 by the Patented Medicine Prices Review Board for the Federal/ Provincial/Territorial Working Group on Drug Prices (*Pharmaceutical Trends 1995/96 - 1999/00*) noted:

“Over the past decade, spending on drugs has grown at twice the rate of spending on health care. Drugs now account for the second largest share of health expenditures, after hospitals, with total spending estimated to have reached \$14.7 billion in 2000.

Despite significant reform of many of the publicly funded drug plans in recent years, public spending has been increasing by more than 10% per year; in 2000/01, many provincial drugs plans experienced increases of 20% or more. The rise in spending on drugs reflects a number of factors, including the growing importance of prescription drugs in treating and preventing illness in Canada and in other countries. Governments can expect to face continuing pressure to ensure that those Canadians who are most in need will be able to maintain affordable access to the best drugs.”

7.3 During 2003, legislative auditors in nine jurisdictions in Canada decided to undertake a joint or collaborative audit of Pharmacare/drug programs in their jurisdictions. The audit took the form of a concurrent audit conducted by several jurisdictions using a common audit plan. Because all Canadian governments face significant challenges in managing drug costs with due regard for economy and efficiency, this program was determined to be an ideal candidate for a joint or collaborative audit. Although there have been previous joint audits undertaken by Canadian legislative auditors, this audit was unique in that the auditors of almost all jurisdictions chose to participate. The audit was coordinated by a sub-committee of the Canadian Council of Legislative Auditors (Health Study Group). The legislative auditors of the other jurisdictions will issue their reports from this

audit to their respective Legislative Assemblies/Parliament between the fall of 2004 and 2005.

- 7.4** The scope of our audit included the Nova Scotia Seniors' Pharmacare program, disease specific programs, exception drug funding administered by the Department of Health and the Pharmacare program offered by the Department of Community Services. See exhibit 7.1 for key information related to the mandates, eligibility and terms and conditions of these programs. Exhibits 7.7 and 7.8 show the relationships between the various organizations responsible for the administration of these programs.
- 7.5** Our audit did not include drugs which are procured and used in acute care and long-term care facilities. However, we compared the price of drugs bulk purchased for use in acute care facilities in Nova Scotia to those paid by the Provincial Pharmacare programs. It is important to note that the Nova Scotia Pharmacare programs are more restricted in scope than those in other jurisdictions and are targeted towards seniors and income assistance recipients with no private insurance.
- 7.6** Exhibits 7.2 to 7.5 provide actual expenditure information for the various drug programs and various program statistics.
- 7.7** DOH has entered into an agreement with Atlantic Blue Cross Care (ABCC) to process claims for most insured health services including Pharmacare and physician payments. ABCC processes all prescription drug claims on behalf of the Department other than exception drug funding claims. ABCC billed the Department \$8.4 million in 2002-03 to provide these services. The amount relating specifically to drug programs is not available.
- 7.8** The Department of Health works in conjunction with other Provincial and Federal government departments and agencies, inter-jurisdictional committees and other organizations in reviewing the various aspects of the prescription drug programs. Exhibit 7.6 provides a listing of these organizations and their roles and responsibilities.

RESULTS IN BRIEF

- 7.9** The following are the principal observations from this audit.
- The contract with Atlantic Blue Cross Care for administration of the drug programs is not current, and is inadequate. We recommend that DOH finalize a performance-based third party service provider contract that includes clearly defined roles, responsibilities, and performance expectations.
 - Although there is now a national Common Drug Review process, Nova Scotia is still responsible for deciding which drugs will be added to the Province's formulary and for reviewing old drugs with new indications, line extensions

and class reviews. We noted that the processes for reviewing and assessing drug manufacturers' submissions and approving additions to the formulary are thorough and consistent. The advice of experts is sought and followed. Effectiveness of drugs and costs are considered.

- The controls and processes in place at ABCC over the payment and monitoring of electronic claims are appropriate. Controls could be improved in the payment and monitoring of manual claims at ABCC.
- DOH needs to conduct a comprehensive evaluation of options for reducing drug costs for the pharmacare programs in Nova Scotia. As an example the Nova Scotia Provincial Drug Distribution Program, which acquires drugs used by District Health Authorities in acute care institutions, has been able to procure drugs at prices approximately 14.8% lower, by purchasing through a national buying group, than prices paid to pharmacies for the same drugs through the Provincial Pharmacare programs. Although we acknowledge that pharmaceutical companies ultimately control the price of drugs and may be unwilling to reduce prices for drugs which are not used in a hospital setting, the potential savings to the program of even modest drug price reductions could be significant and warrants further study. We also acknowledge that bulk purchasing is complex because of the need to consider such factors as warehousing, distribution and uncertainties about how the market would respond to such initiatives.
- We recommended that current DOH initiatives to monitor drug utilization and physician prescribing practices should be continued and enhanced.
- We recommended that DOH should explore options to increase physician participation in *academic detailing* which is a program administered by Dalhousie Continuing Medical Education to provide educational advice to physicians on drug-related topics through visits to physicians' offices.
- The Department of Health needs to improve its information systems for the Pharmacare programs. The current information technology is outdated and unable to produce all information required for appropriate monitoring.

AUDIT SCOPE

7.10 The objectives of this assignment were to assess the adequacy of:

- procedures to manage the performance of the Pharmacare/drug programs;
- procedures to ensure resources are managed with due regard for cost-effectiveness;

- monitoring of the quantity and relevance of drug use to encourage appropriate and economical practices;
- procedures to ensure the eligibility of insured persons and appropriate collection of premiums and other fees;
- procedures to ensure compliance with legislation and assess whether the policies and procedures for approving, processing and paying claims are adequate and are being followed; and
- reporting on the drug program's performance and whether reports to the House of Assembly are presented in the prescribed timeframe.

7.11 Audit objectives and criteria were developed jointly by all participating jurisdictions to assist in the planning and performance of the audit (Exhibit 7.11). The criteria were discussed with and agreed to by senior management of both DOH and DCS.

7.12 Our audit approach included interviews with management of DOH, DCS and ABCC, a review of both internal and external audit files, detailed testing and analysis of claims, as well as the examination of studies and other documents deemed relevant. We also compared the prices paid by other jurisdictions for a sample of drugs to those paid by Nova Scotia. Our detailed testing focused on the year ended March 31, 2003 because that was the most recent complete fiscal year for which data was available at the start of the audit.

PRINCIPAL FINDINGS

Program Governance

7.13 **Overall conclusion** - We found that many of the criteria used to assess program governance (see exhibit 7.11) were not met. Our detailed comments are in paragraphs 7.15 to 7.33. We reviewed the legislation under which the drug programs operate and concluded there is a need to update and consolidate the authority for the drug programs being administered.

7.14 The Departments have a third party service contract with ABCC to provide various administrative services for the programs. We noted the contract is not current and lacks appropriate accountability requirements such as a responsibility framework and performance standards. There are no documented objectives and performance measures for the program.

7.15 **Legislation** - Various Acts, Regulations and Orders in Council provide the authority to administer the drug programs. We observed there is a need to amend sections of the legislation which are no longer relevant. For example, the appeals process for service providers specified in the Health Services and Insurance Act is not used because the Health Services and Insurance Commission which was intended to

hear appeals is no longer in existence. We also noted the need to consolidate the authority for the various drug programs being administered.

- 7.16** DOH has developed policies for administration of the drug programs. Department staff indicated they will be updating certain policies to reflect current practices.

Recommendation 7.1

We recommend the Department and government update and consolidate legislation governing the various prescription drug programs.

- 7.17** **Program objectives and measurement of performance** - Government departments are required to prepare annual business plans and accountability reports using guidelines issued by Treasury and Policy Board. These guidelines focus on the reporting requirements for departments' core business areas. We reviewed the 2003-04 business plans and 2002-03 accountability reports of the Departments and concluded they contained little or no information on operation of the drug programs. Although the Pharmacare Program is not considered to be a core business area by either DOH or DCS, expenditures on an annual basis are significant. The Departments have not developed well defined and measurable objectives and priorities for the programs to be included in their annual business plans and accountability reports.

- 7.18** Government departments are required to develop performance indicators to measure success in achieving their objectives and priorities. No performance indicators have been developed for the drug programs. We were informed there are very few broad based and validated indicators of success for drug programs. The Task Group on Pharmaceutical Indicators, described in paragraph 7.64, is developing a number of national product based and population based drug utilization indicators.

Recommendation 7.2

We recommend that the Departments of Health and Community Services develop a process to establish objectives, measure and evaluate the performance of the Pharmacare Programs. The objectives and results should be included in Departmental Business Plans and Accountability Reports.

- 7.19** **Accountability** - Annual budgets are prepared for the drug programs as part of the Departments' budget processes. We found management receives or prepares relevant and sufficient monthly financial and statistical reports to assist in the monitoring of program costs. We did note improvements were required in information being provided to DOH from the QEII Health Sciences Centre with respect to exception drug funding (paragraph 7.88).

