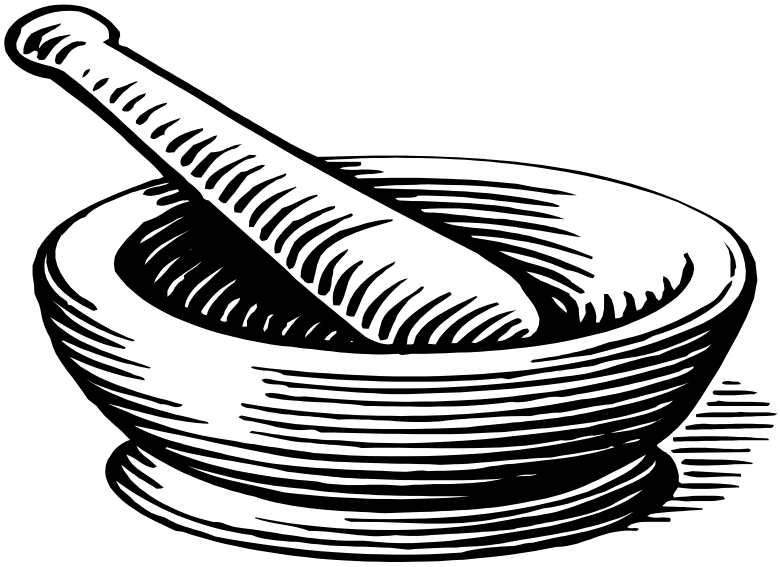
Final Report



An Activity-Based-Costing Estimate for the Average Cost of Pharmacy Services in Newfoundland and Labrador and an Evaluation of the Real Cost of the Proposed Legislative Change to the Formulary Requiring a Manufacturer's Guarantee of Best Prices for Generic Drugs

A report prepared for
The Pharmacists' Association of Newfoundland and Labrador

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Executive Summary

The Government of Newfoundland and Labrador (GNL) has indicated to the Pharmacists' Association of Newfoundland and Labrador (PANL) that it will only accept prices for generic drugs that do not exceed the lowest price that prevails in any other province of Canada.[1] While pharmacists are expected to deliver "cognitive" services to patients without remuneration, the proposed legislation does not have any allowance for funding other professional services or any other mechanism that recognizes the financial reality facing pharmacies operating within Newfoundland and Labrador (NL).

This policy change may be seen as beneficial to Newfoundlanders and Labradorians in that lower prices for generic drugs should, in theory, release more discretionary income for patients that can be used to meet their other needs. However, like many public policy changes, there may be unintended effects that could be ultimately detrimental to the health and well being of the residents of NL who, ostensibly, the proposed legislation is intended to benefit.

To fully appreciate that there may be unintended effects, one needs first to realize that although the GNL is seeking the lowest possible price for generic drugs, it is not proposing any offsetting restructuring of the NL pharmacy industry to fund other professional pharmacy services that are not covered currently by the dispensing fee. These other professional pharmacy services do involve time and have a resource cost associated with them. Heretofore, the majority of these professional services in NL have been cross-subsidized by professional allowances received by pharmacies from generic drug manufacturers.

PANL is concerned for the viability of many of its rural and some of its urban pharmacies should the amendments to the formulary stand – without an offset for the loss of revenues associated with the professional allowances received from generic drug manufacturers. Consequently, PANL commissioned this study to:

- determine the actual costs of services provided by pharmacists to dispense drugs;
- ascertain the loss of revenue to the "Pharmacy" due to the new pricing formulary;
- describe the possible impacts to services provided to patients due to the new pricing formulary; and

[1] See *Section 23.2, Chapter P-12.01: An Act Respecting Pharmaceutical Services*, Statutes of Newfoundland and Labrador 2006, http://www.assembly.nl.ca/legislation/sr/annualstatutes/2006/P12-01.c06.htm. This issue became more pressing with the regulatory amendment that was put in place on December 20, 2007 and was due to come into effect on January 1, 2008. However, its implementation has been delayed until January 1, 2009. This delay provides a brief period of time for the affected stakeholders to document the full anticipated impacts of the legislative and regulatory changes on the health and well being of Newfoundlanders and Labradorians.

- assess the possible loss of infrastructure and health-care professionals (particularly in rural regions) due to the new pricing formulary.

To achieve this objective, this study utilized an activity-based-costing approach that drew upon two surveys administered in February and March of 2008. All non-hospital pharmacies in NL were surveyed and a separate survey was administered to pharmacists and pharmacy technicians who worked in NL.

From the analysis of the survey data, it was found that the average cost per prescription dispensed in NL was $12.00, which neither compares favorably to the NLPDP contract that currently pays a fee of $7.15 per prescription plus a surcharge nor to private payer contracts such as Blue Cross which pays a fee of $9.05 plus a surcharge.[2, 3] Although there was some variation in the average cost per prescription by size of communities, there was narrow range of costs across communities considered in this study. The lowest cost per prescription dispensed was $11.11 for pharmacies operating in communities with a population of between 5,000 and 10,000 people, while the highest average cost per prescription was found in pharmacies servicing communities with a population between 1,000 and 5,000 people. In fact, there were clear scale economies found in the NL pharmacies in that the average cost per prescription fell significantly with the volume of prescriptions dispensed annually.

When the average cost by store type was examined, one observed that chain stores had the lowest average cost of $11.41 per prescription, which was followed by banner stores with an average cost of $12.59 and independent pharmacies with an average cost of $13.61.

The difference between average cost and dispensing fee revenue has been made up through professional allowances from generic drugs. Specifically, professional allowances were equivalent to 9.4% of average sales revenue in NL pharmacies. This ranged from a low of 7.3% for pharmacies located in communities with less than 1,000 people to a high of 11.4% for pharmacies located in communities serving between 1,000 and 5,000 people. When the type of store was considered, there was a larger variation in the relative importance of professional allowances to the bottom line of NL pharmacies — for independent pharmacies, this represented the equivalent of 10.3% of sales revenue; it corresponded to 8.4% of sales revenues for chain stores and 4.9% for banner stores.

[2] Even though the NLPDP surcharge can be 10% of the cost of a drug exceeding $30.00 and has been estimated by the NLPDP to add approximately $1.75 per prescription for a potential combined dispensing fee and surcharge under the NLPDP of $8.90 per prescription and the Blue Cross surcharge is 7.5% of the cost of the drug and has been estimated to equal $1.20 per prescription for potential combined dispensing fee and surcharge under the Blue Cross contract of $10.25 per prescription, it is important to acknowledge that the potential combined fees are not indicative of the actual fees and surcharges paid in Newfoundland and Labrador. In particular, some pharmacies do not charge the full surcharge to groups such as seniors.

[3] It is also interesting to note that Labrador-Grenfell Health is increasing the prescription dispensing fee paid by patients living in communities in southern Labrador. The fees will now increase from as low as $2.00 per prescription to $8.50. This is particularly significant since there are no retail pharmacies in this area and publicly-supported hospitals are seeking to recover $8.50 when NLPDP only covers $7.15 per prescription.

Even with the inclusion of professional allowance, it was clear that NL pharmacies were not making excessive profits that would allow them to easily absorb the loss of this important revenue source. The average net profitability of NL pharmacies was equivalent to 3.5% of sales. This ranged from a low of 0.1% for pharmacies operating in municipalities with less than 1,000 people to a high of 6.1% for pharmacies operating in communities with more than 10,000 people. The corresponding range by type of store was from 2.4% for chain stores to 8.4% for banner stores.

If the legislation stands unaltered, then more than 85% of all pharmacies stand to lose substantial amounts of revenue. It has been estimated that the dispensing fee would have to increase by $4.00 per prescription on average to offset the lost revenue.

Should there no replacement of this revenue lost through a change in the dispensing fee, one should expect that some pharmacies will cease operations, especially in rural parts of the province and are unlikely to be replaced by other pharmacies. As well, fees to patients and mark-ups will increase in the majority of pharmacies to offset the revenue loss. Finally, there will be some reduction in hours and employees as pharmacies attempt to find efficiencies to offset the revenue loss.

Clearly, there are likely to be unintended impacts on NL pharmacies that ultimately will adversely affect service availability and the quality of health care throughout the province. It is important that the GNL consider some of these unintended impacts before finalizing its legislation with potentially irreversible impacts for some pharmacies and their patients.

1.0 Introduction

The Government of Newfoundland and Labrador (GNL) has indicated to the Pharmacists' Association of Newfoundland and Labrador (PANL) that it will only accept prices for generic drugs that do not exceed the lowest price that prevails in any other province of Canada.[4] While pharmacists are expected to deliver "cognitive" services to patients without remuneration, the proposed legislation does not have any allowance for funding other professional services or any other mechanism that recognizes the financial reality facing pharmacies operating within Newfoundland and Labrador (NL). More importantly, the proposed legislation does not seem to recognize the importance that pharmacists play in contributing to the health and well being of Newfoundlanders and Labradorians.

Superficially, this policy change may be seen as beneficial to Newfoundlanders and Labradorians in that lower prices for generic drugs should, in theory, release more discretionary income for patients that can be used to meet their other needs. However, like many public policy changes, there may be unintended effects that could be ultimately detrimental to the health and well being of the residents of NL who, ostensibly, the proposed legislation is intended to benefit. The unintended and negative impacts from this policy change will likely be manifested through:

- reduced viability of pharmacies, with those operating in smaller or rural communities most adversely affected in this manner;
- marginal pharmacies having to cease or significantly reduce operations because an important revenue source has been removed without other compensatory changes;
- pharmacies lowering hours of operations or modifying on how prescriptions are received and dispensed;
- the downsizing of pharmacy personnel as pharmacies attempt to accommodate to the new, lower-revenue environment;
- additional fees for the other professional services currently provided free of charge;
- the complete elimination of certain services that patients have come to expect as part of a trip to the pharmacy; and/or
- an increased mark-up on drugs and services provided to NL patients.

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[4] See *Section 23.2, Chapter P-12.01: An Act Respecting Pharmaceutical Services*, Statutes of Newfoundland and Labrador 2006, http://www.assembly.nl.ca/legislation/sr/annualstatutes/2006/P12-01.c06.htm. This issue became more pressing with the regulatory amendment that was put in place on December 20, 2007 and was due to come into effect on January 1, 2008. However, its implementation has been delayed until January 1, 2009. This delay provides a brief period of time for the affected stakeholders to document the full anticipated impacts of the legislative and regulatory changes on the health and well being of Newfoundlanders and Labradorians.

To understand fully why the proposed legislation may have unintended policy and health care impacts, one needs to first appreciate how pharmacies and pharmacy professionals currently operate within NL and across the country. Likewise, it is important to recognize the integral role that pharmacists and pharmacy technicians play in ensuring that a high quality health care is maintained in NL. In particular, one needs to understand precisely what additional professional pharmacy services are provided without charge to patients as part of the normal activity associated with dispensing prescriptions in NL.

In evaluating the full effects, both intended and unintended, of the proposed NL legislative changes, it is necessary to consider that, in this specific context, the NL pharmacy sector does not operate in isolation of events occurring in other provinces. The most significant event that has a direct bearing on the proposed NL legislative change is the recent restructuring of the pharmacy sector in Ontario. Specifically, Ontario's Bill 102 significantly reduces or effectively removes rebates to pharmacies from generic drug manufacturers, also known as professional allowances. However, a mechanism was introduced in Ontario through which other professional services provided by pharmacists to their patients are funded separately within that province. This removal of generic rebates in Ontario will lower the price that can charge for generic drugs in NL because the effective elimination of rebates will reduce the price of generic drugs to the patients in Ontario.[5] Given the proposed NL legislation, this, in turn, implies that the price of generic drugs in NL will be correspondingly lower. Consequently, professional allowances in NL, typically being some percentage of the sales price, will be reduced or eliminated completely. On the surface, lower prices for generic drugs, the apparent intended impact of the proposed legislation, would seem beneficial to NL patients. A more serious analysis, however, would reveal that this may not be the case. In fact, the quality of health care may be adversely affected and, surprisingly, the cost of pharmacy services to the residence of NL may be increased, not lowered.

To fully appreciate that there may be unintended effects, one needs first to realize that although the GNL is seeking the lowest possible price for generic drugs, it is not proposing any offsetting restructuring of the NL pharmacy industry to fund other professional pharmacy services that are not covered currently by the dispensing fee. These other professional pharmacy services do involve time and have a resource cost associated with them. Heretofore, the majority of these professional services in NL have been cross-subsidized by professional allowances received by pharmacies from generic drug manufacturers. The use of professional allowances to offset the cost of other professional pharmacy services is a common occurrence across Canada. In particular, Ontario, Nova Scotia, and British Columbia have recognized that "rebates" from generic drug manufacturers have acted as subsidies for these other services and have responded by implementing new arrangements with pharmacists.

Consequently, without offsetting funding for other professional services not currently covered by the dispensing fees, pharmacies within NL stand to suffer significant losses in

[5] It is interesting to note that the generic price mandated in Bill 102 in Ontario only applies to government funded programs whereas in NL the potential change applies to all groups of patients. It is not dependent upon whether they are covered by a government plan.

revenue that will effectively come off the bottom line. Hence, the proposed legislation will reduce the viability and sustainability of certain establishments. In particular, this problem will be more acute in rural areas of the province, where low profit margins do not allow for lower revenues without a concomitant reduction in services and service hours. Furthermore, there is also a risk that health-care professionals and infrastructure may be lost in parts of the province that already have a dearth of these services and personnel. In other words, if the proposed legislative changes are implemented in NL without compensatory changes through, for example, the funding of other professional services provided by pharmacists currently without compensation, then competition, service availability and overall health quality available to Newfoundlanders and Labradorians could be compromised.

In advance of the proposed legislative and regulatory changes being implemented, it is important to trace through some of the unintended impacts that may adversely affect the health care afforded residents of NL. For instance, as pharmacies adjust to new revenue realities, some may go out of business; others may attempt to make up the loss of revenue by increasing mark-ups and/or by charging for services that people have come to expect free-of-charge from pharmacists. The end result is that the proposed legislation is likely to diminish pharmacy services in certain parts of the province and to lead to an increase in overall cost to NL patients, rather than lower prices as is the intent of the proposed legislation.

PANL is cognizant of all expenditures relative to the business operations of their members and the important, but often misunderstood and sometimes underappreciated, role that pharmacists and pharmacy technicians play in NL's health industry. PANL is concerned further for the viability of many of its rural and some of its urban pharmacies should the amendments to the formulary stand – without an offset for the loss of revenues associated with the professional allowances received from generic drug manufacturers.

Given this background, PANL has retained Wade Locke Economic Consulting (WLEC) of St. John's, NL to:

- determine the actual costs of services provided by pharmacists to dispense drugs;
- ascertain the loss of revenue to the "Pharmacy" due to the new pricing formulary;
- describe the possible impacts to services provided to patients due to the new pricing formulary; and
- assess the possible loss of infrastructure and health-care professionals (particularly in rural regions) due to the new pricing formulary.

To achieve this objective, this study utilized an activity-based-costing approach that drew upon two surveys administered in February and March of 2008. All non-hospital pharmacies in NL were surveyed and a separate survey was administered to pharmacists and pharmacy technicians who worked in NL.

Including the introduction, this report consists of 14 sections. The methodology utilized in this study is described in the next section, which is followed by a discussion of the surveys administered as part of this exercise. Section 4 provides background statistics on the NL pharmacy sector. These background statistics describe hours of operations, years of operations, work and pay condition among other characteristics in order to provide a context for interpreting the estimated impact of the change in the proposed legislation and the average cost per prescription calculated for NL pharmacies. A description of what activities are undertaken by pharmacists and pharmacy technicians are presented in Sections 5 and 6, respectively. This includes an enumeration of all the duties performed by pharmacy professionals, in general and through their dispensing activity, in particular. In addition, an evaluation of the additional services provided by pharmacies is contained in Section 7, which is followed in Section 8 by a consideration of the factors that increase the amount of time and effort required by pharmacists and technicians in providing pharmacy services in NL. The factors considered in this section are special authorizations, corrections of errors, prescriptions reversed and third party pickup. Insurance issues and their impact on resource cost per prescription are discussed in Section 9. An overall financial picture for the NL pharmacy sector is contained in Section 10. This illustrates the current level of profitability experienced in NL and provides an assessment of the role that professional allowances play in determining that profitability prior to the proposed legislative changes. Following from the discussion of the financial characteristics of the industry is an evaluation of the average cost per prescription faced by NL pharmacies, see Section 11. The consequence of the proposed legislation is dealt with in Section 12 and its implication of long-term viability and sustainability is found in Section 13. The conclusion, Section 14, is followed by four appendices which contain the surveys administered, the memo from PANL and the questions that were re-surveyed.

2.0 Methodology

Data was gathered for 2007 from pharmacy owners, managers or their designates on a broad range of relevant issues with respect to the activities undertaken by pharmacies, the human resource and payroll characteristics, their financial situation, the volume of business undertaken, the relationship between profitability and professional allowances, their likely reaction to the proposed change in legislation, and many other relevant factors. In addition, pharmacists and pharmacy technicians were survey separately with respect to their background, activities and expectations.

The data collected from the surveys were analyzed graphically and statistically in an activity-based-costing framework to ascertain the average cost faced by NL pharmacists. As well, the analysis was extended to include the probable impacts of the proposed legislative changes on pharmacies and professional pharmacy services throughout NL.

Finally, the data was analyzed by size of community and by type of pharmacy to determine whether the calculated averages differed along these dimensions. The approach adopted in this

particular study attempted to follow closely the recent similar study undertaken in British Columbia.[6]

3.0 The Survey

Excluding hospital pharmacies, there are, according to PANL's membership directory, 185 pharmacies located throughout NL. A survey, attached as Appendix A, was emailed to each of these pharmacies in February. For those pharmacies without email or which the email was non-operative, the survey was either sent by regular mail or by fax, depending upon the contact information available for the establishment in question. Each of the pharmacy owners, managers or designates was given the option to return the survey via email, fax or through regular mail. In addition to the survey, PANL sent a memo to its members explaining the purpose of the study and requesting their participation in and cooperation with the survey, see Appendix B. Finally, because of the confusion around the wording of a couple of the questions, a supplementary set of clarifying questions was sent out to those pharmacies that had responded to the original survey — see Appendix C for the specific questions that were re-surveyed.

As indicated in Table 1 and illustrated in Figure 1, 94 of the 185 pharmacies completed and returned the survey, representing a 51% response rate. A perusal of this information reveals that the survey respondents were representative of the total population of pharmacies, at least in terms of the various-sized communities from which the respondents were drawn. For instance, slightly more than 16% of pharmacies in NL are located in communities with less than 1,000 people (hereafter referred to as small communities) and approximately 13% of the survey respondents were from communities of that size. For communities with between 1,000 and 5,000 people (hereafter referred to as mid-sized communities), 28% of the sample and 23% of the total population of pharmacies are located in these sized communities. Almost 22% of NL pharmacies and 23% of the sample operate in communities with between 5,000 and 10,000 people (hereafter referred to as large communities). Finally, communities with a population in excess of 10,000 people (hereafter referred to as very large communities) account for 40% of NL pharmacies and 36% of survey respondents.

Table 1: Comparison of the Distribution of Pharmacies that Responded to the Survey with the Actual Distribution of Pharmacies in Newfoundland and Labrador by Community Size

Community Size	Sample Pharmacies	Sample Distribution	Population Pharmacies	Population Distribution
Less Than 1,000 People	12	12.8%	30	16.2%
Between 1,000 and 5,000 People	26	27.7%	42	22.7%
Between 5,000 and 10,000 People	22	23.4%	40	21.6%
More Than 10,000 People	34	36.2%	73	39.5%
Total	**94**	**100.0%**	**185**	**100.0%**

A second dimension for organizing and analyzing the survey data was by type of pharmacy. In particular, NL pharmacies were characterized as being either: (1) part of a

[6] Kearney, A.T., 2007, *Final Report: Study Findings and Analysis, Activity Based Costing Study*, British Columbia Pharmacy Association and the Canadian Association of Chain Drug Stores, British Columbia.

chain owned by a single corporate entity such as Shopper's Drug Mart or Lawton's Drugs, (2) a banner store, which is an independent store that has a loose affiliation with other pharmacies under a single banner such as PharmaChoice or (3) an independent pharmacy. Table 2 and Figure 2 profile the survey and population data along this dimension.

While the proportion of the sample and the population consisting of independent pharmacists was almost identical, there was a slightly higher proportion of the sample consisting of chain stores relative to share of chain stores operating in NL and a slightly lower share of banner stores in the sample than is found in the actual population of NL pharmacies. This difference may be explained by the fact that for the chain stores, some responses to the survey were coordinated through a central office whereas there was no corresponding coordination for the responses submitted by the banner stores.

Figure 1: Comparison of the Distribution of the Survey Respondents to the Population of Pharmacies by Size of Community

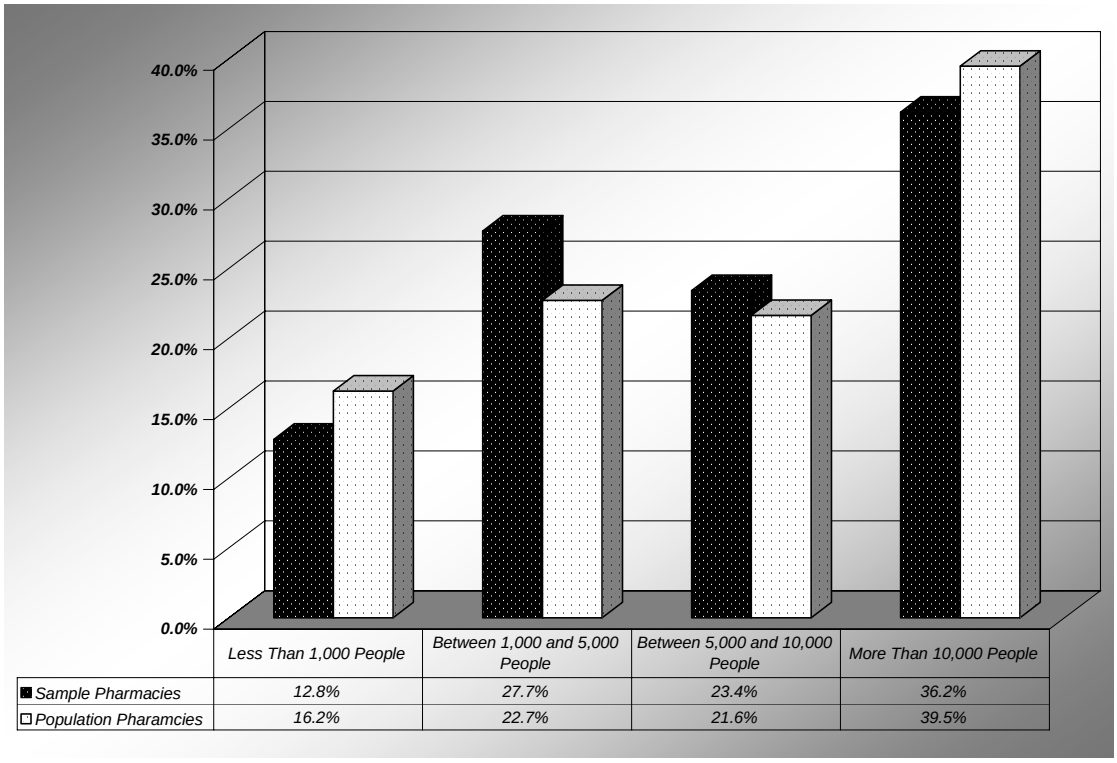
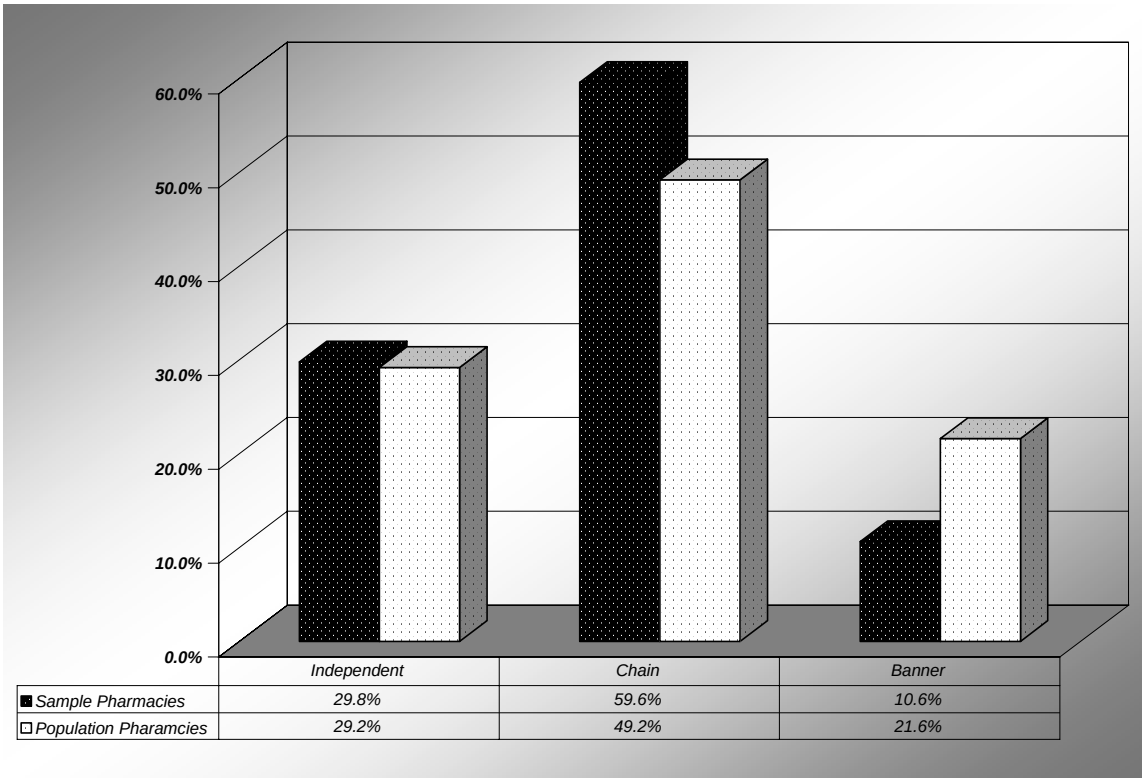


Table 2: Comparison of the Distribution of Pharmacies that Responded to the Survey with the Actual Distribution of Pharmacies in Newfoundland and Labrador by Type of Pharmacy

Pharmacy Type	Sample Pharmacies	Sample Distribution	Population Pharmacies	Population Distribution
Independent Pharmacy	28	29.8%	54	29.2%
Chain Store	56	59.6%	91	49.2%
Banner Store	10	10.6%	40	21.6%
Sample Total	**94**	**100.0%**	**185**	**100.0%**

Supplementing the surveys sent to pharmacies were additional surveys (attached as Appendix D) administered to their professional staff — both pharmacists and pharmacy technicians. Since they are not members of PANL, the association does not collect data on the number or location of pharmacy technicians working within NL. Hence, it is not possible to determine how representative the sample of pharmacy technicians is to the true population. As well, PANL did not collect data on pharmacists by community but it was able to provide an estimate of the number of pharmacists by type of pharmacy in which they worked.

Figure 2: Comparison of the Distribution of the Sample of Pharmacies to the Population of Pharmacies by Size of Community



The results of the survey of pharmacists by community size are provided in Table 3 and displayed in Figure 3. PANL records 426 pharmacists in their membership directory.[7] There were 71 pharmacists who completed and returned the survey. This represented for a response rate of nearly 17%. Approximately 16% of the pharmacists responding to the survey were from small communities; a further 21% were sampled from mid-sized communities; another 20% came from large communities; and the rest of the pharmacists, 44%, were drawn from the very large communities.

[7] This includes pharmacists who work in hospital pharmacies which were not sampled in this survey. Therefore, the response rate of pharmacists to the survey is slightly higher than implied by 17% calculated above.

Table 3: Distribution of Pharmacists by Community Size

Community Size	Sample Pharmacists	Sample Distribution	Population Pharmacists	Population Distribution
Less Than 1,000 People	11	15.5%	NA	NA
Between 1,000 and 5,000 People	15	21.1%	NA	NA
Between 5,000 and 10,000 People	14	19.7%	NA	NA
More Than 10,000 People	31	43.7%	NA	NA
Total	**71**	**100.0%**	**426**	**100%**

Note: PANL does not have information on the actual distribution of pharmacists by community.

Figure 3: Distribution of Pharmacists by Community Size

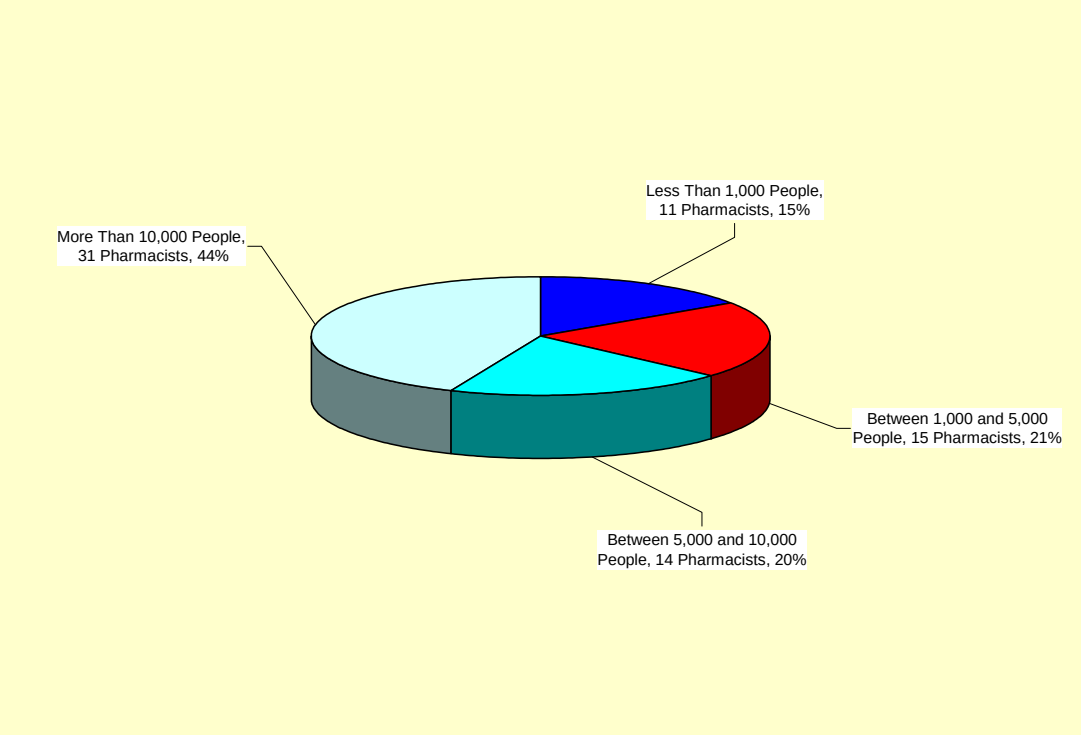


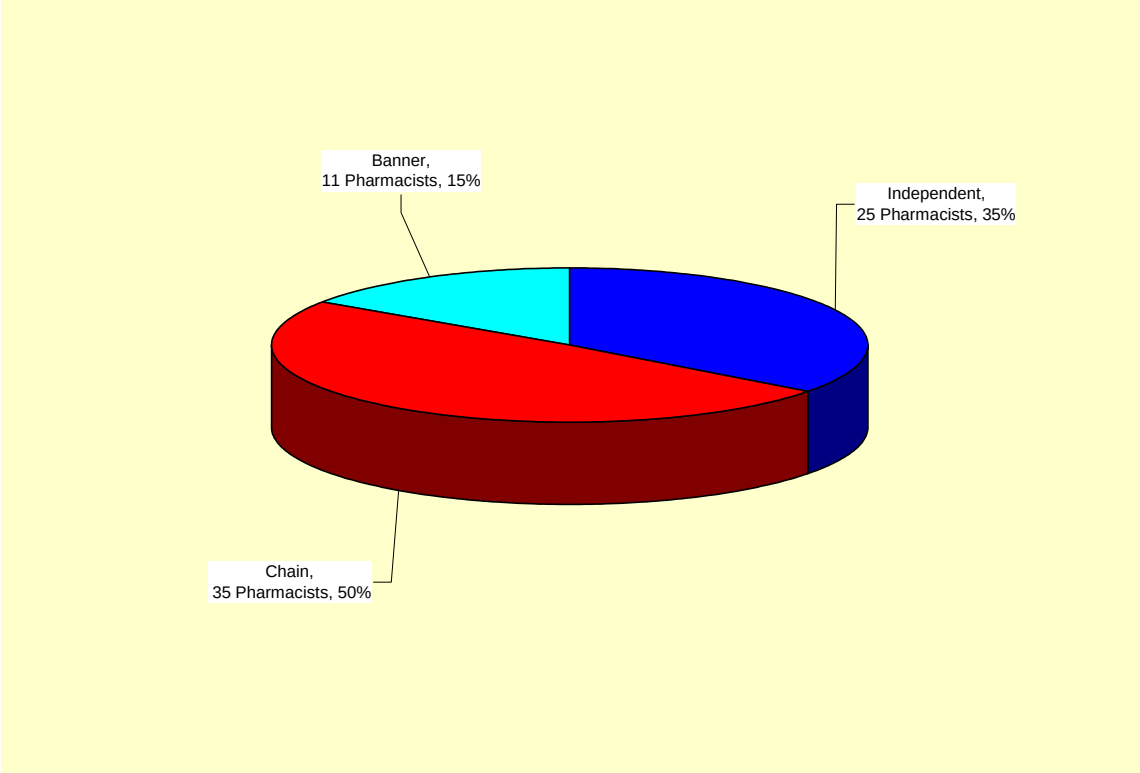
Table 4 and Figure 4 compare the sample of pharmacists who responded to the survey with the actual population of pharmacists by type of pharmacy. While independent pharmacies employed almost 24% of the pharmacists, slightly more that 35% of the sample of pharmacist was drawn from these stores. Additionally, 18% of pharmacists work in banner stores and nearly 16% of the sample came from this group. The remaining 58% of pharmacists in NL are employed by the chain stores. Slightly more than 49% of the sample came from pharmacists working in chain stores.

Table 4: Distribution of Pharmacists that Responded to the Survey by Type of Pharmacy

Pharmacy Type	Sample Pharmacists	Sample Distribution	Population Pharmacists	Population Distribution
Independent Pharmacy	25	35.2%	100	23.5%
Chain Store	35	49.3%	248	58.2%
Banner Store	11	15.5%	78	18.3%
Sample Total	**71**	**100.0%**	**426**	**100.0%**

As noted above, PANL does not record data on the number or distribution of pharmacy technicians. Consequently, there is no comparator for judging the representativeness of the sample of pharmacy technicians who responded to the survey to the true population of technicians. However, there is no reason to believe that the survey of technicians across communities is any less representative than the survey of pharmacies and pharmacists.

Figure 4: Distribution of Pharmacists that Responded to the Survey by Type of Pharmacy



As Table 5 and Figure 5 show, there were 25 technicians who completed the survey — 8% were from small communities; 40% were from mid-sized communities; 36% were drawn from large communities and the remaining 16% were sampled from very large communities.

Table 5: Distribution of Pharmacy Technicians that Responded to the Survey by Community Size

Community Size	Sample Technicians	Sample Distribution	Population Technicians	Population Distribution
Less Than 1,000 People	2	8.0%	NA	NA
Between 1,000 and 5,000 People	10	40.0%	NA	NA
Between 5,000 and 10,000 People	9	36.0%	NA	NA
More Than 10,000 People	4	16.0%	NA	NA
Total	**25**	**100.0%**	**NA**	**NA**

From Table 6 and Figure 6, one observes that none of the pharmacy technicians in the sample were from banner stores. There is no obvious explanation for why this might have transpired. Approximately 28% of the technicians in the sample worked in chain stores and the remaining 72% were drawn from independent stores.

Figure 5: Distribution of Pharmacy Technicians that Responded to the Survey by Community Size

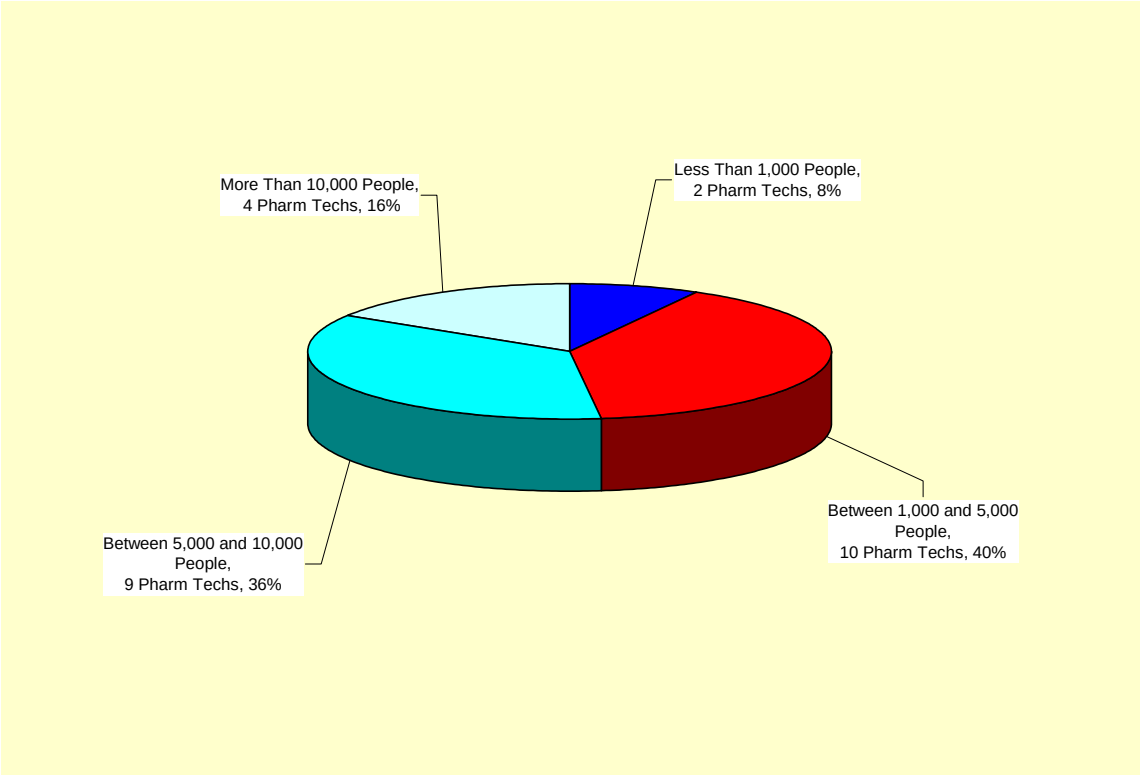
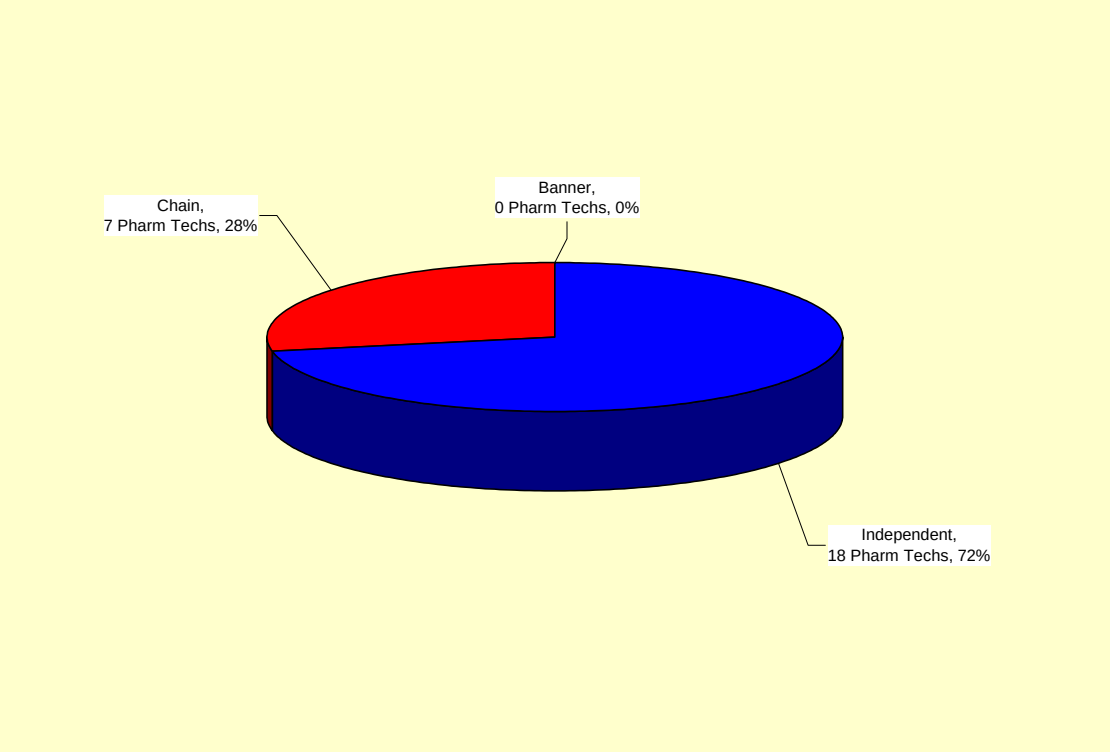


Table 6: Distribution of Pharmacy Technicians that Responded to the Survey by Type of Pharmacy

Pharmacy Type	Sample Technicians	Sample Distribution	Population Technicians	Population Distribution
Independent Pharmacy	18	72.0%	NA	NA
Chain Store	7	28.0%	NA	NA
Banner Store	0	0.0%	NA	NA
Sample Total	**25**	**100.0%**	**NA**	**NA**

Figure 6: Distribution of Pharmacy Technicians that Responded to the Survey by Type of Pharmacy



4.0 The NL Pharmacy Industry – Background Statistics

The following section provides an overview of the NL pharmacy sector. These background statistics provide context for interpreting the effects and significance of the proposed legislation. In addition, it should facilitate an understanding of the cost structure faced by pharmacies in dispensing prescriptions and in providing other cognitive services to their patients.