- 7.20** The financial statements of the Insured Prescription Drug Plan Trust Fund (Seniors' Pharmacare Program) are audited by a public accounting firm. We reviewed the auditor's working papers for the year ended March 31, 2003 and found there were no matters which warranted reporting to the Minister of Health or House of Assembly.
- 7.21** **Statistical reporting** - DOH publishes an Annual Statistical Report and Supplement. The Annual Report only discusses two statistics for the Seniors' Pharmacare program - total program cost and cost per beneficiary. The Supplement contains more detailed statistics on the Seniors' Pharmacare Program as well as on the other disease specific drug programs. No information or statistics are provided on exception drug funding.
- 7.22** **Contract with Atlantic Blue Cross Care** - DOH has contracted the administration of insured health services programs to ABCC. These services include all drug programs, with the exclusion of exception drug funding. The last complete contract was signed in 1992 with Maritime Medical Care Inc. (MMC) and has been extended several times, with the most recent extension expiring March 31, 2005. Legislation formalizing the merger of MMC with ABCC was proclaimed on January 1, 2003.
- 7.23** DOH receives a yearly administrative budget proposal from ABCC. The budget is reviewed and analyzed by Department staff. ABCC is formally notified of the approved administrative budget. We noted that DOH did not communicate the approved budget for the 2002-03 fiscal year to ABCC until August 2002. The approved budget should be communicated to ABCC prior to the start of the fiscal year.
- 7.24** The total cost claimed by ABCC for administering the insured health services programs, including the DOH drug programs as well as physician services, in 2002-03 was \$8.3 million. The total cost claimed by ABCC for the DCS pharmacare program for the same year was \$0.6 million. These amounts represent ABCC's actual costs of providing the service. If the costs of administering all insured health programs exceed the approved administrative budget, DOH would examine the reasons and, if warranted, increase funding. The actual costs of administering the drug program are not currently being reported to the DOH.
- 7.25** Corporate internal audit staff perform an annual audit of the ABCC claim for the administration of the insured health services programs. The scope of this audit does not include costs claimed by ABCC for the DCS pharmacare program. We believe that the scope of the annual audit should be expanded to cover the pharmacare programs of both departments.
- 7.26** We reviewed the ABCC contract details and concluded that it does not provide for an appropriate accountability framework between DOH and ABCC. The roles and responsibilities of the various parties are not clearly defined.

- 7.27** In the spring of 2002, DOH contracted a consultant to look at the existing contract with ABCC and make recommendations for change. The consultant identified gaps between the current agreement with ABCC and best practices in the areas of contracting and business process outsourcing. The consultant developed a decision framework to assess three alternative service provider options:
- public sector (service delivered by the Nova Scotia government);
 - status quo (service continued to be delivered by ABCC); and
 - tendered (tender to choose a private sector service provider).
- 7.28** The consultants concluded that the best option to meet the current and future needs of DOH was to have services delivered by ABCC under a new service level and performance-based contract. The former Management Board (now Treasury and Policy Board) instructed DOH to begin negotiations with ABCC on a new agreement.
- 7.29** In the fall of 2003 the Department hired a different consultant to develop a comprehensive statement of requirements and responsibilities. At the time of writing this chapter, the Department, with the aid of the consultant, has begun negotiating a new contract with ABCC. Under the proposed arrangement ABCC would receive a lump-sum payment to provide specified deliverables at pre-defined performance standards. Although the draft contract only requires the approval of the Minister of Health, Treasury and Policy Board have requested that the contract be submitted to the Board for its review and approval.
- 7.30** The Province of Nova Scotia's Policy on Government Procurement establishes how the procurement of goods and services by the Government of Nova Scotia should be conducted and needs to be considered for the ABCC contract. The Policy requires goods and services to be acquired in an open, fair and competitive manner which helps to ensure that the best value for money is being obtained; however, the Policy allows for alternative procurement practices such as sole sourcing in appropriate circumstances. Consultation with the Procurement Branch and approval by the requesting Deputy Minister is required in such circumstances.

Recommendation 7.3

We recommend that DOH formalize a performance-based third party service contract for the administration of the Pharmacare Programs and that the contract be appropriately approved in accordance with the Government Procurement Policy.

- 7.31** **Computer equipment and software** - DOH owns all the computer hardware and software used to process claims and makes all decisions concerning technology investment. These assets are managed and operated by ABCC. A report prepared by ABCC (Proposed MSI Technology Strategy - A Value Proposition) for the Department of Health noted application software in use is dated and is taking increased effort and cost to maintain. Many software vendors are reducing or

have eliminated support and maintenance for these software products. A report prepared for the Department of Health by a consultant reached similar conclusions. A number of significant issues have been identified which must be addressed during contract negotiations with ABCC.

- 7.32** ABCC noted it has developed a disaster recovery plan to ensure continuity of operations. However, there could be significant problems if a disaster occurred. There is no alternative back-up power source for the data centre. ABCC has also developed business continuity plans to continue minimum business activity for a short period of time. We were informed by ABCC staff that these plans have not been tested. An external consultant's report also identified that there is no long-term system development strategy with respect to the information systems supporting the pharmacare system at ABCC.

Recommendation 7.4

We recommend that DOH develop a long-term system development strategy for the Pharmacare Program.

- 7.33** **Evaluation of the drug programs** - Program evaluation should play a valuable role in assessing the effectiveness of programs and whether program objectives are met. DOH has several important processes in place to assess the effectiveness of specific drugs and to control drug costs. For example, Department staff participated in the F/P/T (Federal/Provincial/Territorial) Task Force on Pharmaceutical Prices and the F/P/T Working Group on Drug Prices. Several studies were published by the Patented Medicine Prices Review Board on behalf of these groups. The studies provided comparative information on various aspects of the programs including cost drivers and drug price comparisons for each of the six participating provinces, including Nova Scotia. However, neither of the departments have completed comprehensive evaluations of the performance of the drug programs against expected outcomes and objectives. DCS management has indicated that they are currently in the process of undertaking an evaluation of the entire Employment Support and Income Assistance Program of which the Pharmacare Program is a component.

Drug Selection and Cost

- 7.34** **Overall conclusion** - We concluded that the process in place to assess drugs for inclusion in the Nova Scotia Formulary is comprehensive and includes a thorough review of the evidence, consideration of cost effectiveness and review by an expert advisory committee. The Department of Health has introduced a number of measures to control drug costs but we believe that additional options for controlling costs should be considered including both drug utilization and other options for procurement. Drugs used in acute care institutions in Nova Scotia are purchased through a national buying group at significant savings when compared to the Pharmacare Programs. Although we acknowledge that pharmaceutical

companies ultimately control the cost of drugs and may be unwilling to reduce prices for drugs which are not used in a hospital setting, the potential savings to the program of even modest drug price reductions could be significant and warrants further study.

- 7.35** **Drug selection** - Eligible drugs available under the programs are listed as benefits in the Nova Scotia Formulary. The Formulary consists of prescription drugs, some prescribed ostomy supplies, prescribed diabetic supplies, including testing materials, needles and syringes, and a limited number of over-the-counter products. Approximately 4,300 individual medications are listed in the Formulary. During the 2002-03 fiscal year, 215 medications were added to the Formulary and 14 medications were deleted.
- 7.36** In January 2002, an Atlantic Common Drug Review (ACDR) process was established to improve the efficiency and quality of the review of new prescription drugs approved for sale in Canada and to provide listing recommendations to the respective Departments of Health for their drug plans. Each Department of Health has the option to accept or reject the listing recommendation based upon its priorities and resources. In September 2003, the process was replaced in part by the National Common Drug Review.
- 7.37** The Atlantic and National processes have different functions but operate in a complementary manner. A pharmaceutical company must formally request a drug be evaluated for benefit status. Written guidelines specify the information to be included in the manufacturer's submission. Independent observers review the submission and other clinical evidence and prepare a drug evaluation summary. The Atlantic Expert Advisory Committee (AEAC) or Common Drug Review make a listing recommendation including conditions and/or criteria for coverage, where appropriate. Provinces decide whether to accept the recommendation.
- 7.38** We examined the documentation supporting the recommendations made by AEAC for a sample of drugs reviewed by the committee in 2003. Based on our review of Nova Scotia procedures we noted that no formal criteria exist to evaluate the therapeutic efficacy and cost effectiveness of the drugs under review. Nova Scotia is not unlike other provinces in this respect. We noted that the evaluations included an assessment against available clinical evidence and included an opinion as to whether the additional cost of listing the drug was justified.
- 7.39** On September 1, 2003, the ACDR process was replaced in part by the National Common Drug Review (CDR) process. The CDR is a single process for reviewing new drugs and providing listing recommendations to participating federal, provincial and territorial drug benefit plans in Canada, except Quebec. The ACDR maintains its responsibility for old drugs with new indications, line extensions and class reviews.
- 7.40** The Nova Scotia Formulary Management Committee has not met since the creation of the ACDR, however, the structure has been maintained to deal with issues of a purely Nova Scotia nature should they arise.

- 7.41** Drugs submitted to the ACDR and the Nova Scotia Formulary Management Committee are prioritized and placed in the queue for review. Generally drug submissions are reviewed on a *first come, first done* basis although DOH management indicated that, where warranted, drugs with significant potential benefits would be reviewed before others in the queue. Based on our review of new drugs submitted to the ACDR during the 2002 calendar year, it took an average of 11 months after the submissions were received from the pharmaceutical companies to the announcement of the decision in the Pharmacare bulletin.
- 7.42** Continuous formulary review is important to determine whether medications should continue to be listed, covered under specific conditions or delisted. The Department does not regularly review medications listed in the Formulary to ensure that the listings continue to provide benefits, based upon current clinical knowledge and practice, and are cost effective.
- 7.43** **Drug costs** - Health Canada assesses all new drugs in Canada to ensure that they conform to the Federal Food and Drug Act and Regulations. The introduction price of new patented prescription and non-prescription drugs and the rate of price increase for existing patented drugs in Canada are regulated by the Patented Medicine Prices Review Board (PMPRB). The PMPRB is an independent quasi-judicial body created under the Federal Patent Act. The PMPRB has no authority to regulate the prices of non-patented drugs, including generics. Manufacturers of non-patented drugs establish drug prices.
- 7.44** There are a large number of factors which contribute to increase in the use and cost of drugs. These factors are shown on Exhibit 7.9.
- 7.45** In April 2000 the F/P/T Working Group on Drug Prices issued a report titled *Cost Driver Analysis of Provincial Drug Plans - Nova Scotia*. The study covered the fiscal periods from 1995-96 to 1998-99. The focus of the report was to disaggregate annual changes in the cost of drugs into five components: price effect, volume effect, entry of new drugs, existing drugs and other. The findings of the report suggest that utilization and entry of new drugs accounted for the largest increase in expenditures over the period with expenditures rising significantly despite little change in the average unit price of drugs. The report also indicates that the contribution of each of these factors to program costs can change dramatically from year to year.
- 7.46** Department of Health management informed us that the April 2000 report was the most recent detailed analysis of the specific cost drivers for the pharmacare programs in Nova Scotia, although potential cost drivers are examined annually in support of the Department's budget process. We believe that information on the specific cost drivers for the Province's programs needs to be obtained by management on a more timely basis so that action can be taken to manage cost increases where possible. We noted that a review of cost drivers is undertaken annually during the budgeting process, that drug class reviews are often undertaken to ensure continued value for drugs already listed on the formulary, and that various policies (such as Maximum Allowable Cost and clinical criteria) are applied when drugs are listed to ensure cost effectiveness of therapy prescribed.