4.1 Background Statistics: Pharmacy Operating Hours

As presented in Table 7 and shown in Figure 7, NL pharmacies operate approximately 68 hours per week on average, but there is a large variation in weekly operating hours by size of community. As explained and demonstrated below, a significant proportion of the weekly operating hours across communities can be explained by variations in the volume of prescriptions dispensed.

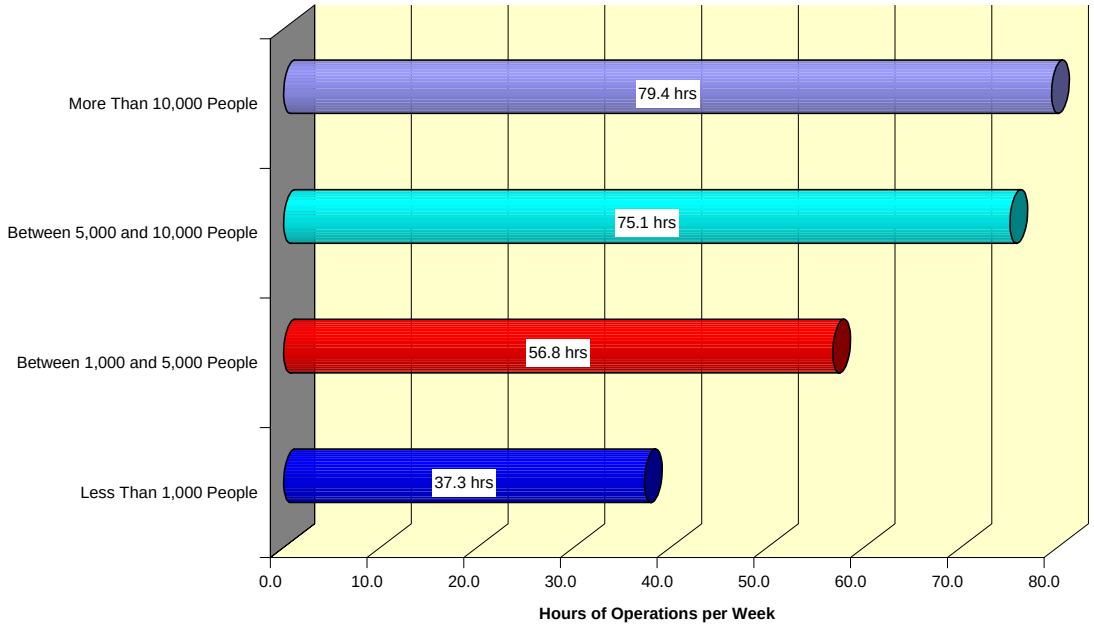
Pharmacies operating in small communities typically operate 37 hours per week. As the size of the community served increases, so does the average hours that the pharmacy remains open per week. For mid-sized communities, pharmacies operate approximately 20 hours more per week than those in small communities. Specifically, pharmacies in mid-sized communities operate 57 hours per week. Similarly, pharmacies in large communities operate 75 hours per week or on average they are open approximately 20

hours more per week than pharmacists in mid-sized communities. Finally, pharmacies located in the very large municipalities are open 79 hours per week on average.

Table 7: Average Hours of Operation of Pharmacies per Week by Community Size

Community Size	Average Hours Operating Per Week
Less Than 1,000 People	37.3
Between 1,000 and 5,000 People	56.8
Between 5,000 and 10,000 People	75.1
More Than 10,000 People	79.4
Total	**67.6**

Figure 7: Average Hours of Operation of Pharmacies per Week by Community Size

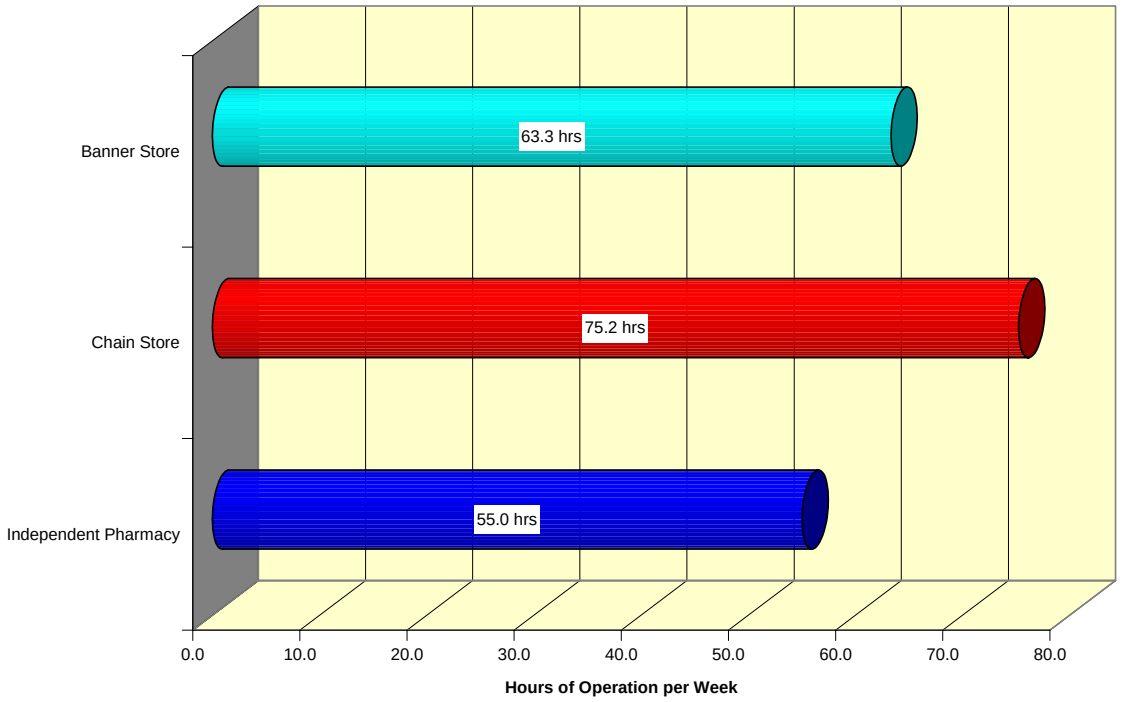


While the average number of operating hours per week does vary by type of store, the variation is less pronounced than what is observed by size of community. Specifically, as revealed in Table 8 and Figure 8, independent store typically operate 55 hours a week, while banner stores are open 63 hours per week and chain stores operate 75 hours per week on average.

Table 8: Average Hours of Operation of Pharmacies per Week by Type of Pharmacy

Pharmacy Type	Average Hours Operating Per Week
Independent Pharmacy	55.0
Chain Store	75.2
Banner Store	63.3
Sample Total	**67.6**

Figure 8: Average Hours of Operation of Pharmacies per Week by Type of Pharmacy

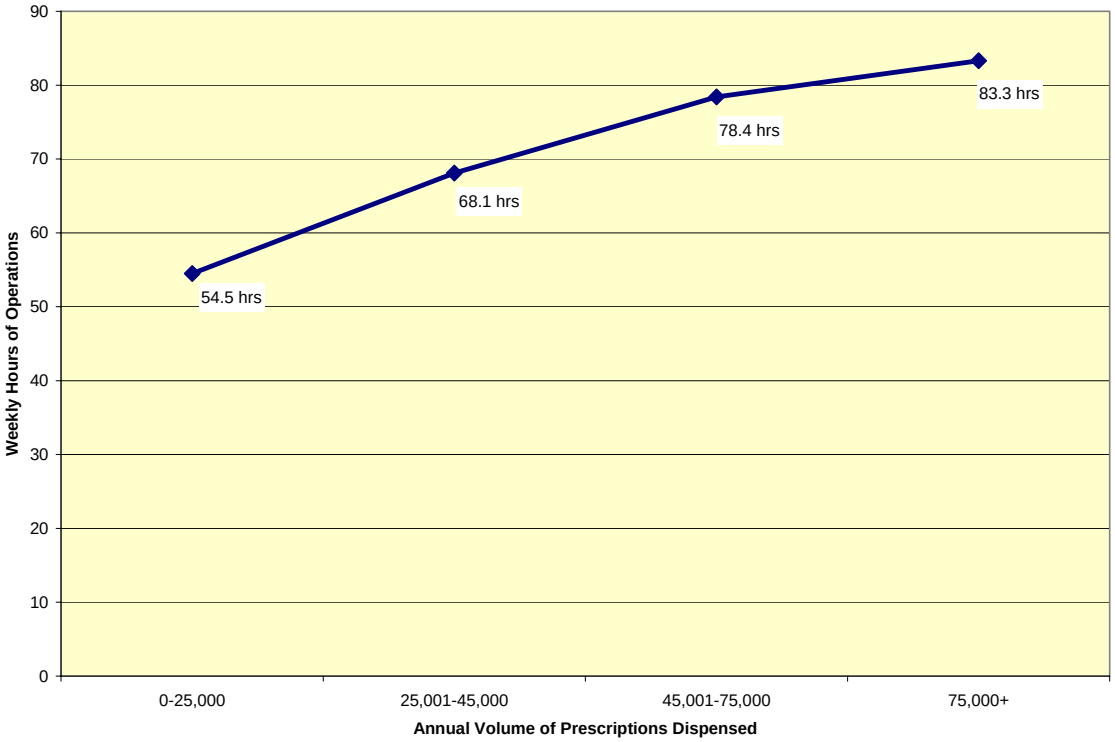


Another dimension to hours of operation is to control for the volume of prescriptions dispensed by the pharmacy. This is provided in Table 9 and displayed in Figure 9. Clearly, pharmacies with longer weekly operating hours are also the stores that have the higher volume of prescriptions dispensed annually. In fact, there is a strong linear relationship between the weekly hours of operation and the annual number of prescriptions dispensed.

Table 9: Distribution of Average Weekly Hours of Operations by Volume of Annual Prescription

	Annual Prescription Volume			
	0-25,000	**25,001-45,000**	**45,001-75,000**	**75,000+**
Average Operating Hours Per Week	54.5	68.1	78.4	83.3

Figure 9: Distribution of Average Weekly Hours of Operations by Volume of Annual Prescription



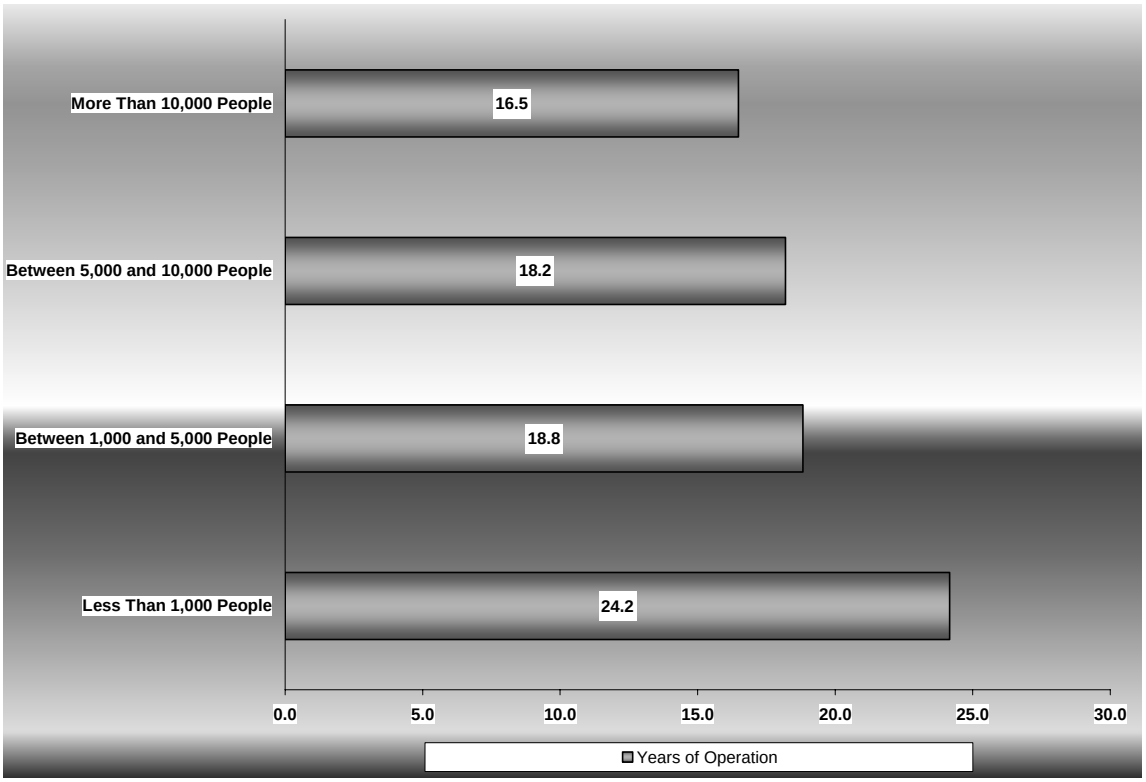
4.2 Background Statistics: Years of Operations

The pharmacies that responded to the survey, as reflected in Table 10 and Figure 10, have a long history of operating within NL. The average number of years that a pharmacy has been in operations in NL is 18.5 years. The pharmacies located in the small communities typically have a longer history – 24.2 years. Pharmacies located in the mid-sized and large communities typically have between 18 and 19 years of business operations within their communities. This is followed by pharmacies in the very large municipalities which have a significant attachment to, but fewer years in, their communities with 16.5 years in business.

Table 10: Average Number of Years in Operation for Pharmacies by Community Size

Community Size	Number of Years in Operation
Less Than 1,000 People	24.2
Between 1,000 and 5,000 People	18.8
Between 5,000 and 10,000 People	18.2
More Than 10,000 People	16.5
Total	**18.5**

Figure 10: Average Years of Operations for Pharmacies by Community Size



As illustrated in Table 11 and Figure 11, banner stores have operated in their communities the longest with 21.3 years of business experience, followed by independents with 19 years and chain stores with a typical history of 15.4 years in business in their respective communities.

Table 11: Average Number of Years in Operation for Pharmacies by Type of Pharmacy

Pharmacy Type	Number of Years in Operation
Independent Pharmacy	19.0
Chain Store	15.4
Banner Store	21.3
Sample Total	**18.5**

4.3 Background Statistics: Size of Pharmacies

A typical pharmacy operating in NL, as profiled in Table 12 and Figure 12, occupies nearly 860 square feet for the pharmacy itself. In addition, it has slightly more than 200 square feet for record keeping and approximately another 100 square feet assigned to a waiting area. That is, a typical pharmacy in NL utilizes between 1,100 and 1,200 square feet. There is some small variation around this average across communities. Pharmacies in the very large communities typically require more space for the pharmacy itself (over

1,000 square feet), while pharmacies in small municipalities require more space for record keeping (nearly 500 square feet).

Figure 11: Average Years of Operations for Pharmacies by Type of Pharmacy

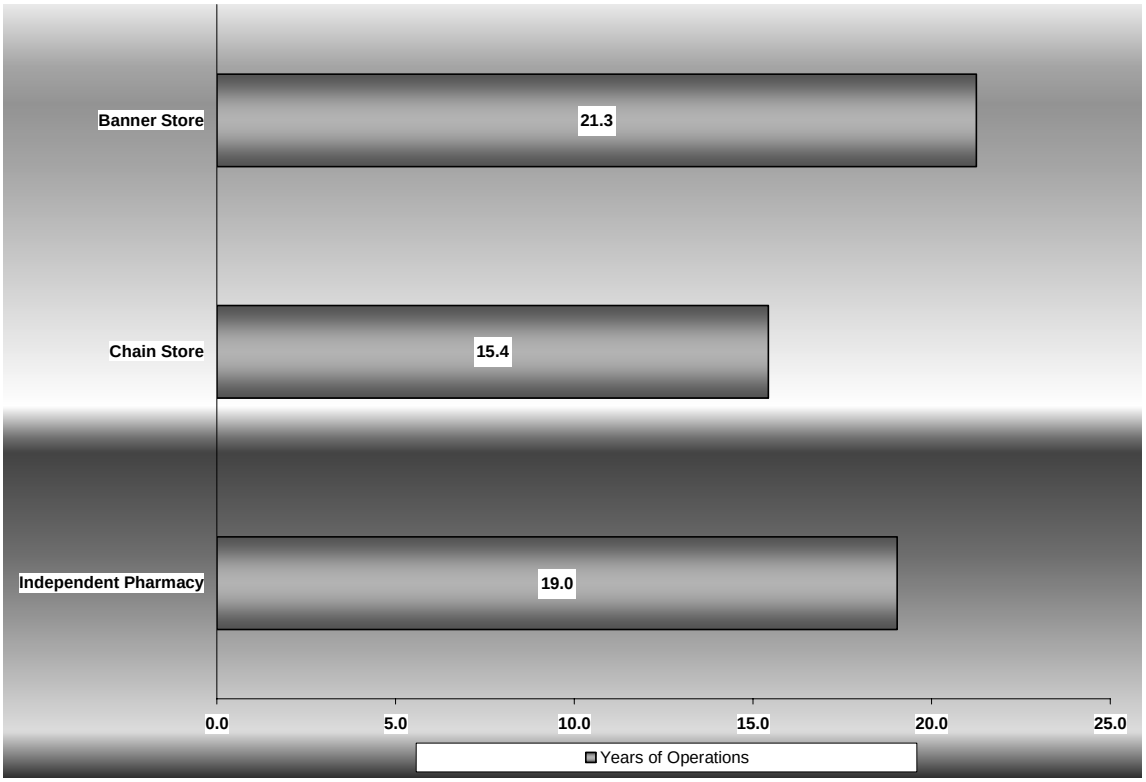


Table 12: Distribution of Pharmacies by Select Space Characteristics by Community Size

Community Size	Pharmacy Size (sq ft)	Other Space for Record Keeping & Retention (sq ft)	Pharmacy Waiting Area (sq ft)
Less Than 1,000 People	787.9	495.6	110.8
Between 1,000 and 5,000 People	760.7	195.5	104.5
Between 5,000 and 10,000 People	700.6	144.2	91.1
More Than 10,000 People	1,023.9	190.2	90.9
Total	**856.7**	**208.8**	**95.8**

From Table 13 and Figure 13, one observes that banner stores have a slightly larger area (1,050 square feet) designated to the pharmacy than do chain stores (920 square feet). Independent stores have the smallest area (690 square feet) for the pharmacy, but when space for record keeping and waiting areas are added, the independent stores utilize nearly 1,400 square feet. This compares to 1,060 square feet for chain stores and 940 square feet for banner stores.