- 7.47** **Controlling drug costs** - Pharmacies are generally reimbursed for the Actual Acquisition Cost (AAC) of a prescription filled for an eligible recipient. AAC includes the cost incurred by the pharmacy to purchase the drug. The pharmacy is also paid a dispensing fee for each prescription filled. The maximum amounts for dispensing fees are included in the agreement between the Province and the Pharmacy Association of Nova Scotia. There is no profit component for the pharmacy in respect to patented drugs billed to the program. The price the Pharmacare Program will pay for generic drugs is set by the program and is documented in the Maximum Allowable Cost (MAC) list. A 3-5% mark-up is added to the list price of these drugs.
- 7.48** The policy of adding a mark-up to MAC drugs is inconsistent with the overall program policy of reimbursing pharmacies for their actual acquisition cost of drugs. Based on an analysis of 2002-03 claims paid to pharmacies for both programs, DOH estimated that this mark-up resulted in additional costs to the programs of \$1 million for the year.

Recommendation 7.5

We recommend that the Departments eliminate the mark-up paid to pharmacies for generic drugs.

- 7.49** The Department of Health has established several processes to control the cost of drugs being paid under the various drug programs which include the following:
- **Interchangeable drugs** - A maximum allowable cost (MAC) is established for drugs which have multiple suppliers and are deemed interchangeable (brand name drugs and their generic equivalents). The maximum cost paid for drugs in these interchangeable categories is the cost of the lowest priced drug plus a percentage mark-up. Every six months the prices for drugs assigned a MAC are reviewed and updated by ABCC. Our testing of a sample of claims paid in 2002-03 indicated that MAC prices were being used as described to us by management.
 - **Special MAC** - A special MAC price can also be established for a group of drugs with similar therapeutic action.
 - **Exception status drugs** - Coverage for certain drugs, called exception status drugs, must be approved according to criteria developed by the Expert Advisory Committees. Approval for these drugs is based upon either a review of a physician's written request by pharmacy consultants or the recording of criteria codes at the time the pharmacist bills the drug program on-line.
- 7.50** In November 2002, the Patented Medicine Prices Review Board prepared a report titled *A Study of the Prices of the Top Selling Multiple Source Medicines in Canada*, in which it examined the relationship of generic to equivalent brand name drug prices in

Canada and reported that “the analysis showed that the average ratio of generic-to-brand name prices was 64.5% in 2001, relatively unchanged since 1996. In other words, prices of the top selling generic drugs were 35.5% below prices for the comparable brand name drugs.” The Department of Health has established policies which enable the Pharmacare programs to benefit from the cheaper generic drugs.

- 7.51** [Comparison with other jurisdictions](#) - During our audit we inquired whether other jurisdictions use alternative methods to acquire drugs for their drug programs. For example, the Province of Saskatchewan has operated a bulk purchasing program for generic drugs called Standing Offer Contracts for many years. The province of Quebec has introduced legislation that requires drug manufacturers to supply drugs to that province’s pharmacare programs at the lowest price available in the other provinces in Canada. The Nova Scotia Department of Health believes that it benefits from Quebec’s policy. British Columbia’s prices are based on standard manufacturers’ price lists plus an approved mark-up.
- 7.52** During our audit we selected a sample of drugs and compared the price being charged the Nova Scotia drug programs to those in other jurisdictions. The sample consisted of the 20 most frequently prescribed drugs in Canada as defined by Health Canada. Results of the comparison indicated that the drug prices being paid in Nova Scotia compare favorably with those in other jurisdictions as shown in exhibit 7.10.
- 7.53** [Comparison with Nova Scotia hospital drug costs](#) - The Provincial Drug Distribution Plan (PDDP) is a program established by DOH and administered by the Capital District Health Authority. The PDDP bulk purchases drugs, primarily through a national buying group, for distribution to District Health Authorities for use in acute care facilities throughout the Province.
- 7.54** Although the PDDP was not included within the scope of our audit, we compared the cost of drugs obtained through the bulk purchasing initiatives at PDDP with the cost of the same drugs paid to pharmacies through the Pharmacare Programs. We tested 18 specific drugs purchased during 2002-03 (18 of the 20 most frequently prescribed drugs in Canada) and concluded that the PDDP purchased these drugs at a price which was, on average, 14.8% lower than the DOH and DCS cost through the Pharmacare Programs. We determined that the potential savings to the Pharmacare Programs if PDDP prices had been paid during 2002-03 for these 18 drugs only would have been \$2.7 million. If the cost difference is similar for the remaining drugs in the formulary, the potential savings would be very significant and potentially in the range of \$20 million for the seniors’ and income assistance programs combined. Details of this comparison are also shown in exhibit 7.10.
- 7.55** We understand, through discussions with DOH management and our colleagues in other jurisdictions, that drug manufacturers tend to use the acute care sector as a means by which to introduce potential customers to their products and as such provide their products to acute care institutions at prices lower than those charged to pharmacare programs. The Department of Health indicates that these

prices are exclusive to the acute care sector and therefore not available to the public Pharmacare Programs. We believe that, although obtaining the same low drug prices as the acute care sector may not be achievable, the potential for significant cost savings to the public Pharmacare Programs from even somewhat modest price reductions would justify DOH conducting a comprehensive analysis of the possible options for reducing drug prices. We also acknowledge that bulk purchasing is complex because of the need to consider such factors as warehousing, distribution and uncertainties about how the market would respond to such initiatives.

Recommendation 7.6

We recommend that the Department of Health identify and analyze possible options for reducing drug prices.

- 7.56** **Verification of actual acquisition cost of drugs** - Pharmacies bill the drug plans actual acquisition cost for drugs. The Tariff Agreement with the Pharmacy Association of Nova Scotia requires all rebates, allowances and free product given to pharmacies to be taken into account when the actual acquisition cost of drugs is determined. We were informed by management that it is difficult to identify and monitor whether pharmacies receive these benefits. However, ABCC conducts audits of these costs (see paragraphs 7.57 and 7.82).
- 7.57** A drug price analysis is prepared by ABCC every six months which compares the Provincial average price paid for each drug dispensed to the average drug cost for each pharmacy. All claims paid over \$1,000 are also reviewed to identify potential submission errors. As a result of these analyses, pharmacare auditors at ABCC may decide to conduct an actual acquisition cost audit on selected pharmacies.
- 7.58** **Dispensing fees** - DOH and the Pharmacy Association of Nova Scotia negotiate the fees paid to pharmacies for dispensing prescriptions. Pharmacies bill the drug programs the lesser of their usual and customary fee charged to cash customers or the maximum dispensing fee per prescription specified in the Agreement. During our testing of a sample of claims paid we concluded pharmacies are being paid in compliance with the Agreement.

Physician Prescribing Practices and Monitoring of Drug Usage

- 7.59** **Overall conclusion** - Although the DOH has several initiatives in place designed to influence physician prescribing practices and monitor drug usage, there is more that could be done to enhance these activities. The introduction of electronic health records would improve the monitoring of drug utilization and would give providers the information needed to monitor drug interactions. DOH should ensure that activities influencing prescribing practices, such as physician participation in academic detailing, are enhanced and that monitoring of drug usage is improved.

7.60 **Physician prescribing practices** - The Department of Health has established a number of initiatives to provide physicians with unbiased, critically appraised information about best practices related to the prescribing of drugs for various conditions. The objective of these initiatives is to ensure physicians have the most up-to-date clinical information available when making decisions regarding the prescribing of drugs and to explain the information in clinically meaningful terms so that physicians can understand how their decisions will impact patient outcomes. The risk of using outdated information or new information that has not been critically appraised is that physicians may prescribe a drug unnecessarily, prescribe an expensive drug rather than a cheaper equally effective alternative, or prescribe the wrong drug or the wrong dose. The major initiatives in this area are described below.

- DOH staff have informed us that Canadian clinical practice guidelines for virtually every common disease or condition are readily available to prescribers. One of the objectives of these guidelines is to assist physicians in determining the most clinically appropriate and cost-effective treatments (including drugs) for certain medical conditions. The Department of Health, through its various initiatives, critically appraises guidelines issued by other bodies to determine whether the information is adequately supported by evidence. The results of that process are communicated through changes to the formulary and through educational interventions to prescribers.
- The Drug Evaluation Alliance of Nova Scotia (DEANS) was established in 1998 with a mandate to contribute to the health of Nova Scotians by addressing critical drug care issues and encouraging appropriate drug use. DEANS develops interventions to address critical drug issues. These interventions can include multi-faceted educational programs, academic detailing and physician profiling and feedback.
- An academic detailing service was introduced in Nova Scotia in 2001. Academic detailing is a process by which a health educator visits a physician to provide a 15-20 minute educational intervention on a specific topic. Dalhousie University Continuing Medical Education administers the program and funding is provided by the DOH. DEANS provides direction on the specific topics to be addressed, monitors the execution and evaluation of each intervention, and oversees complementary interventions. Participation in the program is voluntary. DOH staff have informed us that currently 57% of the primary care physicians have participated in at least one academic detailing session. The Department's long-term (ten year) goal is to achieve a participation rate of 70%. A research study conducted by Dalhousie University Continuing Medical Education is identifying the barriers to participation. The Department of Health indicated that Australia has had a similar program for ten years and that the participation rate is still only 63%.
- In 2004 the Conference of Deputy Ministers of Health approved the establishment of the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS) by the Canadian Coordinating Office on Health Technology

(CCOHTA). The purpose of the initiative is to provide a centre of expertise in best practices in drug prescribing and use. This program will collect, evaluate and distribute best practice information, facilitate best practices among health care providers and patients and coordinate its activities with Canadian and international initiatives.

Recommendation 7.7

We recommend DOH increase the number of primary care physicians meeting with academic detailers by identifying and addressing the barriers to participation.

- 7.61** **Monitoring of drug usage** - Drug utilization review is an ongoing process that analyzes prescribing patterns as well as the use of drugs by clients against established criteria. The Department conducts broad drug utilization reviews through DEANS and as part of the drug evaluation process of the Atlantic Expert Advisory Committee (AEAC). In addition, the DOH and ABCC are developing a patient-specific drug utilization review program. Department and ABCC staff are currently focusing on reviewing prescriptions filled for individual clients whose drug costs are among the top ten most expensive in the Province for a particular month. If the review suggests the drugs prescribed to these clients appear unusual, a letter is sent to the physician requesting additional information. Additional follow-up may be undertaken if the information provided by the physician requires further clarification. DOH management have informed us that, when compared with the broader drug utilization reviews done by DEANS and the AEAC, the patient-specific drug utilization review process is more labor and time-intensive and has yielded minimal drug utilization management results. However, we believe that a sound utilization management approach requires monitoring of both general data related to the entire Pharmacare population and specific data related to individual patients who have high numbers of prescriptions and/or high costs.

Recommendation 7.8

We recommend DOH continue and enhance its drug utilization review activities to ensure that both general and specific data related to both providers and patients is examined and followed up on a regular basis.

- 7.62** **Checking for drug interactions** - Pharmacies in the Province use one of several different software systems to record information on prescriptions filled. All of these software systems provide pharmacists with on-line warnings and information messages concerning potential drug therapy problems using the client's previous prescription information. These systems can only identify potential drug therapy problems based on prescriptions filled at their pharmacy as the individual pharmacy systems are not linked to share such information. The

risk is that some potentially serious drug interactions may not be identified by the pharmacist due to a lack of complete information about prescriptions filled at other pharmacies.

- 7.63** While the responsibility for checking for potential drug interactions rests with the providers (pharmacies, physicians and nurse practitioners), in some other provinces, central information systems maintain data on all prescriptions filled in the province and provide this information to the providers so they can check for potential drug interactions. The electronic patient record (EPR) project within the DOH would begin to create the functionality to achieve this for Nova Scotia. However, at present the Province does not have the legislative authority to collect and analyze information on all prescriptions filled for all residents of Nova Scotia and to make this information available to providers. DOH management indicated that the estimated cost of such a system is \$25 million.

Recommendation 7.9

We recommend DOH seek the legislative authority to collect and analyze drug information for all Nova Scotia residents and move toward a full electronic health record to provide pharmacists, nurse practitioners and physicians with complete information to assist in the identification of potential drug interactions.

- 7.64** **Trends and comparisons with other jurisdictions** - Nova Scotia is currently participating in a number of initiatives with other jurisdictions relating to the examination of drug utilization including those described below.
- **Task Group on Pharmaceutical Indicators** - Under the auspices of the F/P/T Pharmaceutical Issues Committee, the Task Group is charged with exploring methodologies for development of comparable indicators, which the provinces can generate from their own data, for standardized national reporting (N.S. is chair of this Committee).
 - **F/P/T Task Group on Drug Pricing and Strategies** - Through this Task Group, jurisdictions are collaborating on addressing pharmaceutical pricing issues.
 - **National Prescription Drug Utilization Information System (NPDUIS)** - Under the auspices of NPDUIS, the Patented Medicine Prices Review Board (PMPRB) has responsibility to generate research to identify price, utilization and cost trends both within and between jurisdictions. Nova Scotia has made a number of preliminary data submissions to the PMPRB and hopes to receive its first statistical reports in the fall of 2004.
- 7.65** **Monitoring of narcotics** - Monitoring of narcotics in Nova Scotia is currently the responsibility of the Prescription Monitoring Association of Nova Scotia (PMANS). It is a not-for-profit organization established in 1992 to monitor the prescribing and use of narcotics and controlled drugs issued within the Province with the goal

of reducing the abuse and diversion of these drugs. The program also provides information to physicians and pharmacists so they can make more informed decisions in prescribing and dispensing these drugs. Although the program is governed by PMANS, administration of the program has been contracted to ABCC and funded by the DOH. The program includes all drugs dispensed and not just those covered under the Province's Pharmacare programs.

- 7.66** ABCC receives copies of all narcotic prescriptions dispensed from each pharmacy in the Province. This information is then manually entered into a computer system at ABCC where analysis is performed to identify possible cases of abuse. We noted that because information is being received and inputted manually by ABCC, the analysis and subsequent information being provided to physicians and pharmacists is not as timely as it would be if all systems were integrated. DOH management indicated to us that the cost of creating an on-line computer system for the program is estimated at \$400,000 and that the funding is expected to be received in 2005-06.
- 7.67** Although the program is funded by the DOH, there was no clearly defined accountability relationship between the Association and the Department. The Association was not supported by any legislative authority to enable it to intervene when issues were identified. In October 2004, the Prescription Monitoring Act was passed which establishes the Nova Scotia Prescription Monitoring Board and provides legislative authority for the Board to establish and operate a prescription monitoring program in the Province. The objective of the program is to promote the appropriate use, as well as reduction in misuse, of monitored drugs.

Recommendation 7.10

We recommend DOH establish a real-time electronic system to track utilization of drugs monitored by the Prescription Monitoring Association of Nova Scotia with the goal of flagging issues before prescriptions are dispensed.

Eligibility and Payments by Insured Persons

- 7.68** **Overall conclusion** - We concluded there are adequate processes in place to ensure only eligible people are enrolled in the various programs. There are also appropriate controls in place to ensure that annual premium and co-payment amounts for each prescription filled are being billed and collected as required.
- 7.69** **Seniors' Pharmacare Program eligibility** - There is a formal process to establish the amount of the annual premiums and co-payments required to be paid by seniors under the program. As part of the process, program changes are recommended by the Seniors' Secretariat which consults with the Group of IX Seniors' Organizations. The recommendations of the Seniors' Secretariat are reviewed by DOH staff and are considered when submitting changes to Treasury and Policy Board for review and approval.

- 7.70** Terms and conditions for acceptance into the Seniors' Pharmacare Program are outlined in an annual Information Booklet. A copy of the Booklet is included in the initial registration and yearly renewal packages sent out to seniors. Information on the program is available on DOH's website and information can be obtained by calling the Department's toll free number.
- 7.71** ABCC has established an annual registration process to determine client eligibility. During this process it determines whether seniors are eligible for coverage and the amount of the annual premium they will be required to pay. Seniors receiving the Guaranteed Income Supplement (GIS) are exempted from paying the premium. Annual income levels and GIS recipients are verified with the appropriate federal government agency or department.
- 7.72** Based on our testing of a sample of seniors receiving benefits under the program during 2002-03, we concluded that there are appropriate procedures and controls in place to ensure only eligible seniors receive benefits, and that all premiums are being billed and collected as required.
- 7.73** The Seniors' Pharmacare Program is an insurer of last resort. All seniors who have coverage under another drug plan are not entitled to benefits under the Seniors program. Currently, seniors are required to self-declare coverage under another drug plan.
- 7.74** **Community Services Pharmacare Program eligibility** - To be eligible to receive benefits under the Community Services Pharmacare Program the individual must meet criteria established to receive income assistance under the Employment Support and Income Assistance Act, and must not be eligible to receive coverage under a private insurance plan. The ABCC claims payment system is updated on a daily basis via an electronic file of eligible clients provided by DCS. Based on our testing of a sample of claims paid during 2002-03, we concluded that only eligible clients were receiving prescriptions paid for by the program.
- 7.75** **Other disease specific drug programs** - Program terms and conditions for the disease specific drug programs are contained in policies developed by the Department of Health and described in Exhibit 7.1. Clients are not required to pay annual premiums and only certain drug programs have prescription co-payment requirements. We tested a sample of claims for disease specific drugs processed by ABCC and concluded that claims paid under these programs were for eligible clients. Inconsistencies in the various programs are due to the evolution of the programs over the years. Inconsistencies make the programs difficult to administer and explain.

Recommendation 7.11

We recommend that each of the disease specific drug programs be reviewed to ensure that the rationale for the program is still valid and that the coverage provided by the various programs is consistent.

Compliance of Billed Transactions

- 7.76** **Overall conclusion** - We reviewed the system to process claims and concluded controls are generally adequate. We concluded there is appropriate monitoring of claims under the Seniors' and Community Services drug programs. We recommended the scope of monitoring activities be extended to the disease specific programs.
- 7.77** **Edit and assessment of claims** - We documented and reviewed the system used by ABCC to process electronic claims and concluded controls are adequate.
- 7.78** Prior to being approved for payment, pharmacy claims are subjected to numerous electronic edit checks designed to detect inappropriate claims. Edit checks include searching for duplicate claims, ensuring a valid subscriber Health Card number, ensuring the pharmacy identification number is valid, and ensuring the drug identification number has been approved as a benefit. The system calculates the amount of the claim based upon adjudication rules and staff at the pharmacy is notified of the amount to be collected from the subscriber.
- 7.79** ABCC receives manual and batch claims under the disease specific programs. We reviewed the system to process manual claims and concluded controls could be strengthened. ABCC staff ensure the client is registered with a clinic, an eligible drug has been prescribed and the correct dispensing fee has been paid (if applicable). ABCC staff are not required to verify the reasonableness of the drug cost claimed. These claims are not subject to the regular ABCC audit process. Controls for processing of manual claims at ABCC could be improved through appropriate segregation of duties and review by a second person as well as inclusion in the ABCC audit plan.

Recommendation 7.12

We recommend that the controls over claims related to disease-based programs be strengthened to include audit verification, appropriate segregation of duties and assessment of the reasonableness of drug costs.