Figure 12: Distribution of Pharmacies by Select Space Characteristics by Community Size

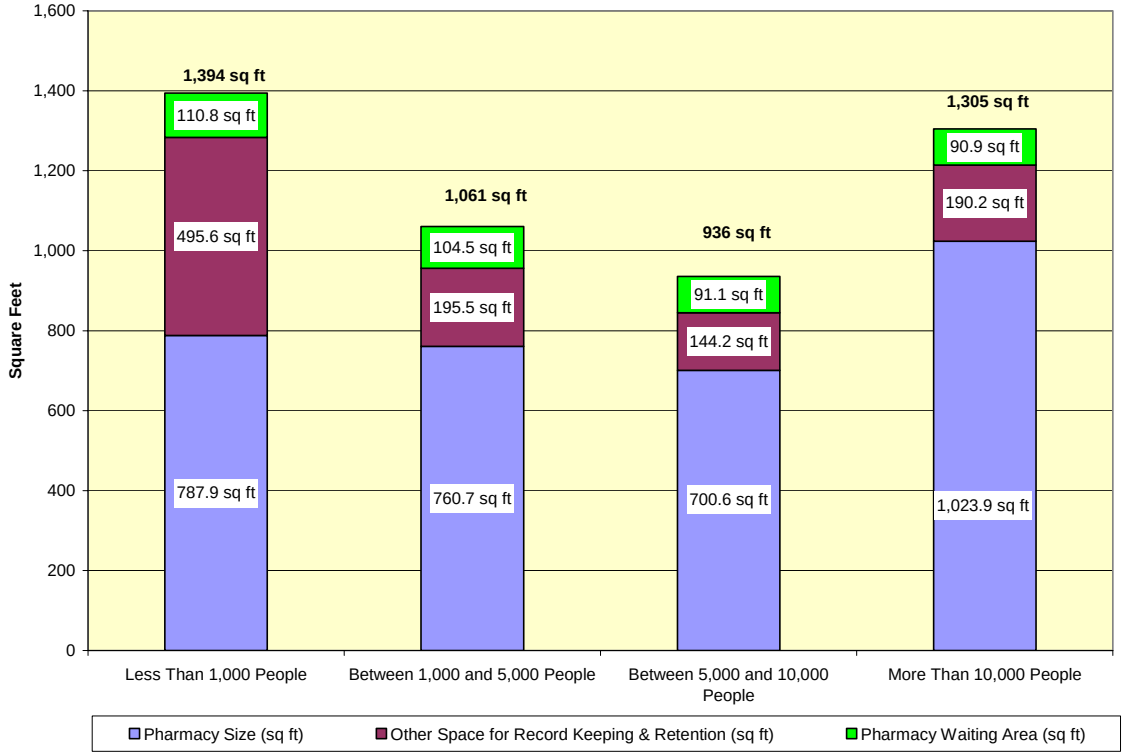


Table 13: Distribution of Pharmacies by Select Space Characteristics by Type of Pharmacy

Pharmacy Type	Pharmacy Size (sq ft)	Other Space for Record Keeping & Retention (sq ft)	Pharmacy Waiting Area (sq ft)
Independent Pharmacy	688.7	293.8	126.9
Chain Store	920.3	127.7	84.0
Banner Store	1045.0	420.0	75.0
Sample Total	**856.7**	**208.8**	**95.8**

4.4 Background Statistics: Work and Pay - Pharmacists

Table 14 and Figure 14 illustrate that pharmacists typically work 38.2 hours per week for 43.2 weeks per year; earn approximately $39 per hour, which increases to $42 per hour with overtime and bonuses; and have 20.6 years of experience in the industry. There is very little variation in the average number of hours worked per week, ranging between 37 and 39 hours per week. Pharmacists located in very large communities report working 35 weeks per year on average, while pharmacists in the mid-sized and large communities work between 46 and 48 weeks per year and those practicing in very large communities work slightly more than 41 weeks per year. In addition, there is some variation in the hourly remuneration of pharmacists — the highest paid pharmacists ($44.79 per hour) are those working in large communities; the next highest paid ($40.89 per hour) are

pharmacists working in small communities; this is followed by pharmacists located in mid-sized communities ($38.59 per hour); and the lowest paid group ($35.69 per hour) are found in the very large communities. This pattern is replicated when overtime and bonuses are considered. Finally, pharmacists in small communities have the most (27 years) experience in the industry. This is followed by pharmacists working in large communities with approximately 22 years experience and by pharmacists serving mid-sized communities (19 years experience). Pharmacists in the very large municipalities have the lowest attachment to the industry with 15 years experience.

Figure 13: Distribution of Pharmacies by Select Space Characteristics by Type of Pharmacy

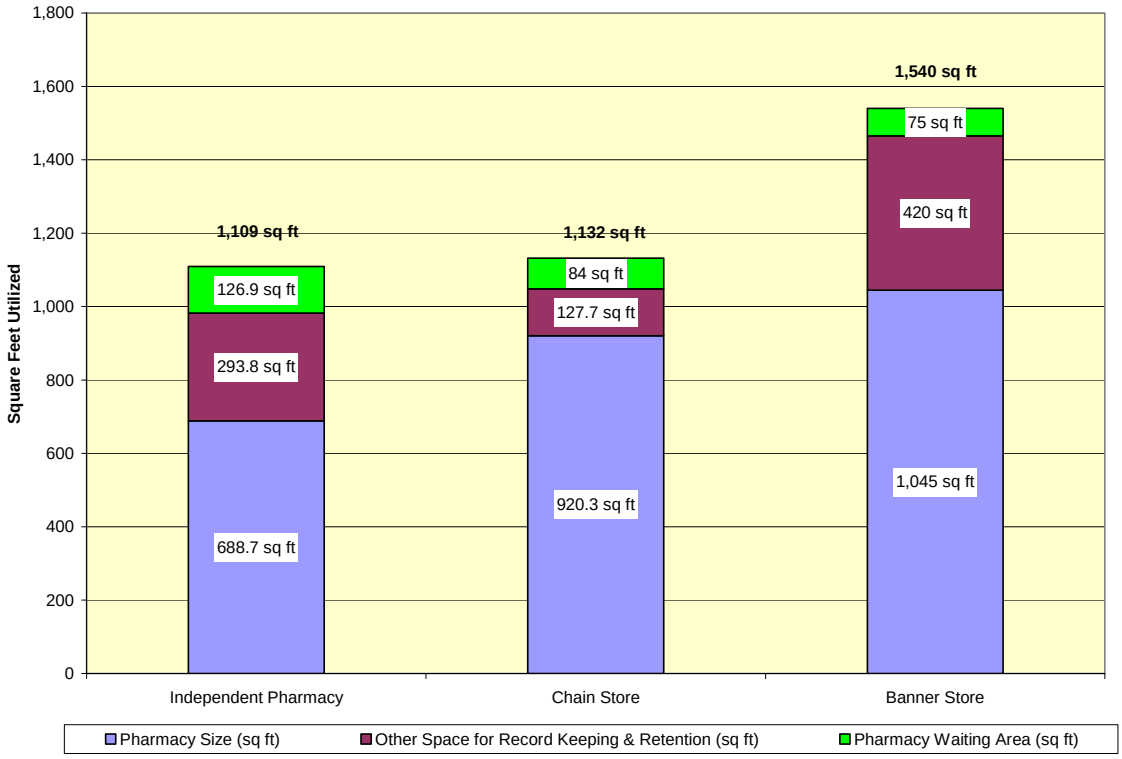


Table 14: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacists by Community Size

Community Size	Average Hours per Week Worked by Pharmacist	Average Weeks per Year Worked by Pharmacist	Average Wage Rate for Pharmacist Excl. Overtime/Bonus	Average Wage Rate for Pharmacist Incl. Overtime/Bonus	Years Pharmacist Working at Current Pharmacy	Years Pharmacist Working at Other Pharmacy
Less Than 1,000 People	38.4	35.0	$40.89	$43.04	12.7	14.0
Between 1,000 and 5,000 People	39.4	46.0	$38.59	$42.84	8.4	10.4
Between 5,000 and 10,000 People	36.8	47.6	$44.79	$47.74	14.4	7.2
More Than 10,000 People	38.1	41.3	$35.69	$37.84	7.7	7.2
Total	**38.2**	**43.2**	**$39.09**	**$41.94**	**9.7**	**10.9**

Figure 14: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacists by Community Size

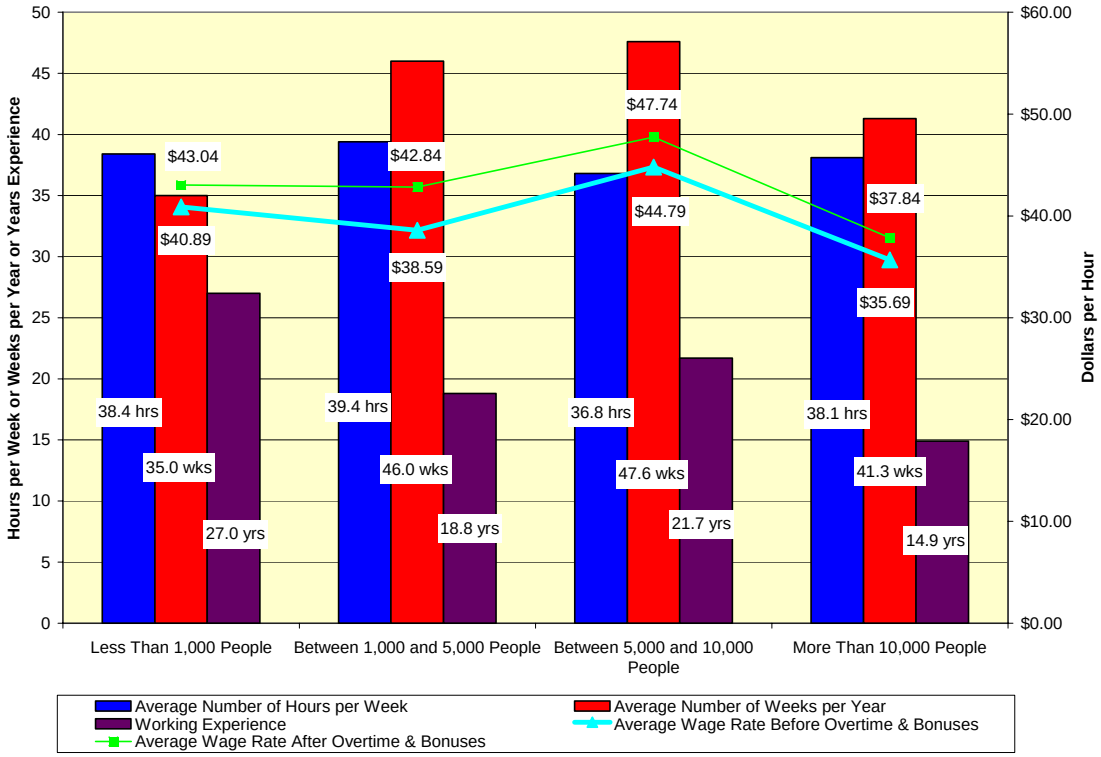
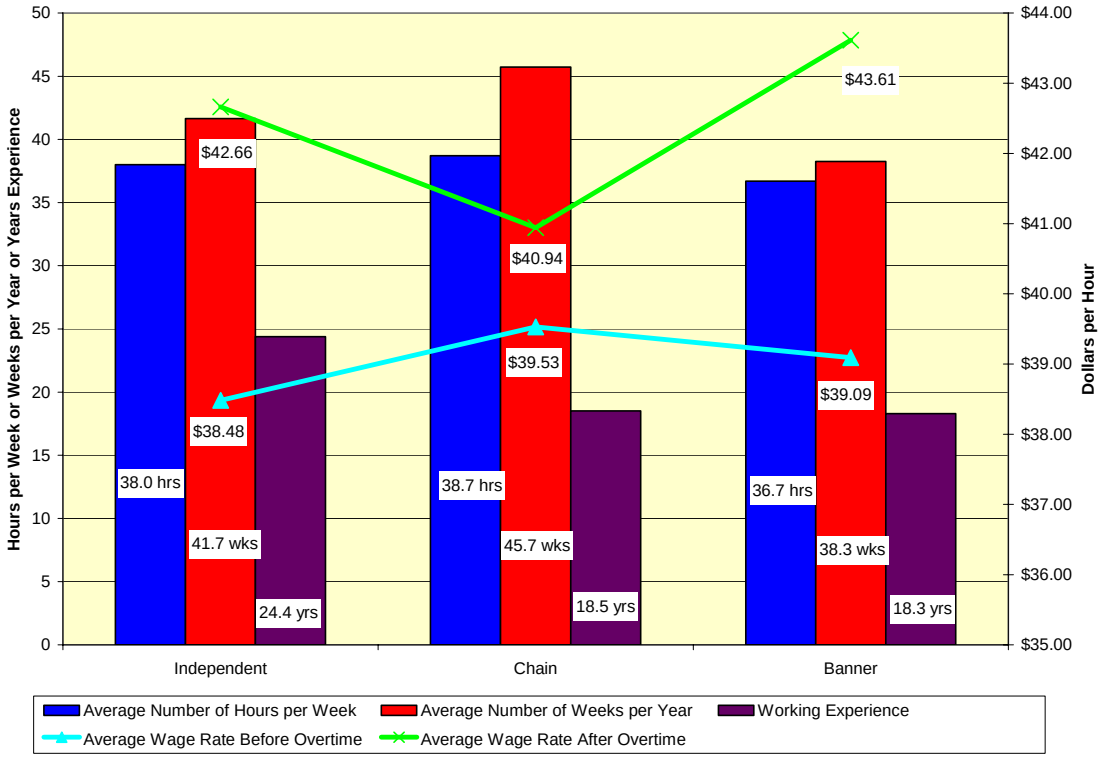


Table 15 and Figure 15 illustrate the differences reported for work and pay conditions by type of pharmacy. There is no significant difference in hours worked per week by type of pharmacy. Chain store pharmacists typically work 46 weeks per year, independent pharmacists average 42 weeks per year and banner store pharmacists typically work 38 weeks per year. All the stores pay between $38.50 and $39.50 per hour before overtime and bonuses. Finally, pharmacists working in independent pharmacies typical have 33% more experience in the industry (24.2 years) than do pharmacists employed in chain or banner stores — each have approximately 18 years experience.

Table 15: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacists by Type of Pharmacy

Pharmacy Type	Average Hours per Week Worked by Pharmacist	Average Weeks per Year Worked by Pharmacist	Average Wage Rate for Pharmacist Excl. Overtime/Bonus	Average Wage Rate for Pharmacist Incl. Overtime/Bonus	Years Pharmacist Working at Current Pharmacy	Years Pharmacist Working at Other Pharmacy
Independent Pharmacy	38.0	41.7	$38.48	$42.66	10.6	13.8
Chain Store	38.7	45.7	$39.53	$40.94	9.0	9.5
Banner Store	36.7	38.3	$39.09	$43.61	10.0	8.3
Sample Total	**38.2**	**43.2**	**$39.09**	**$41.94**	**9.7**	**10.9**

Figure 15: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacists by Type of Pharmacy



4.5 Background Statistics: Work and Pay – Pharmacy Technicians

Table 16 and Figure 16 profile the work and pay conditions of pharmacy technicians. Technicians typically work 35.1 hours per week, average 43.4 weeks per year and earn approximately $12 per hour. While the average hourly remuneration is fairly consistent across communities of different size, varying between a low of $11.39 per hour and a high of $12.82 per hour, there is more variability in hours worked per week and weeks worked per year. Technicians in small communities work approximately 40 hour per week while technician in other sized communities work between 30 and 35 hours per week. Further, technicians typically work between 40 and 46 weeks per year.

Table 16: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacy Technicians by Community Size

Community Size	Average Hours per Week Worked by Technician	Average Weeks per Year Worked by Technician	Average Wage Rate for Technician
Less Than 1,000 People	40.5	46.3	$11.58
Between 1,000 and 5,000 People	34.8	39.5	$12.82
Between 5,000 and 10,000 People	30.2	44.6	$11.39
More Than 10,000 People	34.5	44.3	$11.66
Total	**35.1**	**43.4**	**$11.86**

Figure 16: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacy Technicians by Community Size

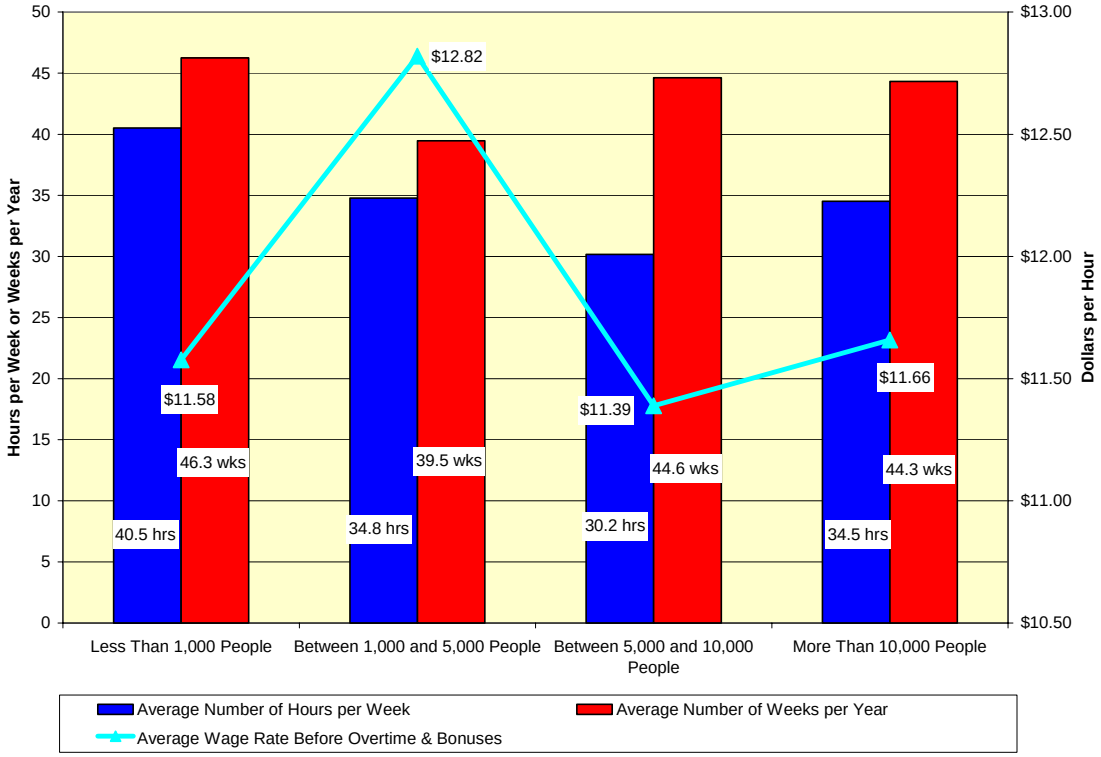
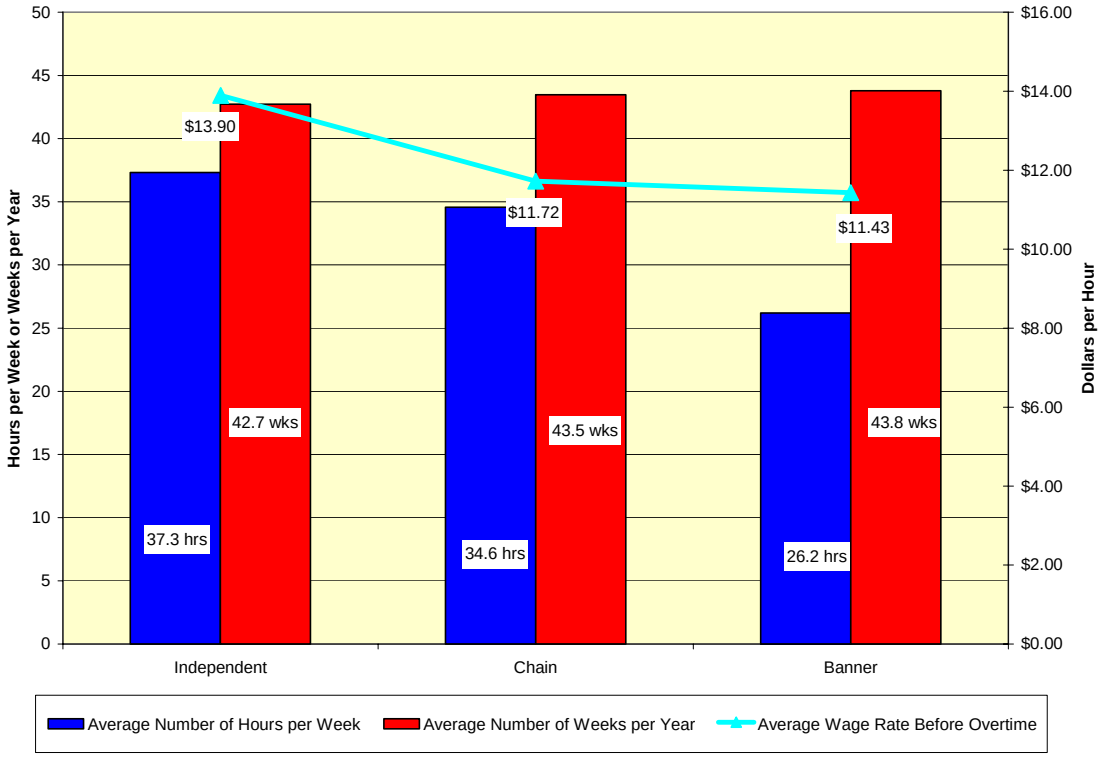


Table 17 and Figure 17 show that pharmacy technicians in banner store work on average 26 hours per week, while those in chain stores and independent stores work between 35 and 37 hour per week. The is very little variation in the number of weeks worked per year, with 43 and 44 weeks per year worked by the typical pharmacy technician. Independent pharmacies pay technicians nearly $14 per hour, which is approximately $2 more per hour earned by technician in the chain and banner stores.