- 7.80** Our audit included testing a sample of 60 drug claims during 2002-03 for compliance with program terms and conditions as well as the Tariff Agreement with the Pharmacy Association of Nova Scotia. Our sample included claims paid under all drug programs except the exception drug fund. As a result of our testing, we concluded that payments are accurate and in accordance with the terms and conditions of programs and contract requirements.
- 7.81** **ABCC Monitoring and Statistics work** - The Monitoring and Statistics Division of ABCC is responsible for monitoring payments to providers under the Seniors' Pharmacare and Community Services Pharmacare Programs. DOH approves all audit procedures and audit recovery guidelines used by the Division.

- 7.82** Various types of audit tools, including the following, are used to verify claims submitted by pharmacies.
- Service verification letters are sent to a random sample of clients of each pharmacy to determine if the services claimed were the services actually provided.
 - On-site prescription audits are performed to verify that the contents of the claims agree with the prescriptions, prescriptions include all required information, and the quantity and maximum number of refills are not exceeded.
 - Actual acquisition costs audits are conducted to ensure the programs are being charged the actual drug costs incurred by the pharmacies in accordance with the Tariff Agreement.
- 7.83** If audits reveal instances of inappropriate billing, the funds are recovered from the pharmacy in accordance with the audit recovery guidelines.
- 7.84** ABCC produces an annual report summarizing the results of audit activity each year. The report is provided to DOH for information. The 2002-03 report included the following statistics.
- 13,602 service verification letters were sent out with an 88% response rate.
 - 171 prescription audits were conducted resulting in recoveries of \$321,560.
 - 199 actual acquisition cost audits were conducted resulting in recoveries of \$135,706.
- 7.85** The Division's goal is to audit every pharmacy once every two years. Pharmacies may be subject to more frequent audit if the average day's supply of drugs dispensed is not consistent with the Provincial average or the average acquisition cost of drugs is not consistent with the Provincial average.
- 7.86** We reviewed a sample of audits conducted and concluded the audits were conducted in accordance with the procedures and guidelines established by the Division.
- 7.87** **Scope of monitoring activity** - All drug programs should be subject to monitoring activities. ABCC's monitoring activity is confined to computer claims processed under the Seniors' and Community Services Pharmacare Programs. No monitoring is performed on the manual claims processed under these programs or the disease specific drug programs. Manual claims processed by DOH for the exception drug fund are reviewed and approved on a monthly basis.

Exception Drug Funding

- 7.88** The QEII Health Sciences Centre and IWK Health Centre administer the exception drug fund on behalf of DOH (see Exhibit 7.7).
- 7.89** QEII and IWK staff at the clinics are required to determine client eligibility based on the guidelines established by the DOH. Coverage is restricted to Nova Scotia residents on an outpatient basis only, and only to be provided if the clients do not have any other means of obtaining the drugs at a reasonable cost, such as third party insurance coverage. We were informed by QEII management that, due to a lack of resources, few clinics at the QEII are actually making this determination and as a result these programs may be covering drug costs for patients who are actually ineligible for the program.
- 7.90** DOH receives a monthly summary invoice from the QEII for the cost of the drugs dispensed by the QEII under exception drug funding. DOH, prior to paying the invoice, will ensure that only eligible drugs are being invoiced and DOH will also verify the mathematical accuracy of the bill. The invoice is also assessed for reasonableness by comparing to drug costs on previous invoices. Because the QEII only submits summary invoices, limited analysis of program costs can be made. DOH receives additional information with respect to the number of clients receiving drugs or the number of prescriptions being issued for some exception drug programs but not all. At present the DOH does not conduct any audit verification of the reasonableness of drug costs claimed by the QEII or whether patients are eligible for coverage. As an example, we examined the home address of all patients who received prescriptions for mycophenolate based on the QEII's January 2004 invoice to the DOH. We discovered that of the \$93,144 billed, \$3,105 was billed incorrectly under the terms of the program. This represents a 3% error rate. These patients should have been considered as inpatients and therefore not eligible for the program. The cost of the drugs should have been borne by the facility where they were registered as inpatients. Management of the Capital District Health Authority indicated that they do not have the means or resources to assess whether a client meets eligibility criteria for exception drug funding.

Recommendation 7.13

We recommend the Department of Health put processes in place to ensure that it is receiving sufficient information from the QEII and the IWK to allow detailed analysis of program costs and to ensure only eligible patients receive prescriptions covered by the Exception Drug Fund.

Reporting to the Legislature

- 7.91** **Performance reporting** - The annual Estimates and Public Accounts of the Province, tabled in the House of Assembly, contain information on the financial operation of the drug programs.

- 7.92** The recoveries and expenditures of the Insured Prescription Drug Plan Trust Fund are reported to the House of Assembly through its audited financial statements.
- 7.93** We noted the information presented by the Department to the Legislature does not describe the various drug programs being offered, explain significant issues and risks and describe past and expected future performance. Minimal financial information is being presented and there is no statistical information and analysis being provided. Some of this information is available to the general public via the DOH website which includes the Department's Annual Statistical Report and Supplement.

Catastrophic Drug Coverage

- 7.94** Government has recognized that many Nova Scotians do not have drug coverage and one of the priorities identified in the DOH Business Plan is the development of a catastrophic drug plan. On February 5, 2003 the First Ministers agreed to a new Federal/Provincial Health Accord. As part of this Accord, a new \$16 billion Health Reform Fund was established by the Federal Government to target three priority reform activities: the expansion of new models of primary health care; home care; and catastrophic drug coverage. Department management indicated to us that staff is developing a proposal for an expanded prescription drug insurance program. Funding has not been allocated to this initiative.

CONCLUDING REMARKS

- 7.95** Drug therapy is an important part of an integrated health care system in Canada. Appropriate drug therapy has the potential to reduce costs in other aspects of the health system such as acute care and long-term care. Drug programs offered by all governments in Canada have been experiencing rapidly increasing costs. Despite the Nova Scotia government's best efforts to control costs by introducing initiatives such as a strong pharmacy audit regime, setting maximum acquisition costs based on equivalent drugs, requiring special approvals for funding of certain drugs, a thorough formulary management process and programs designed to positively influence physician prescribing, costs continue to increase.
- 7.96** From our review of cost data from other provincial programs in Canada, Nova Scotia drug costs compare favourably with those of other provinces. A comparison between drug prices paid by acute care institutions in Nova Scotia and the Province's Pharmacare programs show that acute care institutions pay significantly less for the same drugs than the prices paid by Nova Scotia's Pharmacare Programs. Drugs in Nova Scotia's acute care sector are purchased by the Nova Scotia Provincial Drug Distribution Program through a national buying group representing many large hospitals in Canada. Although we acknowledge that pharmaceutical companies ultimately control the cost of drugs and may be unwilling to reduce prices for drugs which are not used in a hospital setting, the potential for savings from even modest price reductions warrants the exploration of possible options to the current system.

- 7.97** Monitoring of drug prescribing and utilization is essential to ensure that eligible program participants are receiving optimal drug therapies at the lowest possible cost. The Department of Health and Atlantic Blue Cross Care have implemented processes for monitoring drug utilization. However, the ability to monitor is limited by deficiencies in the current information systems. For example, there is no system which monitors drugs for potential negative drug interactions. Individual pharmacies have such systems, but they only monitor the drugs purchased by the person at that pharmacy - not from other pharmacies. The monitoring of drug use by individual patients, physician prescribing habits, and efforts to educate physicians on proper prescribing should be enhanced.
- 7.98** We acknowledge that the Nova Scotia government has taken measures to control drug costs and utilization, but there is more that should be done.
- 7.99** As noted in the opening paragraphs of this chapter, this was a concurrent audit with legislative auditors of eight other Canadian jurisdictions using a common audit plan and methodologies. We communicated with our colleagues throughout the audit and were able to share information on best practices and benchmarks. We believe that this approach was beneficial in allowing us to produce realistic recommendations for program enhancement and we look forward to participating in more collaborative audits in the future.
-

Summary of Key Program Terms and Conditions Concerning Eligibility, Drug Coverage, Annual Premiums and Co-payments for the Year Ended March 31, 2003

Exhibit 7.1

Seniors' Pharmacare Program

- Authority to administer the Program is the Health Services and Insurance Act, Seniors' Pharmacare Regulations, Insured Prescription Drug Plan Regulations and Pharmacare Tarriff Regulations.
- Seniors must be a Nova Scotia resident, covered under MSI (Medical Service Insurance); and be at least 65 years of age.
- Seniors with coverage under a private drug plan, Veterans Affairs Canada or First Nations or Inuit Health are not eligible to join.
- Eligible drugs are listed in the Nova Scotia Formulary.
- Seniors who receive the Guaranteed Income Supplement (GIS) do not pay a yearly premium.
- Seniors who do not receive the GIS pay a premium up to \$336 per year.
- Seniors qualify for a reduced premium if they are single and have income less than \$24,000 or are married and have income less than \$28,000.
- The co-payment for each prescription filled is 33% of the total prescription cost up to a maximum of \$350 per year. The minimum co-payment is \$3 and the maximum co-payment is \$30.

Cancer Program

- Authority to administer the Program is an Order in Council.
- Clients must be a Nova Scotia resident under the age of 65 and covered under MSI.
- Clients with coverage under another government program (Community Services Pharmacare, Workers' Compensation Board, Veterans Affairs Canada or First Nations or Inuit Health) are not eligible.
- Gross family income must be less than \$15,720 per year.
- Clients must have a confirmed diagnosis of cancer.
- Eligible drugs are contained in the Nova Scotia Formulary.
- There is no annual premium or co-payment.

Other Disease Specific Programs

- Authority to administer the Program is various Orders in Council or the general powers of the Minister contained in Section 13(1)(g) of the Health Services and Insurance Act.
- Clients must be a Nova Scotia resident under the age of 65 and covered under MSI.
- Clients with coverage under another government program are not eligible.
- Clients must have a confirmed diagnosis of cystic fibrosis, diabetes insipidus, growth hormone deficiency or multiple sclerosis.
- Client must be registered at the applicable clinic at the QEII or IWK Health Centre.
- Eligible drugs and equipment are contained in Department of Health policies.
- There is no annual premium.
- The co-payment for each prescription filled is \$9.35.

Exception Drug Programs

- Authority to administer the Program is the general powers of the Minister contained in Section 13(1)(g) of the Health Services and Insurance Act.
- Clients must be a Nova Scotia resident and covered under MSI.

- Clients must have no other means for obtaining funding for the drugs (private health insurance, Workers' Compensation Board, Veterans Affairs Canada or First Nations or Inuit Health).
- The client requires treatment for organ transplantation, renal failure, multiple sclerosis, HIV / AIDS, HIV hemopliacs, neutropenia and schizophrenia.
- Clients must be registered at the appropriate clinic at the QEII or IWK Health Centre or prescriptions require the approval of an authorized physician.
- Eligible drugs are contained in Department of Health policies.
- There is no annual premium.
- The co-payment for each prescription filled is \$9.54.

Community Services Pharmacare

- Authority to administer the Program is the Employment Support and Income Assistance Act and Regulations, and Social Assistance Act.
- Clients and their dependents must be in receipt of Income Assistance.
- Clients must be accessing Community Supports for Adults (Homes) and do not have coverage under another drug plan.
- Eligible drugs as included in the Nova Scotia Formulary.
- There is no annual premium.
- The co-payment for each prescription filled is \$5. There is an exemption for clients with disabilities who have large, on-going monthly prescription drug costs or require small dosage amounts taken on a frequent basis.

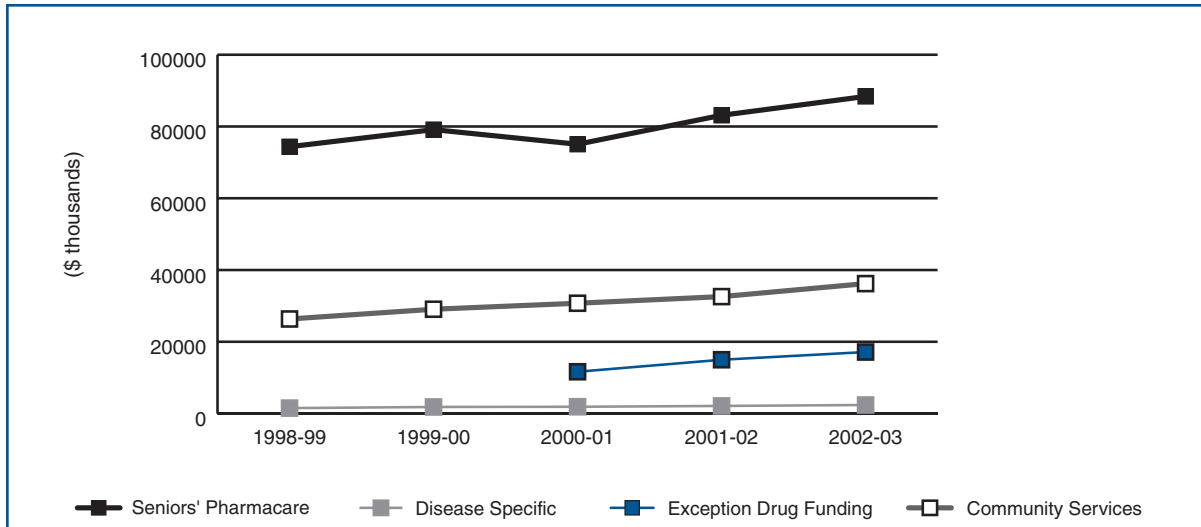
Drug Program Statistics - Year Ended March 31, 2003

	Gross Expenditures (\$ thousands)	Number of Beneficiaries	Prescriptions Dispensed	Expenditure Per Beneficiary (\$)
Seniors' Pharmacare	123,669	94,593	2,883,326	1,307
Cancer	591	370	N/A	1,597
Cystic Fibrosis	826	151	N/A	5,470
Growth Hormone	521	43	N/A	12,125
Diabetes Insipidus	116	69	N/A	1,679
Multiple Sclerosis	323	N/A	N/A	N/A
Exception Drug Funding	17,137	N/A	N/A	N/A
Community Services Pharmacare	37,504	45,976	865,802	816

Note: Certain information is not available and is noted as N/A in the Exhibit.

Net Drug Program Expenditures (after premiums and co-payments are deducted)

Exhibit 7.3

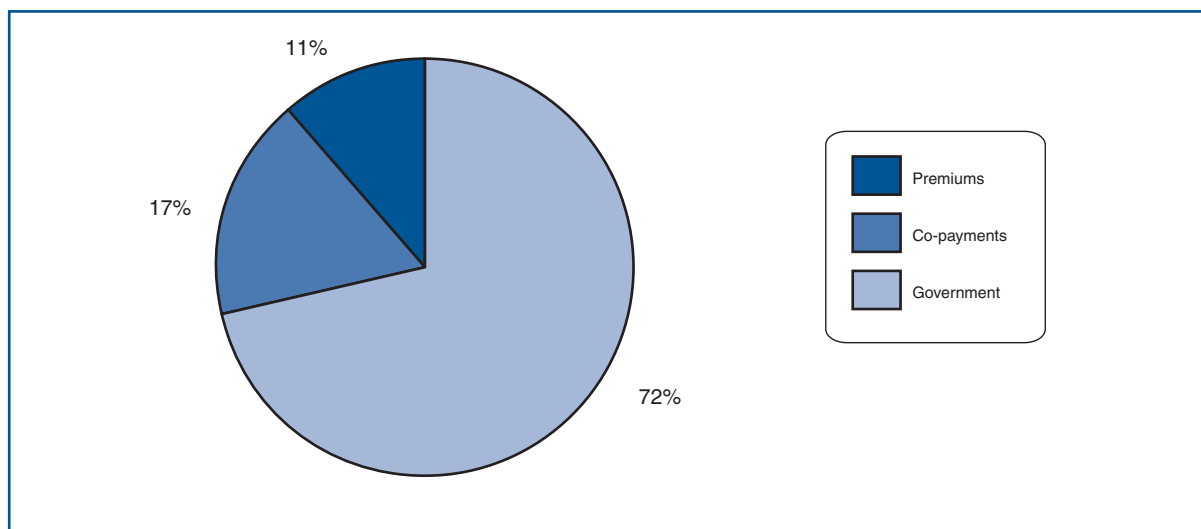


Note 1: In 1998-99 and 1999-2000 exception drug funding was included in the budget of the QEII Health Sciences Centre.

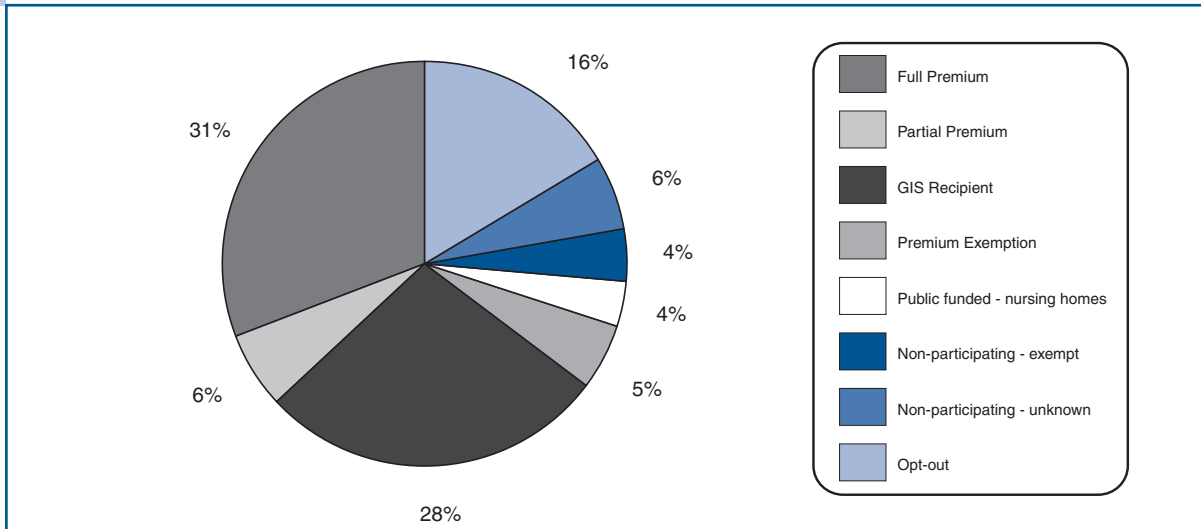
Note 2: From 1998-99 to 2002-03, there were changes in the annual premium and co-payments paid by seniors under the Seniors' Pharmacare Program. During this period gross expenditures increased from \$99.3 million to \$123.7 million, a 25% increase in costs.

Seniors' Pharmacare Program Revenue by Source - 2002-03

Exhibit 7.4



Nova Scotia Seniors' Status with Respect to Pharmacare - 2002-03



Note: Enrolment statistics were obtained from the Seniors' Pharmacare computer system. The difference between the estimated number of seniors (as estimated by Statistics Canada) and the seniors recorded in the computer system are included in the category entitled Non-participating - unknown. DOH staff have been unable to determine who these seniors are. DOH staff believe there may be some seniors who are eligible for a full or partial premium exemption who are paying the full premium; however, DOH staff also have no way of determining who these seniors are.

Roles and Responsibilities of Organizations Involved in the Prescription Drug Program

Atlantic Blue Cross Care (ABCC) - In 1999 Maritime Medical Care and Blue Cross of Atlantic Canada join operations and assumed the name Atlantic Blue Cross Care. Since 1969, this organization has administered the Medical Services Insurance (MSI) program for the Province of Nova Scotia. The MSI program includes the issuance of health cards and the maintenance of health care records for all residents of the province and the payment of more than 11 million medical and drug claims annually from a wide variety of health care providers.

Atlantic Expert Advisory Committee (AEAC) - AEAC is an expert advisory committee composed of health and other professionals with expertise in drug therapy and drug education from Atlantic Canada. The committee makes listing recommendations to each of the participating Provinces regarding the listing of new drugs or combination drugs in their formularies. Funding for the Atlantic Common Drug Review is provided by the four participating Provinces.