Table 17: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacy Technicians by Type of Pharmacy

Pharmacy Type	Average Hours per Week Worked by Technician	Average Weeks per Year Worked by Technician	Average Wage Rate for Technician
Independent Pharmacy	37.3	42.7	$13.90
Chain Store	34.6	43.5	$11.72
Banner Store	26.2	43.8	$11.43
Sample Total	**35.1**	**43.4**	**$11.86**

Figure 17: Distribution of Pharmacies by Select Work and Pay Characteristics of Pharmacy Technicians by Type of Pharmacy



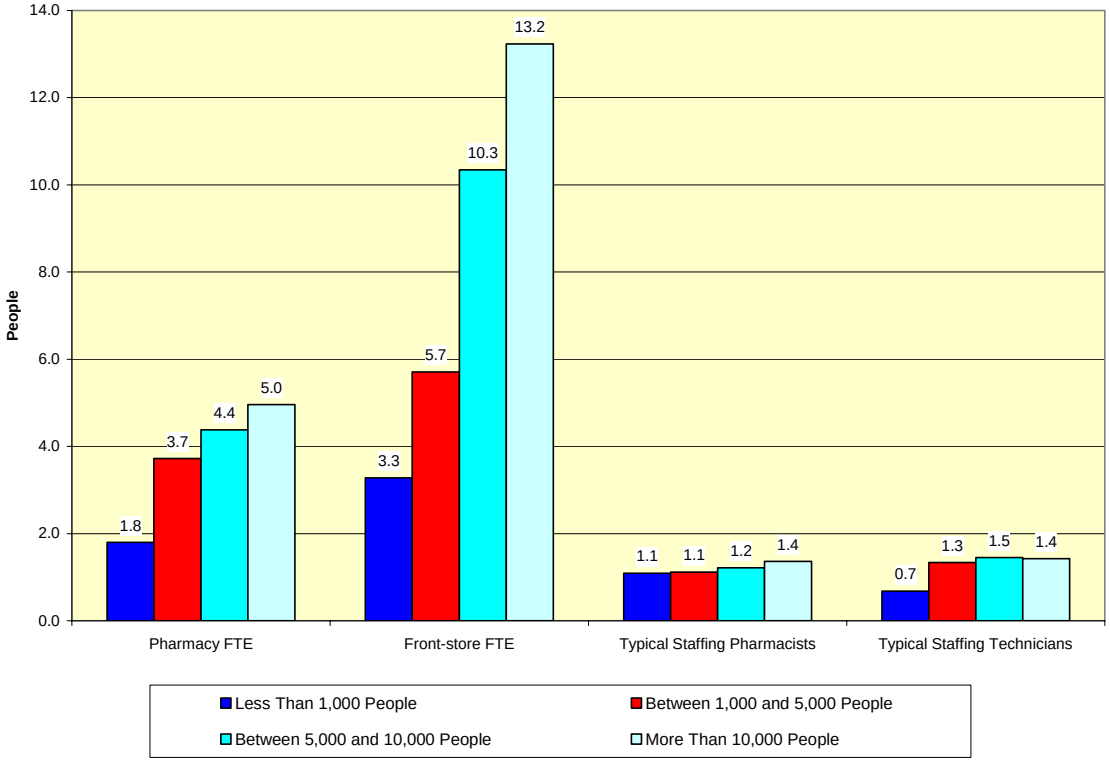
4.6 Background Statistics: Employee Mix

NL pharmacies, as demonstrated in Table 18 and Figure 18, on average have 4.1 full-time professional employees, either pharmacists or pharmacy technicians. Their typical staffing involves 1.2 pharmacists and 1.3 pharmacy technician working together at peak times. In other words, in a random sample of five pharmacies, one should expect to see six pharmacists working, matched by an approximate equal number of technicians. In addition, a typical pharmacy would have 9.2 full-time, front store staff. A quick review of the survey responses reveals that the larger the community served, the more full-time employees are hired by the pharmacy. Likewise, the larger the community served, the more technicians and pharmacists that are working at peak times.

Table 18: Distribution of Pharmacies by Select Human Resource Characteristics by Community Size

Community Size	Pharmacy Full Time Employees (Pharmacist & Technicians)	Front Store Full Time Employees (Clerks, cleaners, etc)	Typical Staffing Pharmacists	Typical Staffing Pharmacy Technicians
Less Than 1,000 People	1.8	3.3	1.1	0.7
Between 1,000 and 5,000 People	3.7	5.7	1.1	1.3
Between 5,000 and 10,000 People	4.4	10.3	1.2	1.5
More Than 10,000 People	5.0	13.2	1.4	1.4
Total	**4.1**	**9.2**	**1.2**	**1.3**

Figure 18: Distribution of Pharmacies by Select Human Resource Characteristics by Community Size

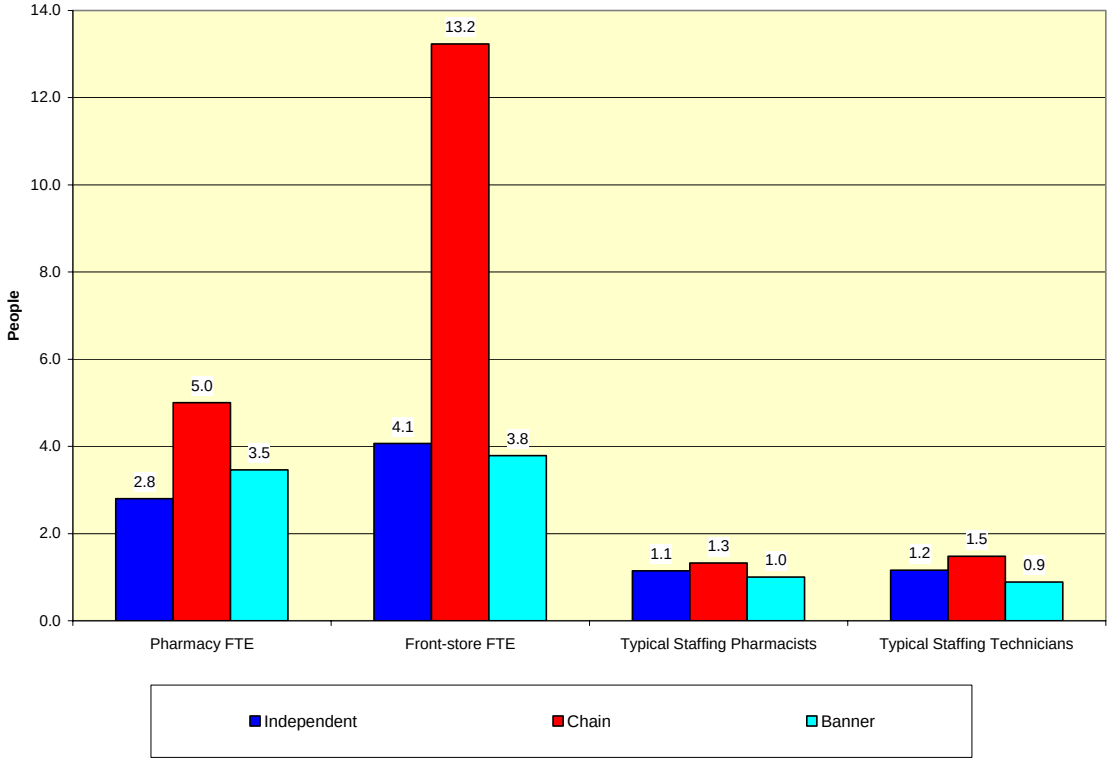


Chain stores employ more pharmacists/technicians and front store employees per store than either banner stores or independents, see Table 19 and Figure 19. Banner stores tend to hire more pharmacists/technicians and less front store staff than do independents. Moreover, chain stores typically have more pharmacists and technicians working during peak periods and independent pharmacies employ slightly more professionals than do banner stores during peak periods.

Table 19: Distribution of Pharmacies by Select Human Resource Characteristics by Type of Pharmacy

Pharmacy Type	Pharmacy Full Time Employees (Pharmacist & Technicians)	Front Store Full Time Employees (Clerks, cleaners, etc)	Typical Staffing Pharmacists	Typical Staffing Pharmacy Technicians
Independent Pharmacy	2.8	4.1	1.1	1.2
Chain Store	5.0	13.2	1.3	1.5
Banner Store	3.5	3.8	1.0	0.9
Sample Total	**4.1**	**9.2**	**1.2**	**1.3**

Figure 19: Distribution of Pharmacies by Select Human Resource Characteristics by Type of Pharmacy



4.7 Background Statistics – Volume and Mix of New/Refill Prescriptions

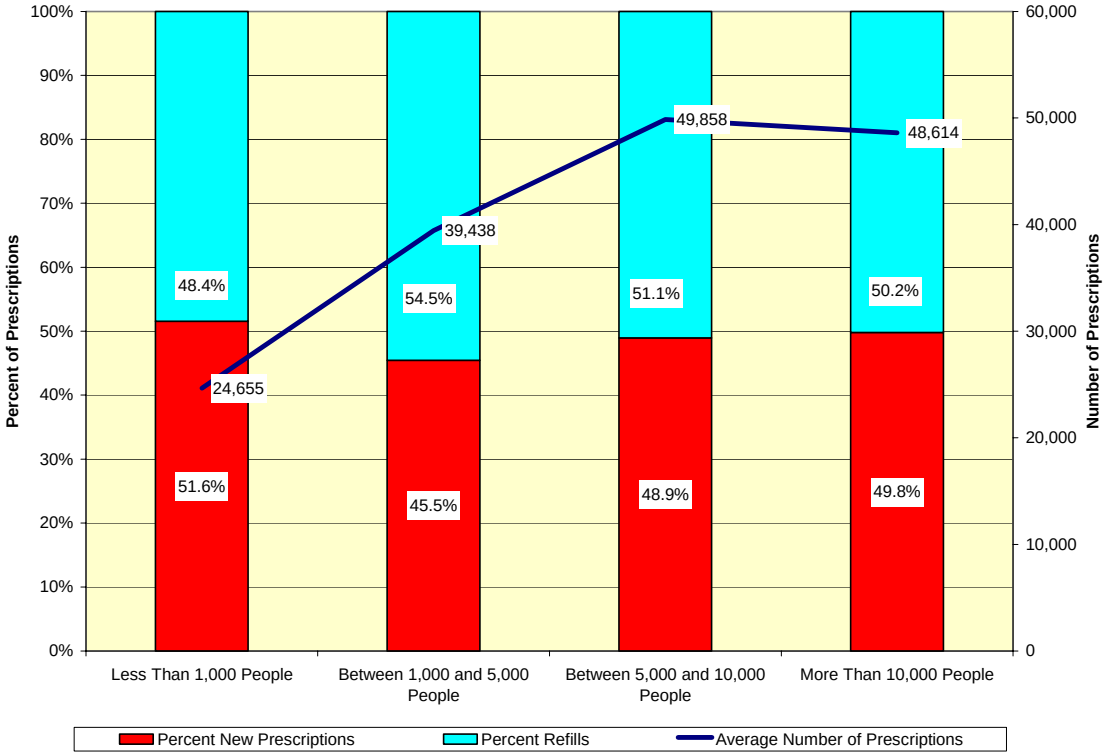
A key determinant of pharmacy operations is the volume of prescriptions that it dispenses annually. As illustrated in Table 20 and Figure 20, NL pharmacies dispense on average 42,754 prescriptions per year. Approximately 49% of these are new prescriptions, with the residual 51% being refills of existing prescriptions. As demonstrated below, a significant determinant of the cost of dispensing prescriptions in NL is the volume of prescriptions, with the average cost per prescription falling as the volume of prescriptions increases.

There is a large variation in the average volume of prescriptions dispensed across the communities surveyed. For example, pharmacies in small communities dispense 24,655 prescriptions annually, while pharmacies operating in large communities typically dispense nearly double this number, with 49,858 prescriptions dispensed per annum. This is followed in size by pharmacies in the very large communities which dispense 48,614 prescriptions annually and pharmacies servicing mid-sized communities handle 39,438 prescriptions per year.

Table 20: Average Number of Prescriptions Filled per Year Broken Out by New Prescriptions and Refills by Community Size

Community Size	Average Number of Prescriptions Fills	Percent New Prescriptions	Percent Refills
Less Than 1,000 People	24,655	51.6%	48.4%
Between 1,000 and 5,000 People	39,438	45.5%	54.5%
Between 5,000 and 10,000 People	49,858	48.9%	51.1%
More Than 10,000 People	48,614	49.8%	50.2%
Total	**42,754**	**48.8%**	**51.2%**

Figure 20: Average Number of Prescriptions Filled per Year Broken Out by New Prescriptions and Refills by Community Size

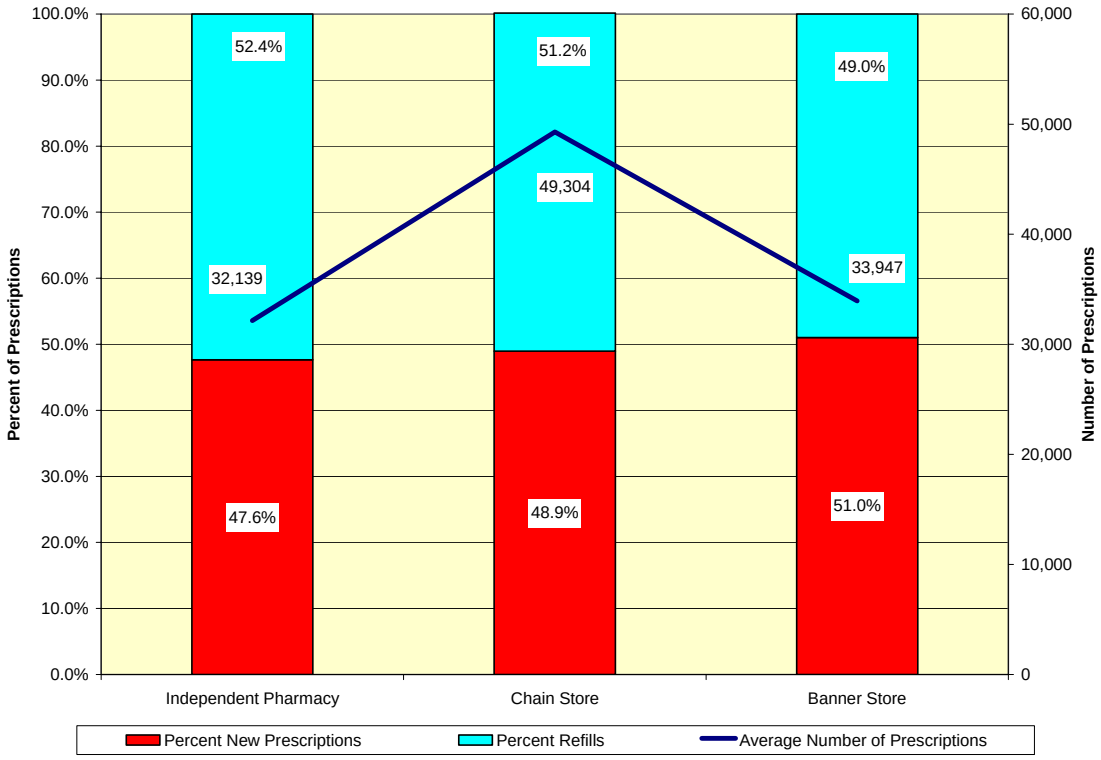


From Table 21 and Figure 21, one observes that chain stores dispense on average significantly more prescriptions per year (49,304) than do banner (33,947) or independent (32,139) stores.

Table 21: Average Number of Prescriptions Filled per Year Broken Out by New Prescriptions and Refills by Type of Pharmacy

Pharmacy Type	Average Number of Prescriptions Fills	Percent New Prescriptions	Percent Refills
Independent Pharmacy	32,139	47.6%	52.4%
Chain Store	49,304	48.9%	51.2%
Banner Store	33,947	51.0%	49.0%
Sample Total	**42,754**	**48.8%**	**51.2%**

Figure 21: Average Number of Prescriptions Filled per Year Broken Out by New Prescriptions and Refills by Type of Pharmacy



4.8 Background Statistics – Type of Prescriptions

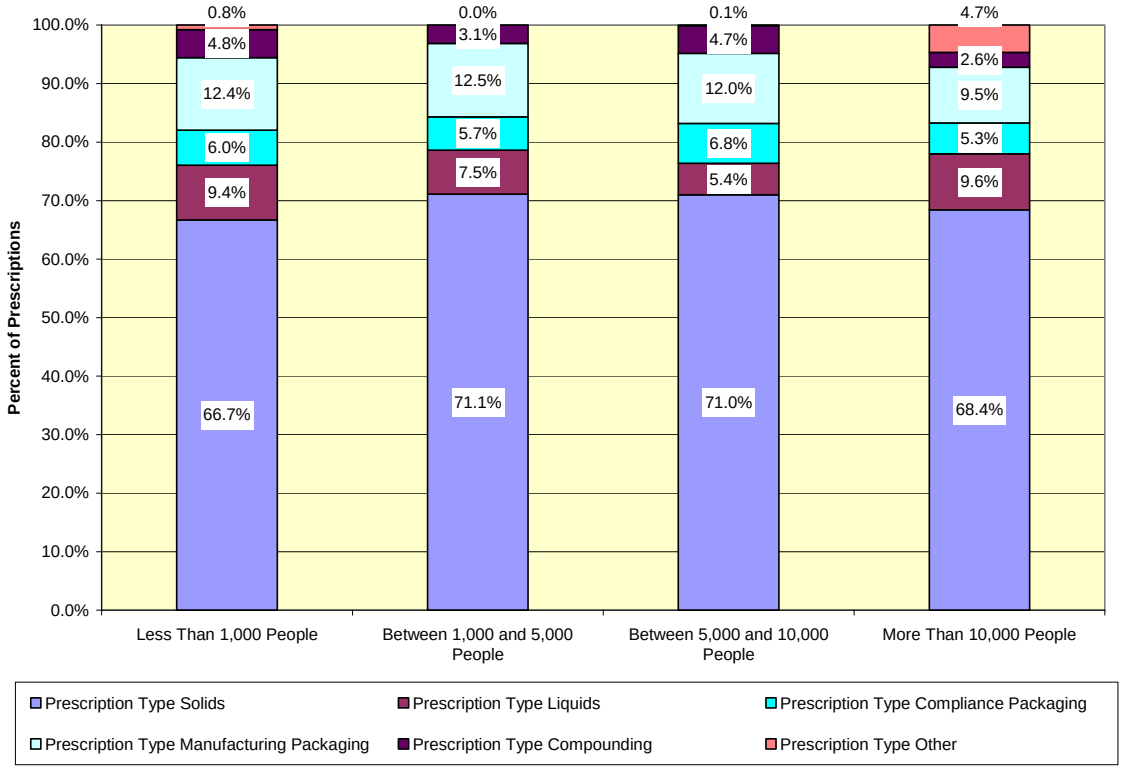
Since not all prescriptions types require the same amount of time or cost to dispense, Table 22 and Figure 22 presents the proportion of prescriptions by type dispensed in NL pharmacies. In this context, type of prescription references whether the prescription involved solids, liquids, compounds, etc.

The overwhelming majority of prescriptions dispensed in NL are solids, which accounted for 69.5% of all prescriptions. This is followed by prescriptions involving manufacturer packaging (11%), liquids (8.1%), compliance packaging (5.8%) compounding (3.3%) and other (2.2%). Although the pattern is similar across communities, there is significant difference in the other category for very large communities.

Table 22: Distribution of Prescriptions by Type of Prescription by Community Size

Community Size	Percent of Prescriptions Solids	Percent of Prescriptions Liquids	Percent of Prescriptions Compliance Packaging	Percent of Prescriptions Manufacturer Packaging	Percent of Prescriptions Compounding	Percent of Prescriptions Other
Less Than 1,000 People	66.7%	9.4%	6.0%	12.4%	4.8%	0.8%
Between 1,000 and 5,000 People	71.1%	7.5%	5.7%	12.5%	3.1%	0.0%
Between 5,000 and 10,000 People	71.0%	5.4%	6.8%	12.0%	4.7%	0.1%
More Than 10,000 People	68.4%	9.6%	5.3%	9.5%	2.6%	4.7%
Total	**69.5%**	**8.1%**	**5.8%**	**11.0%**	**3.3%**	**2.2%**

Figure 22: Distribution of Prescriptions by Type of Prescription by Community Size



A similar pattern is observed for type of prescription dispensed by chain, banner and independent stores. However, independent stores dispense more compliance packaging and less prescriptions involving solids than do either the chain or banner stores, see Table 23 and Figure 23.

Table 23: Distribution of Prescriptions by Type of Prescription by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions Solids	Percent of Prescriptions Liquids	Percent of Prescriptions Compliance Packaging	Percent of Prescriptions Manufacturer Packaging	Percent of Prescriptions Compounding	Percent of Prescriptions Other
Independent Pharmacy	64.6%	6.9%	11.2%	13.3%	3.6%	0.5%
Chain Store	71.0%	8.8%	3.5%	10.2%	3.3%	3.1%
Banner Store	71.6%	5.8%	8.5%	10.7%	2.7%	0.6%
Sample Total	**69.5%**	**8.1%**	**5.8%**	**11.0%**	**3.3%**	**2.2%**

4.9 Background Statistics – Type of Prescriptions – Controlled Substances

The percent of prescriptions that are controlled substances are profiled in Table 24 and Figure 24. On average, 10.6% of prescriptions across all pharmacies are controlled substances. This does vary by the size of the community that is served by the pharmacy. By way of illustration, for pharmacies in very large municipalities controlled substances

comprise 14.2% of their prescriptions, while pharmacies in small communities have 9.9% of the prescriptions in the form of controlled substances. The pharmacists in the mid-sized and large communities dispense between 6 and 7% of the prescriptions in the form of controlled substances.

Figure 23: Distribution of Prescriptions by Type of Prescription by Type of Pharmacy

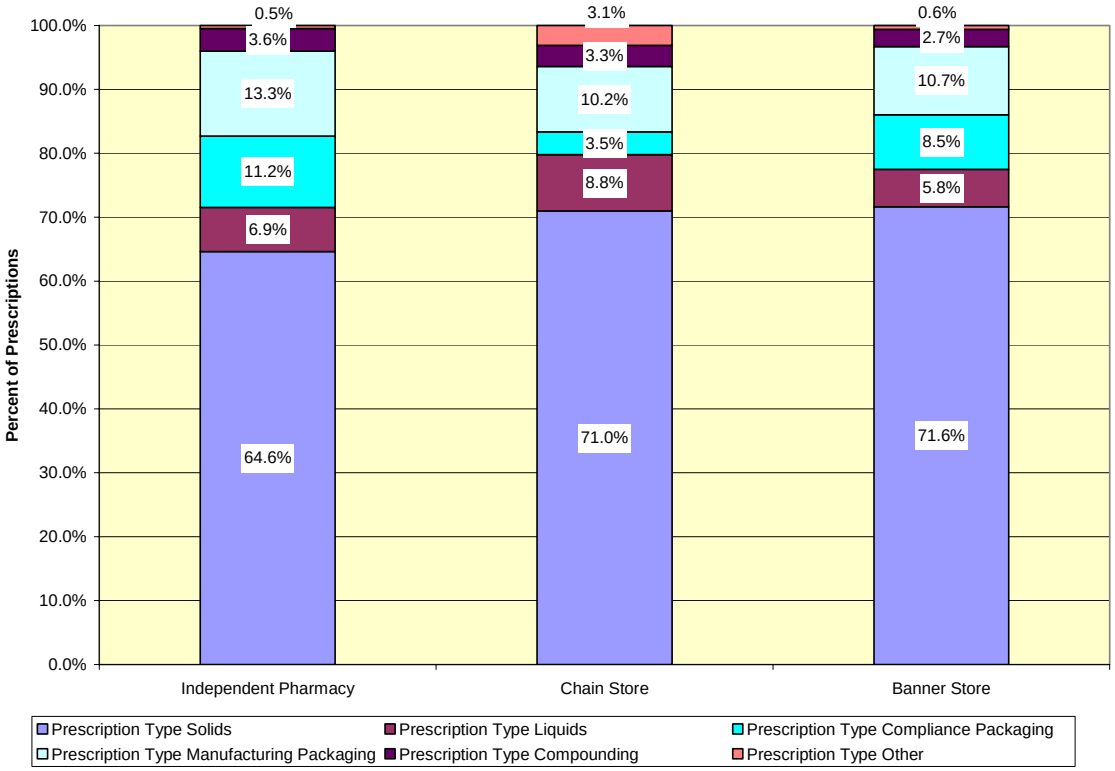


Table 24: Percent of Prescriptions that are Controlled Substances by Community Size

Community Size	Percent of Prescriptions that are Controlled Substances
Less Than 1,000 People	9.9%
Between 1,000 and 5,000 People	6.3%
Between 5,000 and 10,000 People	6.8%
More Than 10,000 People	14.2%
Total	**10.6%**

As Table 25 and Figure 25 reveal, chain stores dispense 11.9% of their prescriptions as controlled substances, while independent stores only dispense 8% of their prescriptions in this form. Controlled substances also comprise 9.7% of banner store prescriptions.

Figure 24: Percent of Prescriptions that are Controlled Substances by Community

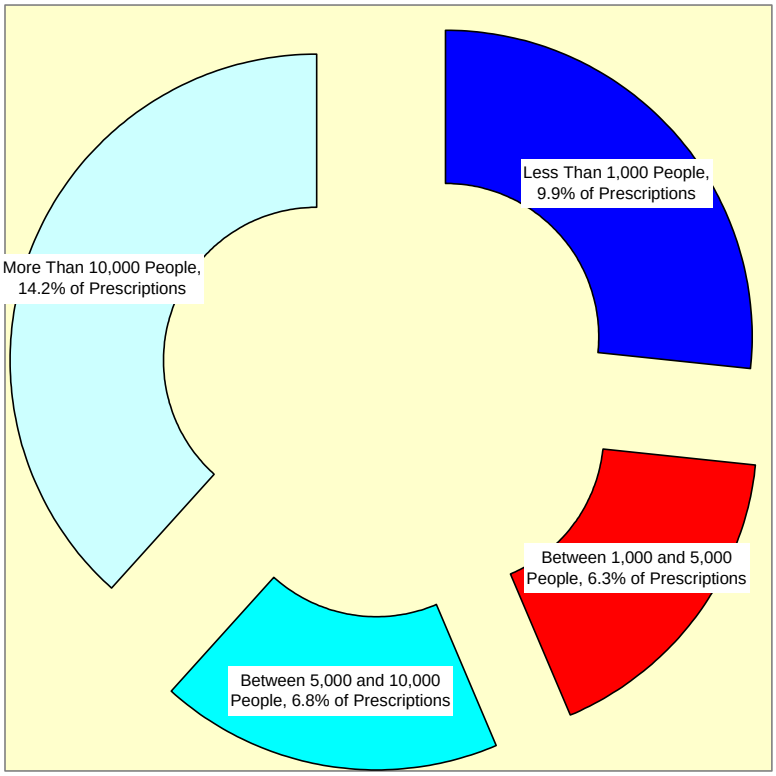


Table 25: Percent of Prescriptions that are Controlled Substances by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions that are Controlled Substances
Independent Pharmacy	8.0%
Chain Store	11.9%
Banner Store	9.7%
Sample Total	**10.6%**

4.10 Background Statistics – How Prescriptions Received

Given that the method by which a prescription is received by the pharmacy may influence both the amount of time required to dispense a prescription and the cost of a prescription, Table 26 and Figure 26 examines how NL pharmacies typically receive prescriptions. The majority of prescriptions (60.2%) are dropped off by patients. This is followed by prescription that are phoned in by patients (22.7%), phoned in by the doctor (8.3%), faxed in (7.8%) and other (1.0%). While there are variations across communities, this pattern is repeated for each of the communities considered in this survey.

Figure 25: Percent of Prescriptions that are Controlled Substances by Type of Pharmacy

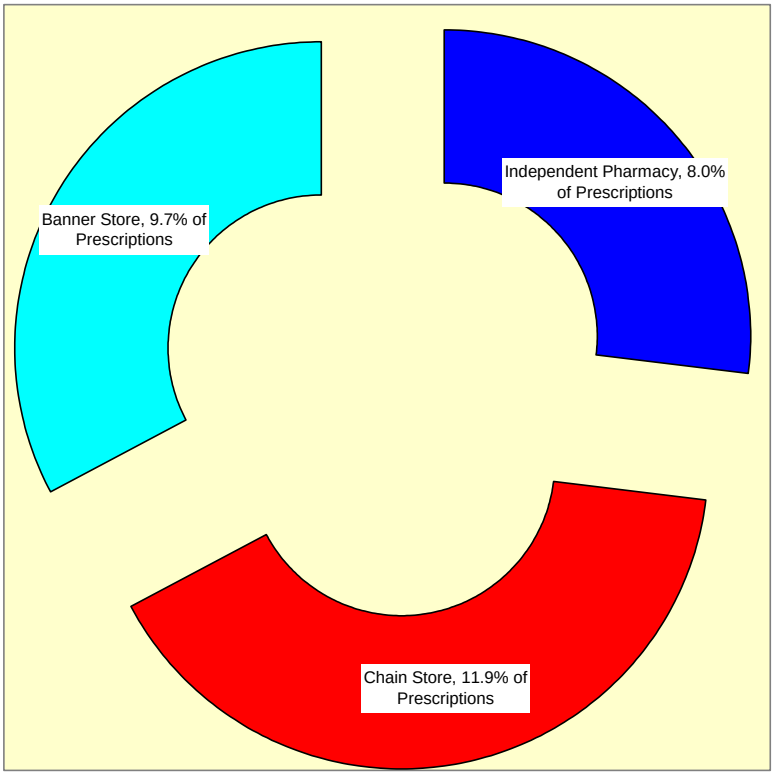
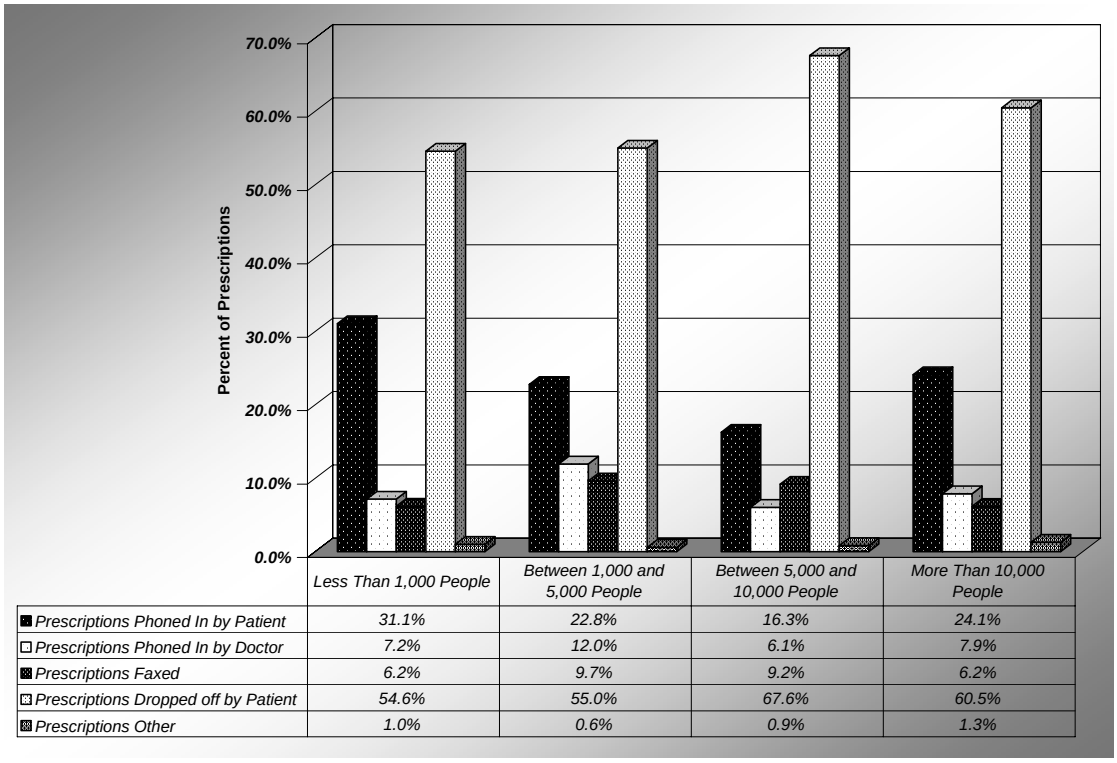


Table 26: Distribution of Prescriptions by How Prescription Received by Community Size

Community Size	Percent of Prescriptions Phoned In by Patient	Percent of Prescriptions Phoned In by Doctor	Percent of Prescriptions Faxed In	Percent of Prescriptions Dropped Off by Patient	Percent of Prescriptions Other
Less Than 1,000 People	31.1%	7.2%	6.2%	54.6%	1.0%
Between 1,000 and 5,000 People	22.8%	12.0%	9.7%	55.0%	0.6%
Between 5,000 and 10,000 People	16.3%	6.1%	9.2%	67.6%	0.9%
More Than 10,000 People	24.1%	7.9%	6.2%	60.5%	1.3%
Total	**22.7%**	**8.3%**	**7.8%**	**60.2%**	**1.0%**

Table 27 and Figure 27 reveal that the majority of prescriptions are dropped off by patients and this unaffected by the type of store being considered. Interestingly, a higher proportion of prescriptions that are phoned in is dispensed by independent pharmacies.

Figure 26: Distribution of Prescriptions by How Prescription Received by Community Size

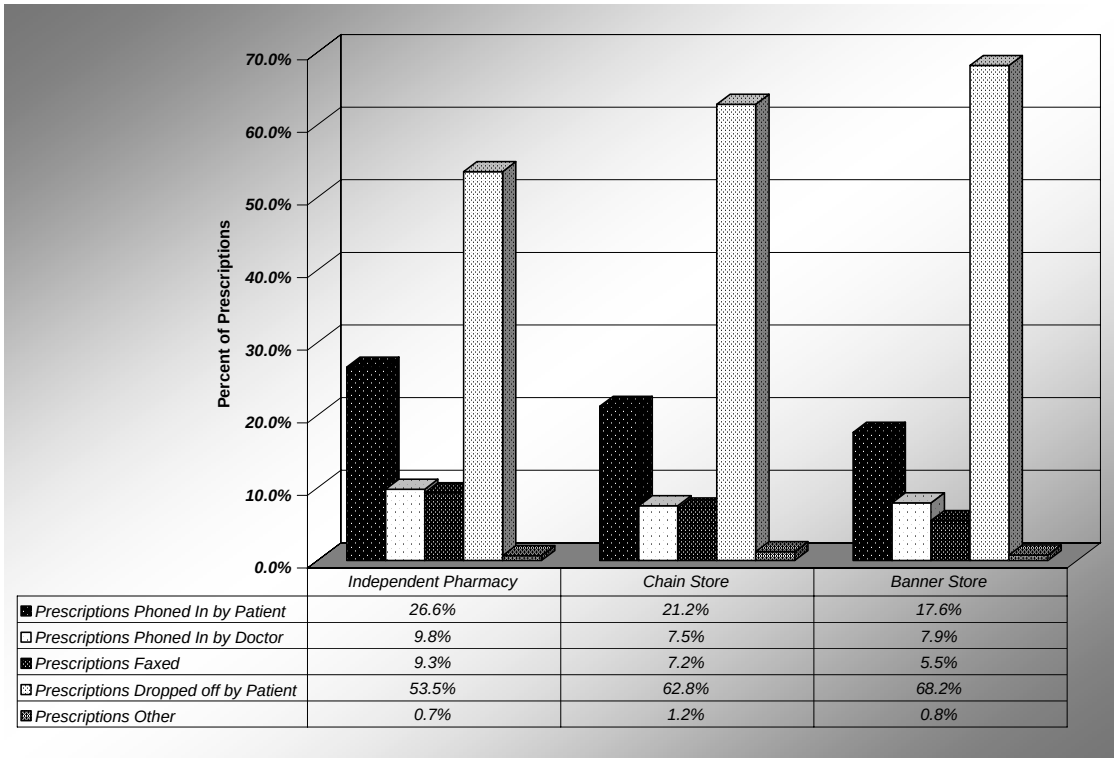


	Less Than 1,000 People	Between 1,000 and 5,000 People	Between 5,000 and 10,000 People	More Than 10,000 People
Prescriptions Phoned In by Patient	31.1%	22.8%	16.3%	24.1%
Prescriptions Phoned In by Doctor	7.2%	12.0%	6.1%	7.9%
Prescriptions Faxed	6.2%	9.7%	9.2%	6.2%
Prescriptions Dropped off by Patient	54.6%	55.0%	67.6%	60.5%
Prescriptions Other	1.0%	0.6%	0.9%	1.3%

Table 27: Distribution of Prescriptions by How Prescription Received by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions Phoned In by Patient	Percent of Prescriptions Phoned In by Doctor	Percent of Prescriptions Faxed In	Percent of Prescriptions Dropped Off by Patient	Percent of Prescriptions Other
Independent Pharmacy	26.6%	9.8%	9.3%	53.5%	0.7%
Chain Store	21.2%	7.5%	7.2%	62.8%	1.2%
Banner Store	17.6%	7.9%	5.5%	68.2%	0.8%
Sample Total	**22.7%**	**8.3%**	**7.8%**	**60.2%**	**1.0%**

Figure 27: Distribution of Prescriptions by How Prescription Received by Type of Pharmacy



	Independent Pharmacy	Chain Store	Banner Store
Prescriptions Phoned In by Patient	26.6%	21.2%	17.6%
Prescriptions Phoned In by Doctor	9.8%	7.5%	7.9%
Prescriptions Faxed	9.3%	7.2%	5.5%
Prescriptions Dropped off by Patient	53.5%	62.8%	68.2%
Prescriptions Other	0.7%	1.2%	0.8%

5.0 What do Pharmacists Do?

There are two types of duties that pharmacists operating in NL pharmacies fulfill: (1) act as pharmacists in charge and (2) act as staff pharmacists. In addition to performing most of the duties of a staff pharmacist, the pharmacist in charge oversees the entire pharmacy operation. In particular, he/she is responsible for ensuring that the Pharmacy Act and Bylaws are complied with and for ensuring that the standards of practice are met. In addition, these pharmacists are responsible for administrative duties that consist of daily and monthly reports, narcotic control reports, scheduling, labour management, reconciling insurance, accounts receivable and payable, etc.