Canadian Coordinating Office for Health Technology Assessment (CCOHTA) - CCOHTA is an independent, non-for-profit organization that is funded by the Canadian federal, provincial and territorial governments. The mission of CCOHTA is to encourage the appropriate use of health technology by influencing decision makers through the collection, analysis, creation and dissemination of information concerning the effectiveness and cost of technology and its impact on health. CCOHTA administers the Common Drug Review program and the Canadian Optimal Medication Prescribing and Utilization Service (COMPUS).

Prescription Monitoring Association of Nova Scotia (PMANS) - PMANS is a non-profit organization whose mandate is to reduce the abuse and diversion of controlled and restricted drugs under the federal Controlled Drugs and Substances Act. The governing board of PMANS consists of a representative from six self-governing organizations. DOH is represented by two non-voting members on the board. PMANS receives administrative assistance from ABCC. The board establishes policy that guides the Prescription Monitoring Program. PMANS is funded by the Department of Health.

Dalhousie University Continuing Medical Education - Dalhousie University Continuing Medical Education administers an academic detailing program which is funded by DOH. DEANS provides direction on the specific topics addressed.

Drug Evaluation Alliance of Nova Scotia (DEANS) - DEANS was established to contribute to the health of Nova Scotians by encouraging appropriate drug use. DEANS obtains and analyzes information; provides relevant information to Nova Scotian decision-makers, practitioners and consumers; and evaluates the impact of the information and the methods of its dissemination on policy making, practitioner behavior and consumer outcomes. Members of the Management Committee are appointed by DOH. DOH is represented by non-voting members of the management committee. Although DOH funds DEANS, external funding might be sought for special projects.

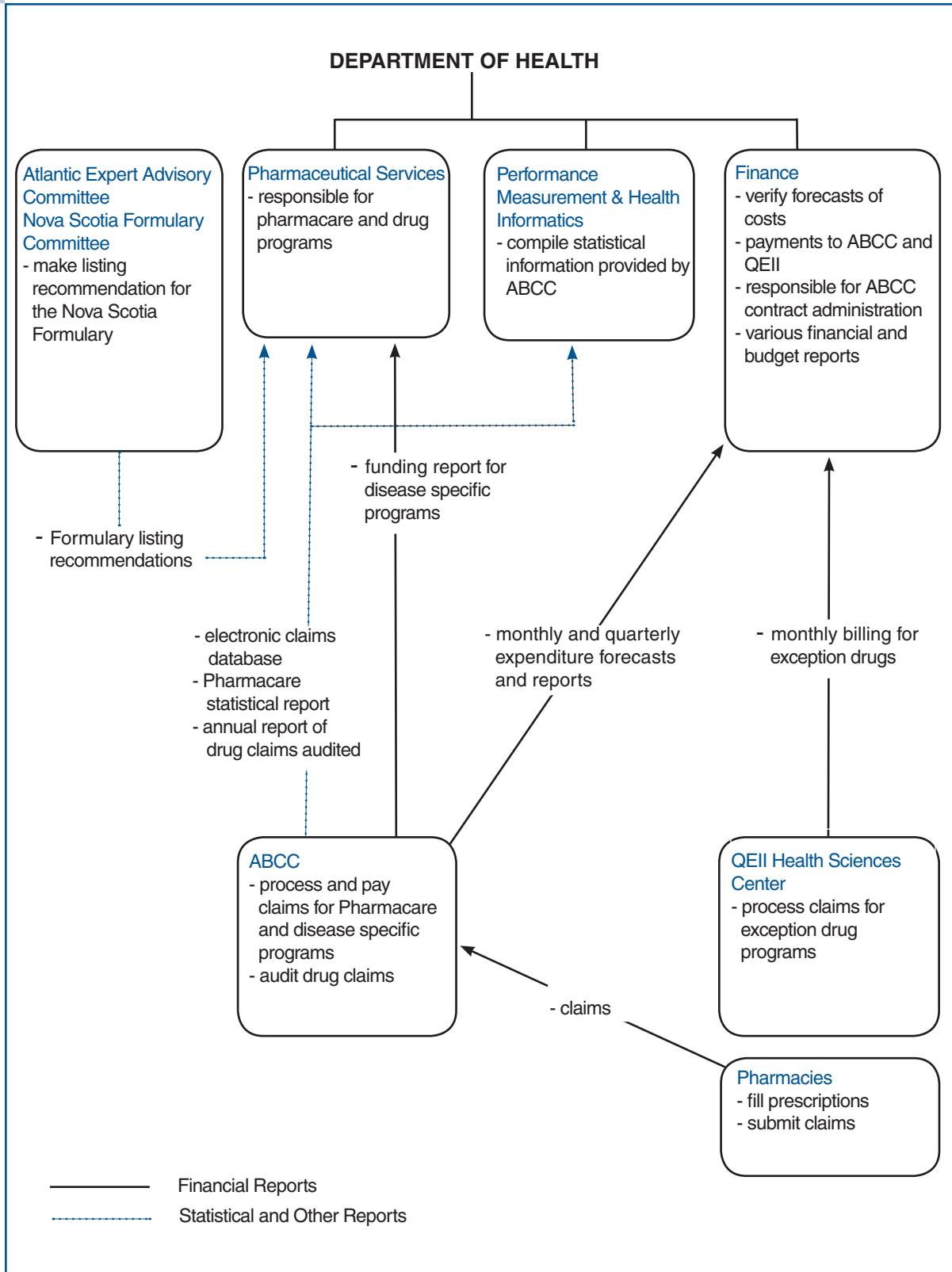
N.S. Seniors' Organizations - Group of IX - This group represents seniors' organizations in Nova Scotia. A committee of nine members makes recommendations to the Minister of Health on changes to the Seniors' Pharmacare program. Administrative support is provided by DOH.

Health Canada - The Therapeutic Products Directorate of Health Canada regulates pharmaceutical drugs and medical devices for human use. Prior to being given market authorization, a manufacturer must present substantive scientific evidence of a product's safety, efficacy and quality as required by the federal Food and Drugs Act and Regulations. Formal authorization to market or distribute a drug is granted to a drug manufacturer through a Notice of Compliance.

Nova Scotia Formulary Management Committee - This expert advisory committee is composed of medical specialists, family practitioners and pharmacists appointed by DOH. The committee makes recommendations to DOH regarding the management of the Nova Scotia Formulary. DOH provides funding and administrative support for operation of the committee.

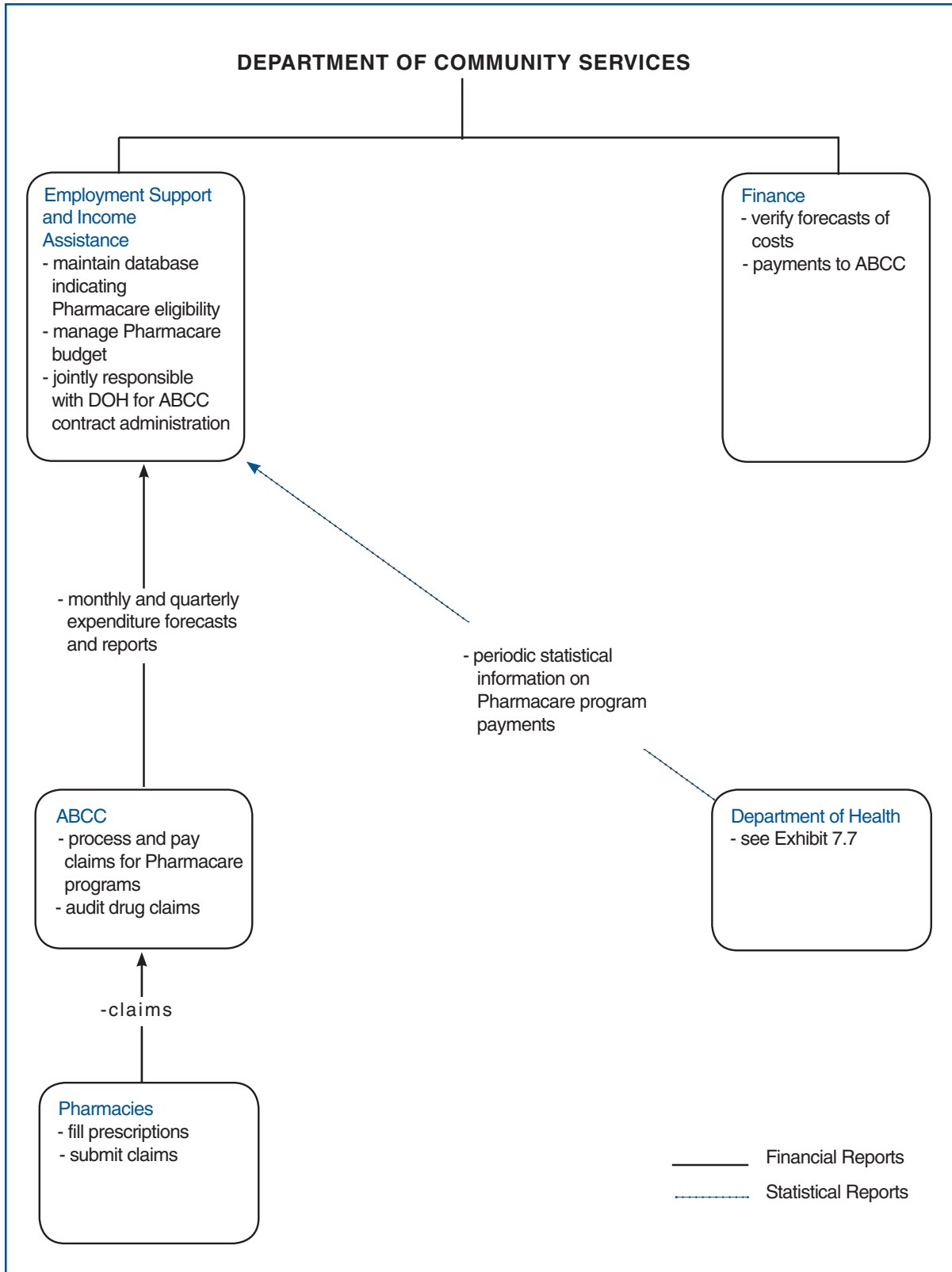
Patented Medicine Prices Review Board (PMPRB) - The PMPRB was created in 1987 under the federal Patent Act as an independent, quasi-judicial tribunal. The PMPRB is responsible for regulating the prices that manufacturers charge for all patented medicines, new and existing, sold in Canada, under prescription or over the counter, to ensure they are not excessive. Pursuant to an agreement by the Federal/Provincial/Territorial Ministers of Health and at the request of the federal Minister of Health, the PMPRB reports its research studies conducted under the National Prescription Drug Utilization Information System (NPDUIS) on the utilization and management of pharmaceutical products in Canada.