The staff pharmacist, on the other hand, provides patients with pharmaceutical care through counseling and monitoring of drug therapy to achieve optimal therapeutic outcomes and ultimately improve a patient's quality of life. Specifically, this involves:

- taking the medication histories for new patients
- entering prescriptions on patient profiles for later fill;
- filling prescriptions on patients profiles;
- checking for interactions and drug related problems with every fill of new prescription;
- counseling patients about their medications;
- calling third party adjudicators when problems arise with billing of prescriptions;
- reviewing special authorization criteria for medications and assessing patients needs with regards to this criteria to determine whether coverage is an option;

- completing Special Authorization request forms for patients if warranted;
- contacting Pharmaceutical Services regarding Special Authorization requests;
- providing over-the-counter counseling, including advice on over-the-counter drugs;
- taking verbal prescriptions from family physicians;
- filling compliance packages for clients;
- calling other pharmacies for prescription transfers;
- ordering drug inventory;
- maintaining proper pharmacy inventory control;
- recording narcotic purchases in proper registers;
- administering methadone programs;
- developing and delivering many community programs;
- answering numerous telephone calls from patients/physicians/3rd party insurance/ government
- providing information to other health care professionals
- teaching about devices;
- intervening when it is not appropriate to dispense a medication
- intervening and advocating for patients with third parties and physicians,
- researching and providing more detailed drug information for physicians and patients;
- "non traditional" counseling on wellness and preventative health, including diabetes counseling; asthma education; smoking cessation, etc.;
- being on call after hours for emergencies and consultation; and
- maintaining proper pharmacy inventory control;

5.1 What do Pharmacists Do?- By Type of Activity

While pharmacists dispense prescriptions, they are involved in many other professional pharmacy activities. A description of the types of activities undertaken by a typical pharmacist and the proportion of time allocated to that activity in a typical day are presented in Table 28 and Figure 28. The largest block of the pharmacist's time (41.4%) is spent dispensing prescriptions. This followed by routine patient counseling (16.3%), counseling on over-the-counter drugs (8.3%), time spent on the telephone (8.3%), review of patient medical records (7.4%), administration (7.2%), assisting with patient medical adherence (5.2%), complex disease management (2.2%), implementing care plans (1.8%) and other activities (1.9%).

There is considerable variation across communities in the amount of time spent on each activity performed by pharmacists. For instances, approximately 53% of a pharmacist's time in small communities is devoted to dispensing, while 36% of time for pharmacists in very large municipalities is devoted to dispensing. For mid-sized and large communities, pharmacists allocate between 43 and 44% of their time to dispensing activities. Patient counseling for routine matters and for over-the-counter drugs take up approximately 30% of a pharmacist's time in very large municipalities and only 17% of their time in the small communities. Approximately 22 to 23% of the pharmacists' time in the mid-sized

and large communities is allocated to routine and over-the-counter counseling activities. Another interesting difference by size of community is that complex disease management and the implementation of care plans comprise slightly more than 1% of a pharmacist's time in small communities but absorb between 4 and 5% of their time in the mid-sized and larger communities.

Table 28: Distribution of Pharmacist's Time by Type of Activity by Community

Community Size	Percent of Pharmacist's Time Allocated to Dispensing	Percent of Pharmacist's Time Allocated to Routine Patient Counseling	Percent of Pharmacist's Time Allocated to Complex Disease Management	Percent of Pharmacist's Time Allocated to Implementing Care Plans	Percent of Pharmacist's Time Allocated to Review Patient Medical Profiles
Less Than 1,000 People	52.5%	10.9%	0.6%	0.6%	7.5%
Between 1,000 and 5,000 People	43.1%	14.9%	2.2%	1.8%	6.6%
Between 5,000 and 10,000 People	43.7%	13.9%	2.0%	1.5%	6.4%
More Than 10,000 People	35.5%	20.1%	2.8%	2.4%	8.2%
Total	**41.4%**	**16.3%**	**2.2%**	**1.8%**	**7.4%**
Community Size	**Percent of Pharmacist's Time Allocated to Assist w/ Patient Medical Adherence**	**Percent of Pharmacist's Time Allocated to OTC Consultation**	**Percent of Pharmacist's Time Allocated to Administration**	**Percent of Pharmacist's Time Allocated to Telephone**	**Percent of Pharmacist's Time Allocated to Other**
Less Than 1,000 People	4.7%	6.4%	7.1%	8.5%	1.2%
Between 1,000 and 5,000 People	3.9%	8.1%	7.9%	11.5%	0.0%
Between 5,000 and 10,000 People	5.1%	7.7%	9.3%	8.4%	2.1%
More Than 10,000 People	6.0%	9.5%	5.8%	6.6%	3.0%
Total	**5.2%**	**8.3%**	**7.2%**	**8.3%**	**1.9%**

Figure 28: Distribution of Pharmacist's Time by Type of Activity by Community

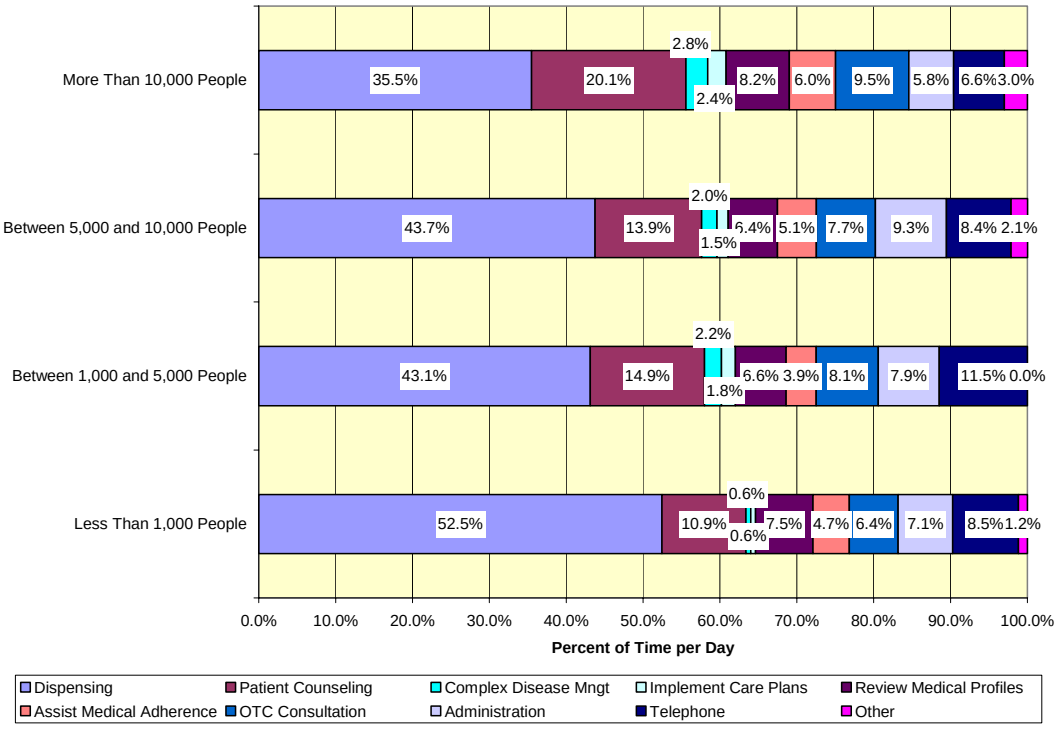


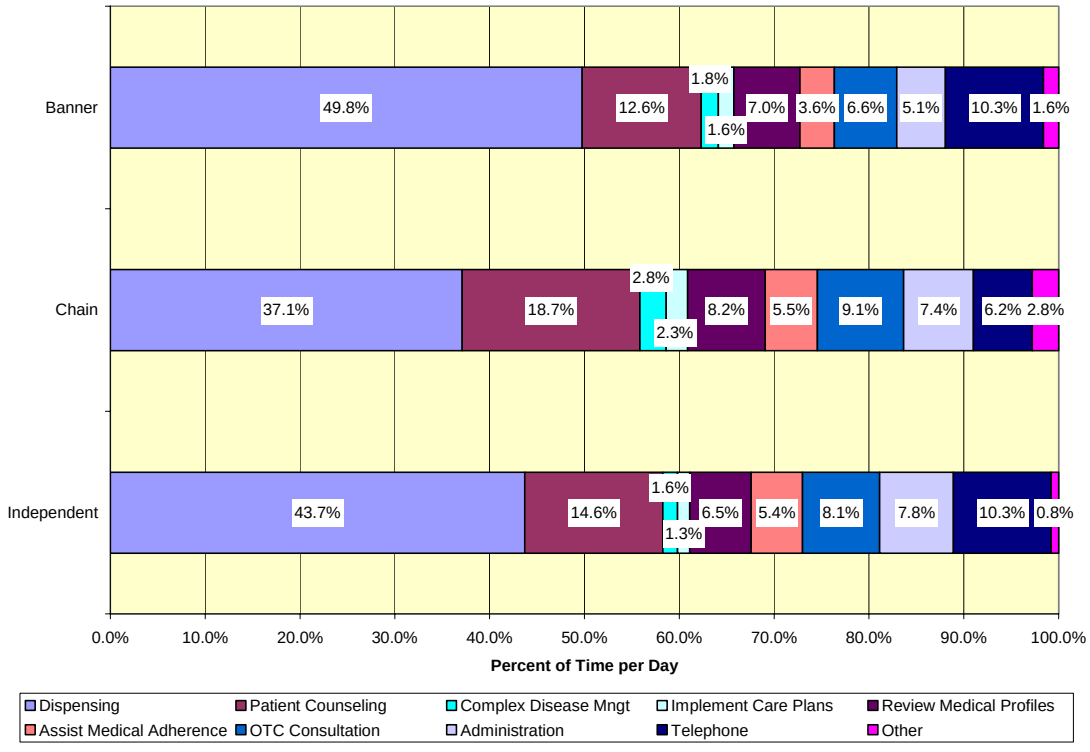
Table 29 and Figure 29 profile how the amount of time allocated to dispensing differs by type of store. Nearly 50% of a pharmacist's time in banner stores is devoted to

dispensing activities, while 37% of a chain store pharmacist's time goes to dispensing activities and 44% of the independent pharmacist's time is expended in this way. On the other hand, chain store pharmacist spend proportionately more time counseling patients (27.8%) than do banner store (19.2%) or independent pharmacists (22.7%). Chain store pharmacists spend less time on the telephone (6.2%) than either banner store pharmacists (10.3%) or independent pharmacists (10.3%).

Table 29: Distribution of Pharmacist's Time by Type of Activity by Type of Pharmacy

Community Size	Percent of Pharmacist's Time Allocated to Dispensing	Percent of Pharmacist's Time Allocated to Routine Patient Counseling	Percent of Pharmacist's Time Allocated to Complex Disease Management	Percent of Pharmacist's Time Allocated to Implementing Care Plans	Percent of Pharmacist's Time Allocated to Review Patient Medical Profiles
Independent Pharmacy	43.7%	14.6%	1.6%	1.3%	6.5%
Chain Store	37.1%	18.7%	2.8%	2.3%	8.2%
Banner Store	49.8%	12.6%	1.8%	1.6%	7.0%
Sample Total	**41.4%**	**16.3%**	**2.2%**	**1.8%**	**7.4%**
Community Size	**Percent of Pharmacist's Time Allocated to Assist w/ Patient Medical Adherence**	**Percent of Pharmacist's Time Allocated to OTC Consultation**	**Percent of Pharmacist's Time Allocated to Administration**	**Percent of Pharmacist's Time Allocated to Telephone**	**Percent of Pharmacist's Time Allocated to Other**
Independent Pharmacy	5.4%	8.1%	7.8%	10.3%	0.8%
Chain Store	5.5%	9.1%	7.4%	6.2%	2.8%
Banner Store	3.6%	6.6%	5.1%	10.3%	1.6%
Sample Total	**5.2%**	**8.3%**	**7.2%**	**8.3%**	**1.9%**

Figure 29: Distribution of Pharmacist's Time by Type of Activity by Type of Pharmacy



5.2 What do Pharmacists Do?- By Dispensing Activity

Table 30 and Figure 30 further decompose dispensing activity. The largest amount of time spent by pharmacists on dispensing activity is taken up with validating and dispensing prescriptions (27.5%). This, in terms of time commitment, is followed by processing prescriptions (21.0%), filling prescriptions (13.3%), interviewing patients (9.5%), collecting payment (9.4%), managing inventory and records (6.4%), receiving prescriptions (6.0%), restocking drugs (4.1%) and delivery to the patient (3.0%). Within each of these categories, there is significant variation across communities. For example, the amount of time spent validating prescription can be as low as 18.2% in small communities to as high as 33.3% in very large communities. Similarly, the time spent processing a prescription can be as low as 16.4% in very large communities to as high as 30.9% in mid-sized communities.

Table 30: Distribution of Pharmacist's Time Allocating to Dispensing by Type of Activity by Community Size

Community Size	Percent of Pharmacist's Time Allocated to Dispensing Spent on Receiving Prescription	Percent of Pharmacist's Time Allocated to Dispensing Spent on Interviewing Patients	Percent of Pharmacist's Time Allocated to Dispensing Spent on Processing Prescriptions	Percent of Pharmacist's Time Allocated to Dispensing Spent on Filling Prescriptions	Percent of Pharmacist's Time Allocated to Dispensing Spent on Validating & Dispensing Prescriptions
Less Than 1,000 People	4.5%	9.1%	20.9%	22.2%	18.2%
Between 1,000 and 5,000 People	3.5%	8.1%	30.9%	10.8%	27.2%
Between 5,000 and 10,000 People	8.0%	8.8%	20.0%	9.7%	21.1%
More Than 10,000 People	7.1%	10.6%	16.4%	13.0%	33.3%
Total	**6.0%**	**9.5%**	**21.0%**	**13.3%**	**27.5%**
Community Size	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Collecting Payment**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Delivering to Patient**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Re-Stocking Drugs**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Managing Inventory & Records**	
Less Than 1,000 People	10.5%	2.7%	4.5%	7.5%	
Between 1,000 and 5,000 People	7.5%	3.6%	2.0%	6.2%	
Between 5,000 and 10,000 People	11.9%	4.1%	6.4%	10.0%	
More Than 10,000 People	9.1%	2.3%	4.1%	4.8%	
Total	**9.4%**	**3.0%**	**4.1%**	**6.4%**	

The amount of dispensing time allocated to each task does vary by the type of store being considered, see Table 31 and Figure 31. By way of illustration, independent pharmacists spend 26.3% of their time validating and dispensing prescriptions while for chain store pharmacists, this absorbs 20.5% of their time. The corresponding time for banner store pharmacists is 23%. A similar pattern is observed for the amount of time spent processing prescriptions, with independent pharmacists allocating 27.9% of their time to this activities and chain store pharmacists consuming 16.5% of their time in this activity and banner store pharmacist utilizing 19.9% of their time processing prescriptions.

Figure 30: Distribution of Pharmacist's Time Allocating to Dispensing by Type of Activity by Community Size

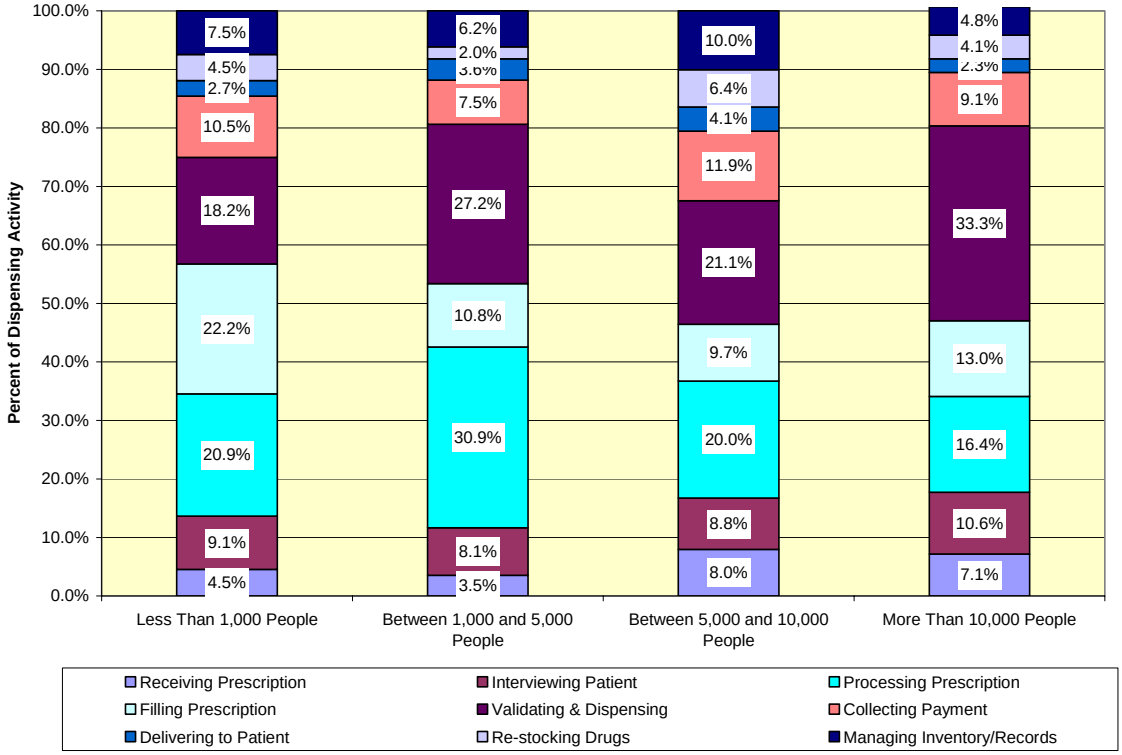
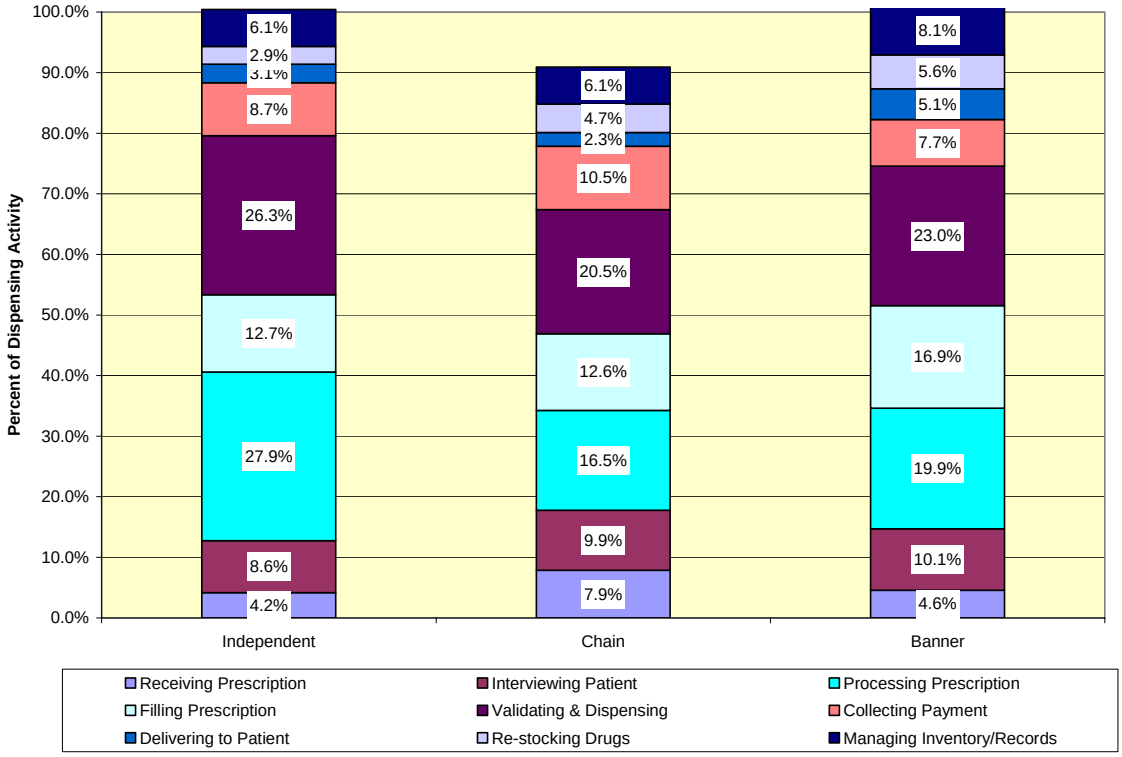


Table 31: Distribution of Pharmacist's Time Allocating to Dispensing by Type of Activity by Type of Pharmacy

Community Size	Percent of Pharmacist's Time Allocated to Dispensing Spent on Receiving Prescription	Percent of Pharmacist's Time Allocated to Dispensing Spent on Interviewing Patients	Percent of Pharmacist's Time Allocated to Dispensing Spent on Processing Prescriptions	Percent of Pharmacist's Time Allocated to Dispensing Spent on Filling Prescriptions	Percent of Pharmacist's Time Allocated to Dispensing Spent on Validating & Dispensing Prescriptions
Independent Pharmacy	4.2%	8.6%	27.9%	12.7%	26.3%
Chain Store	7.9%	9.9%	16.5%	12.6%	20.5%
Banner Store	4.6%	10.1%	19.9%	16.9%	23.0%
Sample Total	**6.0%**	**9.5%**	**21.0%**	**13.3%**	**27.5%**
Community Size	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Collecting Payment**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Delivering to Patient**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Re-Stocking Drugs**	**Percent of Pharmacist's Time Allocated to Dispensing Spent on Managing Inventory & Records**	
Independent Pharmacy	8.7%	3.1%	2.9%	6.1%	
Chain Store	10.5%	2.3%	4.7%	6.1%	
Banner Store	7.7%	5.1%	5.6%	8.1%	
Sample Total	**9.4%**	**3.0%**	**4.1%**	**6.4%**	

Figure 31: Distribution of Pharmacist's Time Allocating to Dispensing by Type of Activity by Type of Pharmacy



5.3 What do Pharmacists Do?- By Type of Prescription and Insurance Coverage

Table 32 and Figure 32 indicate how the time required to fill a prescription is influenced by the insurance status of the patient and whether if it is a new or refill prescription for an existing client. On average, the existence of third party insurance for a new prescription adds about three extra minutes to fill the prescription — it typically takes 7.4 minutes to fill a new prescription for a new client without third party insurance and this increases to 10.4 minutes if the new client has third party insurance. On the other hand, filling a new prescription for an existing client requires about six minutes to fill, which drops to approximately four minutes if it is a refill.