Pharmacare and Drug Programs Summary of Responsibilities and Reports Submitted



Summary of Responsibilities and Reports Submitted

Exhibit 7.8



Factors That Affect Drug Expenditure and Utilization

PRICES

Entry of New Drug Chemicals

Volume of Drug Use

- Population-related
 - Changes in total population
- Changes in population demographics
 - Age, gender and ethnicity
- Changes in health status of a population
 - Emergence of new diseases
 - Epidemics

System-related

- Changes and transition associated with health system reform and restructuring
 - Move towards shorter hospital stays and home/community care (shift of drug provision from hospital to community)
- Change in policies and programs
 - The extent of formulary listings
 - Eligibility and co-payments
- Availability of third party insurance coverage

Research and technology-related (clinical and informational)

- New treatment approaches
 - Drugs replacing surgery
 - Drug therapy for previously untreatable diseases
 - Availability of more and/or improved diagnostic technology
 - Outcomes research, evidence-based preventive or curative approaches in diagnosis or treatment
- Use of programs and technology in monitoring patients

Pharmaceutical industry

- Development of new drug products (e.g., new strengths, new drug forms and presentations)
- Promotion of drugs to physicians
- Drug sampling
- Direct to consumer advertising

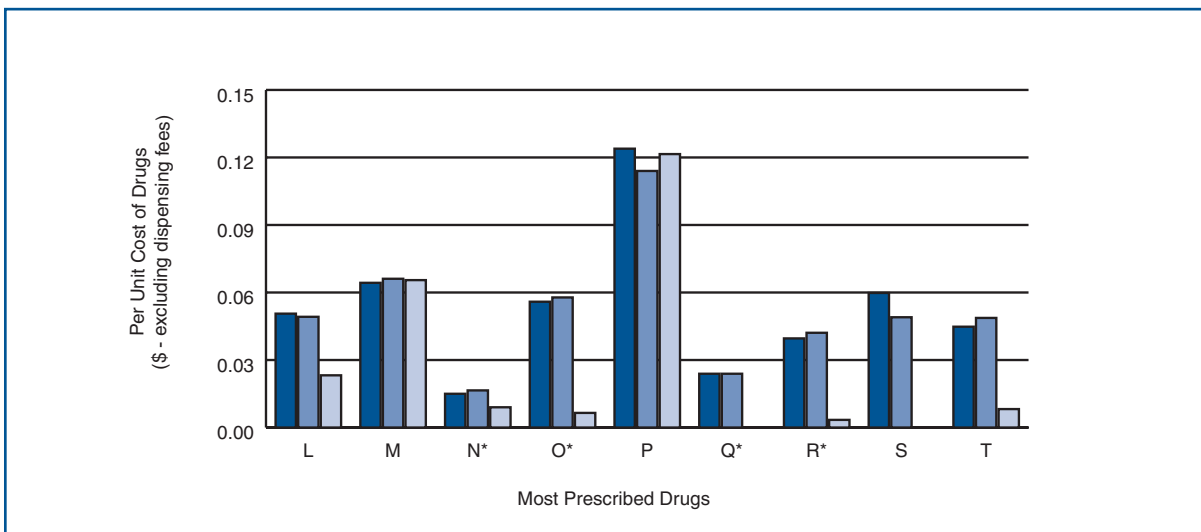
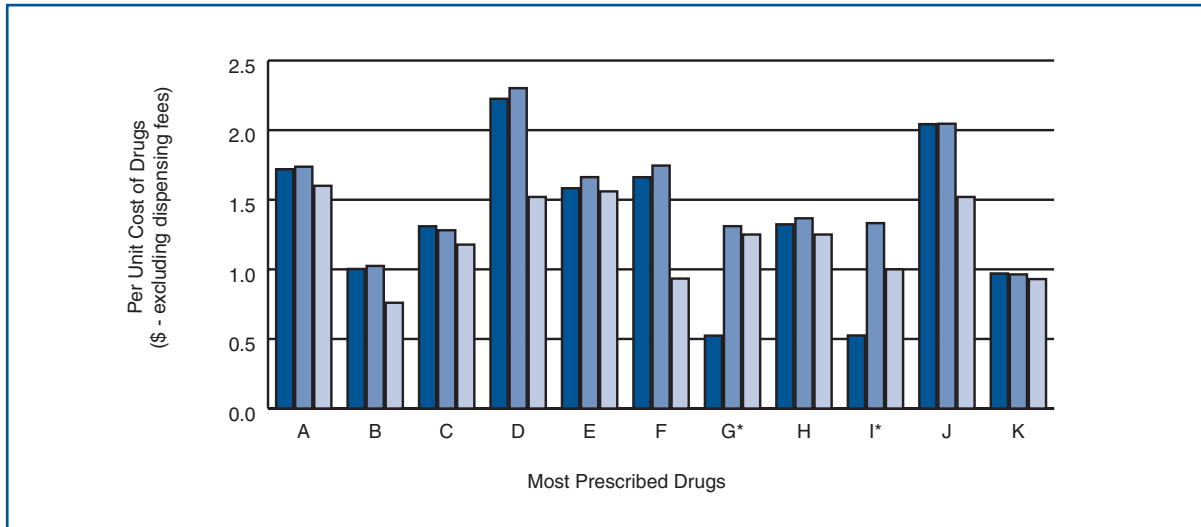
Practice and people-related (health care providers and consumers)

- Changes in prescribing and dispensing practices
- Number and mix of prescribers (specialists, general practitioners, nurse practitioners and others)
- Multiple doctoring
- Consumers' expectations and behaviours
- Wastage

Note: Information in this exhibit was obtained from Development of Drug Utilization Indicators: A Feasibility Study Using Aggregation Administrative Databases published by the Canadian Institute for Health Information, 2002.

Comparison of Drug Costs for 20 Most Prescribed Drugs in Canada

Exhibit 7.10



Nova Scotia Seniors' Pharmacare
 Other Jurisdictions (Average of British Columbia, Manitoba, Saskatchewan and a Federal program)
 Nova Scotia Provincial Drug Distribution Program (hospitals' cost)

*These drugs have a maximum allowable cost in Nova Scotia which is not based on the pharmacies' actual acquisition cost (see paragraph 7.49).

Audit Criteria

Program Management

- The objectives of the program should encompass the entire program mission. They should be well defined, measurable and periodically reviewed.
- Adequate performance information should be available to measure whether program's mission statement and objectives are being achieved.
- The selection process, for the third party service provider, should provide due regard for economy and efficiency, and compliance with government's procurement policies and procedures.
- An adequate responsibility framework needs to be put in place with the third party service provider in order to evaluate the effectiveness of its services.
- The organization should regularly monitor and evaluate the performance of the third party service provider.
- The organization should have adequate standards to monitor and evaluate the program's performance.
- There should be regular evaluation of key aspects of the program's performance and corrective action taken when necessary.
- Adequate procedures should be in place to ensure compliance with legislation and policies and to take corrective action when necessary.

Drug Selection and Cost

- Drugs that are listed on the formulary should be properly assessed to ensure they are cost effective.
- Drugs listed should be regularly evaluated to determine whether they should be retained, deleted or restricted in their use, and corrective action taken when necessary.
- Drugs under assessment that have the potential for significant cost savings or avoidance should be fast tracked for inclusion on the list.
- There should be policies and processes in place to ensure that listed drugs and pharmacy services are acquired at the lowest possible cost (including use of competitive processes, generic drugs, and volume discounts).
- Commercial marketing practices should be followed up to see if they have an impact on the drug/pharmicare program and strategies.
- Prices of drugs should be followed up and analyzed and, if necessary, audited.

Drug Use

- Prescribing practices should be monitored to assess and, to the extent practical, determine whether they are appropriate and economical.
- Procedures should be in place to encourage improved physician prescribing practices.

- Procedures should be in place to monitor and analyze drug use, and take corrective action where necessary.

Eligibility and Payment by Insured Persons

- Program terms and conditions and eligibility requirements should be clearly communicated.
- Adequate processes should be in place to ensure a recipient's eligibility at registration and during the covered period.
- Adequate procedures should be in place to ensure that payments are made by the recipients in accordance with the terms of plan eligibility.

Claims Submitted by Pharmacies

- Procedures should be in place to verify the validity of claims submitted and to ensure that related payments are accurately and consistently processed on a timely basis.
- There should be appropriate computer environment and application controls to provide for completeness, accuracy, and authorization of data processed and appropriate contingency planning.
- The organization should have reasonable assurance that the pharmacy payment system processes only valid claims accurately, consistently and on a timely basis and that the amounts paid to pharmacies comply with the policies and legislation.
- System deficiencies should be identified and corrected on a timely basis.
- Adequate procedures should be in place to identify and prioritize pharmacies for audits.
- Audits should be consistently conducted and, where applicable, recoveries should be made on a timely basis.

Reporting to the Legislature

- The reported information should
 - focus on the essential aspects of performance
 - make mention of the future and also the past
 - explain key risks
 - explain the main considerations regarding capacity
 - explain any other essential factors related to performance
 - integrate financial information with non-financial information
 - present comparative information
 - present credible information fairly interpreted
 - disclose the basis for reporting.
- The reported information should be presented to the legislature in the prescribed timeframe.