Interestingly, for large communities, it takes 4.6 minutes extra to fill a prescription for new patients with third party insurance. This fall to 3.2 minutes for mid-sized communities, to 2.8 for small communities and to 2.3 minutes for vary large communities. There is a significant variation in the time to fill new prescriptions for existing clients across communities; ranging from 4.2 minutes per prescription in small communities to 7.1 minutes in large communities. On the other hand, the time to fill prescriptions for existing clients are all within one minute of the average.

Table 33 and Figure 33 indicate that the presence of third party insurance for new patients adds about the same amount of time to filling new prescriptions — it takes an extra 3.3 minutes for independent pharmacies and 2.7 minutes for chain and banner

stores. Also, the difference in time between refills and new prescriptions is almost identical at 1.8 minutes across all three pharmacy types.

Table 32: Distribution of Pharmacist's Time Required to Fill Prescriptions by Type of Prescription and Insurance by Community Size

Community Size	Time to Process New Prescription for New Client With 3rd party Insurance	Time to Process New Prescription for New Client Without 3rd party Insurance	Time to Process New Prescription for Existing Client	Time to Refill Prescription for Existing Client
Less Than 1,000 People	8.3	5.5	4.2	3.4
Between 1,000 and 5,000 People	11.9	8.7	6.1	3.9
Between 5,000 and 10,000 People	13.1	8.5	7.1	4.5
More Than 10,000 People	9.4	7.1	5.8	4.3
Total	**10.4**	**7.4**	**5.9**	**4.1**

Figure 32: Distribution of Pharmacist's Time Required to Fill Prescriptions by Type of Prescription and Insurance by Community Size

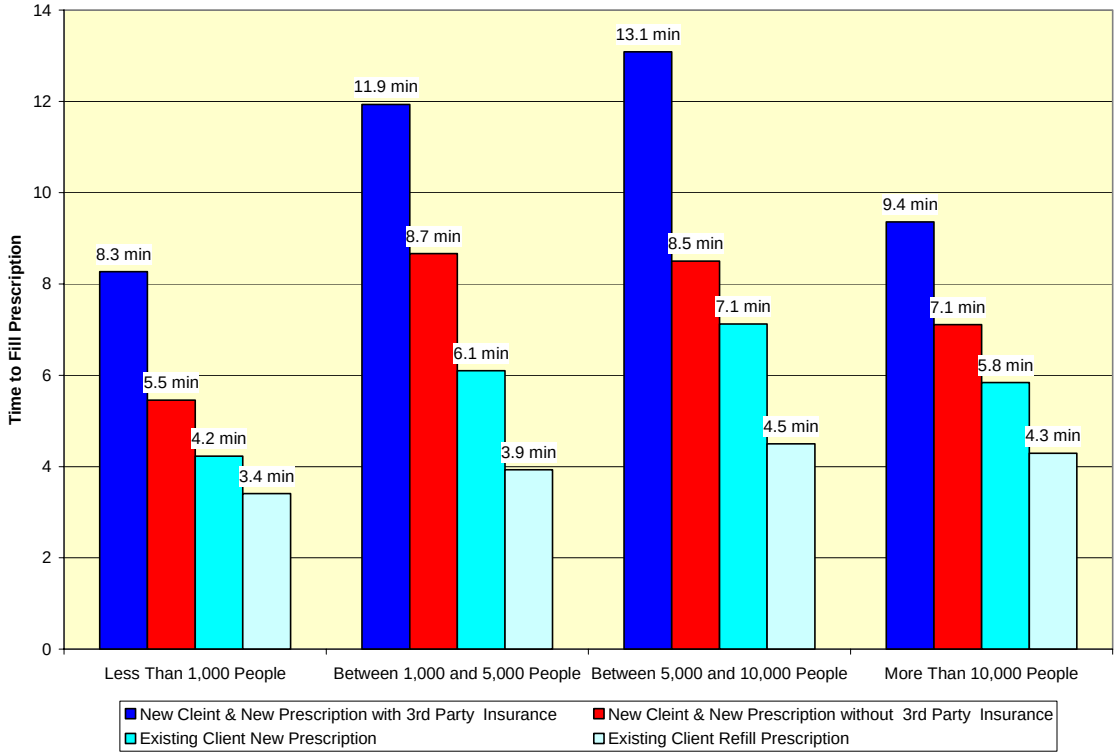
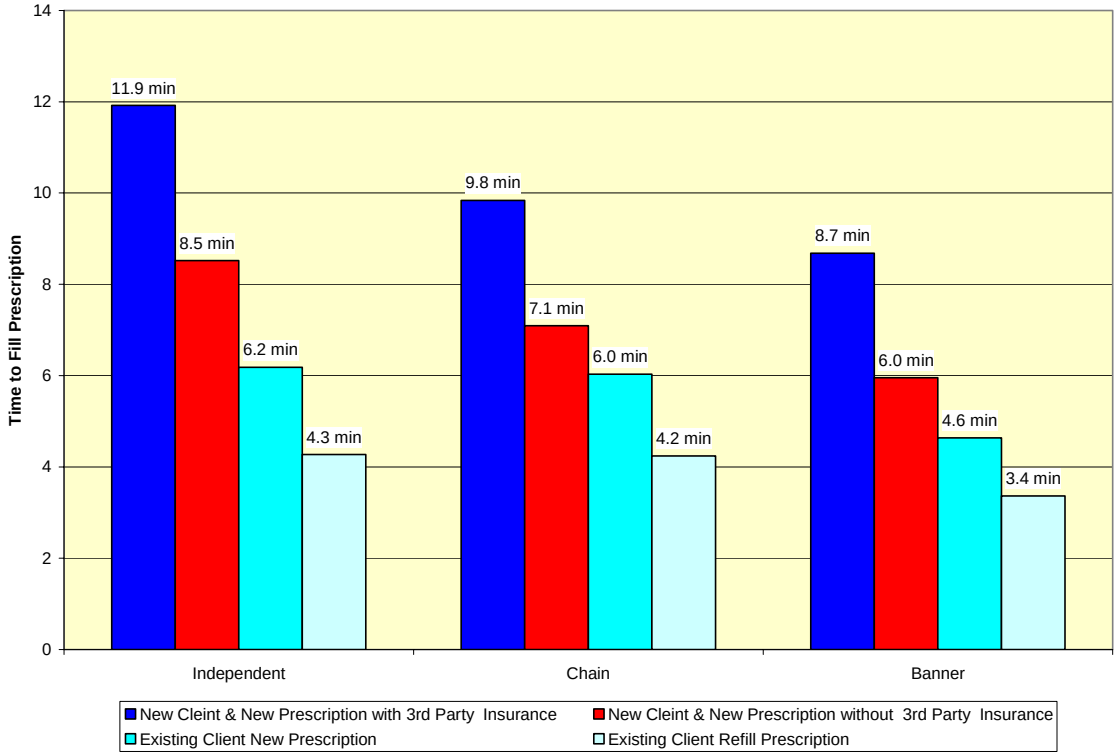


Table 33: Distribution of Pharmacist's Time Required to Fill Prescriptions by Type of Prescription and Insurance by Type of Pharmacy

Pharmacy Type	Time to Process New Prescription for New Client With 3rd party Insurance	Time to Process New Prescription for New Client Without 3rd party Insurance	Time to Process New Prescription for Existing Client	Time to Refill Prescription for Existing Client
Independent Pharmacy	11.9	8.5	6.2	4.3
Chain Store	9.8	7.1	6.0	4.2
Banner Store	8.7	6.0	4.6	3.4
Sample Total	**10.4**	**7.4**	**5.9**	**4.1**

Figure 33: Distribution of Pharmacist's Time Required to Fill Prescriptions by Type of Prescription and Insurance by Type of Pharmacy



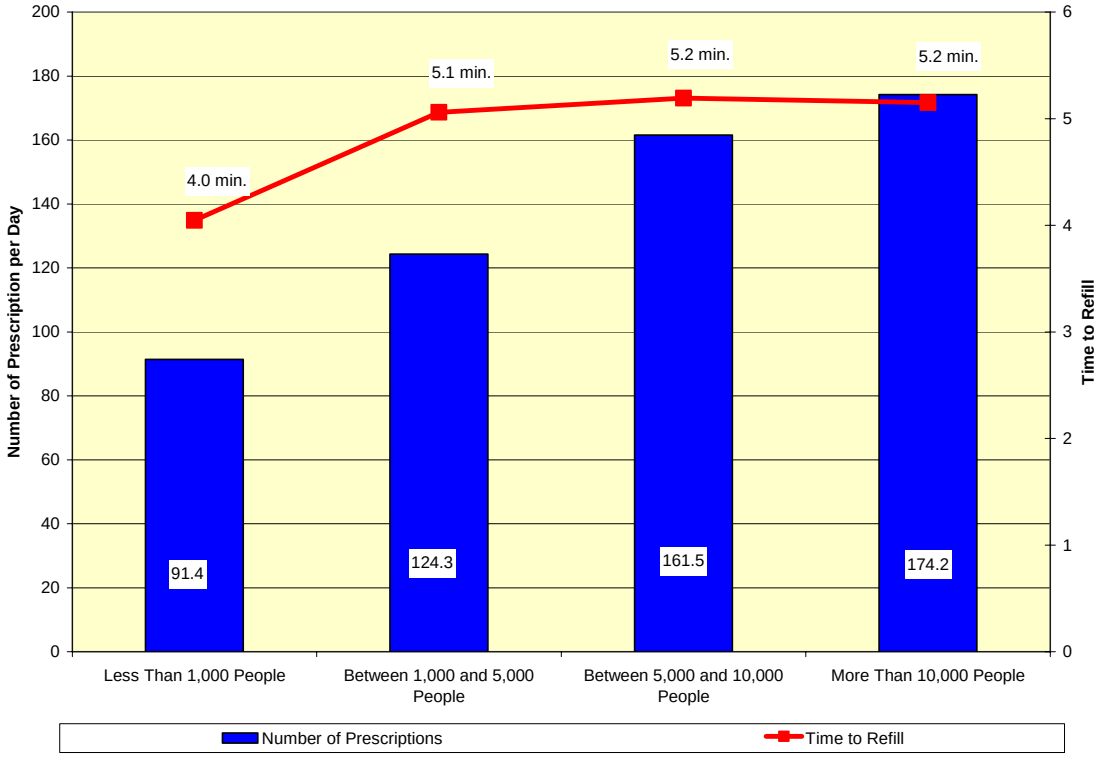
5.4 What do Pharmacists Do?- Average Number of Prescriptions & Time to Fill

Pharmacists, as profiled in Table 34 and displayed in Figure 34, receive 148 prescriptions per day on average and typically take five minutes to fill the prescription. As well, approximately 28% of prescriptions take more time to fill because of the extra procedures associated with third party insurance. There is a direct correlation between the size of the community and the average number of prescription filled by a pharmacist per day. While pharmacists in small municipalities fill prescription within four minutes, most pharmacists require five minutes to fill a prescription. As well, third party insurance plays a more significant role in the time to fill prescription in the large and very large communities.

Table 34: Distribution of Prescriptions Received by Pharmacist by Community Size

Community Size	Number of Prescriptions Received per day by Pharmacist	Time Required by Pharmacist to Fill Prescription	Percent of Prescriptions that Take More Time for Pharmacist to Process because of 3rd Party Insurance
Less Than 1,000 People	91.4	4.0	18.3%
Between 1,000 and 5,000 People	124.3	5.1	21.8%
Between 5,000 and 10,000 People	161.5	5.2	33.7%
More Than 10,000 People	174.2	5.2	30.3%
Total	**148.1**	**5.0**	**28.1%**

Figure 34: Distribution of Prescriptions Received by Pharmacist by Community Size

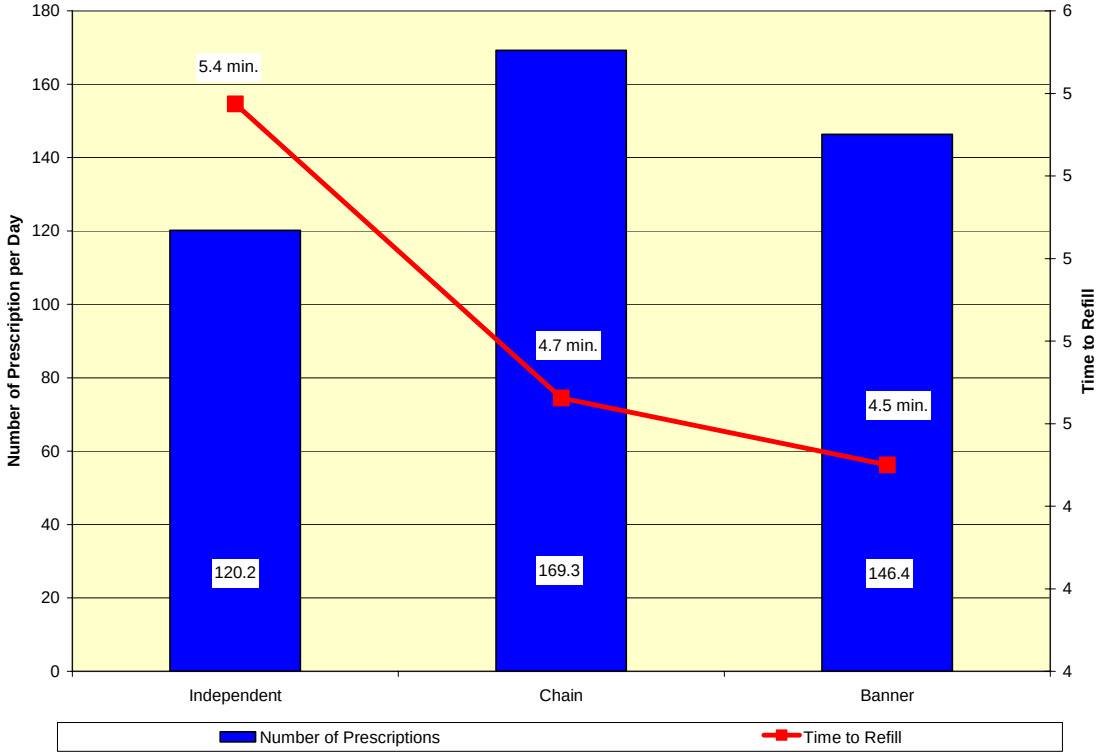


As shown in Table 35 and Figure 35, chain store pharmacists process more prescriptions per day (169) than do banner store pharmacist (146) or independent pharmacists (120). While independent pharmacists take slightly more time to process prescriptions, the estimate for each pharmacy type is within one minute of the others.

Table 35: Distribution of Prescriptions Received by Pharmacist by Type of Pharmacy

Pharmacy Type	Number of Prescriptions Received per day by Pharmacist	Time Required by Pharmacist to Fill Prescription	Percent of Prescriptions that Take More Time for Pharmacist to Process because of 3rd Party Insurance
Independent Pharmacy	120.2	5.4	27.1%
Chain Store	169.3	4.7	28.6%
Banner Store	146.4	4.5	25.6%
Sample Total	**148.1**	**5.0**	**28.1%**

Figure 35: Distribution of Prescriptions Received by Pharmacist by Type of Pharmacy



6.0 What Pharmacy Technicians Do?

A pharmacy technician's role is to assist the pharmacist. This involves:

- receiving a written prescription or requests for a prescription refill from the patient or representative;
- ensuring completeness of information on prescription;
- preparing prescription labels;
- retrieving, counting, pouring, weighing, measuring and mixing medications;
- affixing prescription and auxiliary labels to prescription containers;
- pricing prescriptions;
- filling prescriptions;
- logging prescriptions;
- filling compliance packages for clients;
- establishing and maintaining patient profiles;
- preparing and reconciling third party billings;
- answering telephone inquires and screening calls;
- monitoring stock levels to ensure sufficient quantities for optimal operation;
- preparing and placing orders from specific sources;
- receiving and checking supplies purchased;

- maintaining inventory records, including those for narcotics and controlled drugs;
- rotating stock and monitoring expiry dates;
- identifying expired products for disposal, destruction or return to manufacturer;
- print tax receipts; and
- receipting of cash and daily deposits.

6.1 What Pharmacy Technicians Do – Type of Activity

The majority of the pharmacy technician's time is allocated to dispensing activities (53.4%), this is followed by time on the telephone (18.8%), administration (15.3%), other unspecified activities (4.7%), review of patient medical profiles (3.1%) and the remaining functions each occupied less than 2% of their time, see Table 36 and Figure 36. There is a large variation in the amount of time allocated to each activity by the size of the community served. For example, technicians in small communities spend nearly 78% of their time in dispensing activities, while only 49% of the pharmacy technician's time in large communities goes to dispensing activities. Administration activities are important across all community sizes, but it is most important in small communities, taking up 20% of the technician's time. On the other hand, only 2% of the pharmacy technician's time is sent on the telephone in small communities, but this constitutes nearly 26% of the technician's time in mid-sized communities.

Table 36: Distribution of Pharmacy Technician's Time by Type of Activity by Community Size

Community Size	Percent of Technician's Time Allocated to Dispensing	Percent of Technician's Time Allocated to Routine Patient Counseling	Percent of Technician's Time Allocated to Complex Disease Management	Percent of Technician's Time Allocated to Implementing Care Plans	Percent of Technician's Time Allocated to Review Patient Medical Profiles
Less Than 1,000 People	77.5%	0.0%	0.0%	0.0%	0.0%
Between 1,000 and 5,000 People	50.0%	0.5%	0.0%	0.0%	1.0%
Between 5,000 and 10,000 People	48.9%	3.3%	0.1%	1.7%	5.9%
More Than 10,000 People	59.8%	0.0%	0.0%	0.0%	3.7%
Total	**53.4%**	**1.4%**	**0.0%**	**0.6%**	**3.1%**
Community Size	**Percent of Technician's Time Allocated to Assist w/ Patient Medical Adherence**	**Percent of Technician's Time Allocated to OTC Consultation**	**Percent of Technician's Time Allocated to Administration**	**Percent of Technician's Time Allocated to Telephone**	**Percent of Technician's Time Allocated to Other**
Less Than 1,000 People	0.0%	0.5%	20.0%	2.0%	0.0%
Between 1,000 and 5,000 People	0.5%	3.7%	11.3%	25.8%	7.2%
Between 5,000 and 10,000 People	1.7%	0.2%	18.8%	16.7%	2.8%
More Than 10,000 People	2.2%	0.0%	15.0%	14.4%	5.0%
Total	**1.1%**	**1.6%**	**15.3%**	**18.8%**	**4.7%**

Table 37 and Figure 37 report the activity breakdown for technicians by independent and chain stores only because completed surveys were received from banner store technicians. The allocation of the technicians' time is similar across both store type. The exception is that more of the technician's time in independent pharmacies (20.9%) is spent on the telephone relative to that observed for chain stores (13.2%) and more of the technician's time in chain stores (58.5%) is spent in dispensing activities than is observed in the independent pharmacies (51.4%).

Figure 36: Distribution of Pharmacy Technician's Time by Type of Activity by Community Size

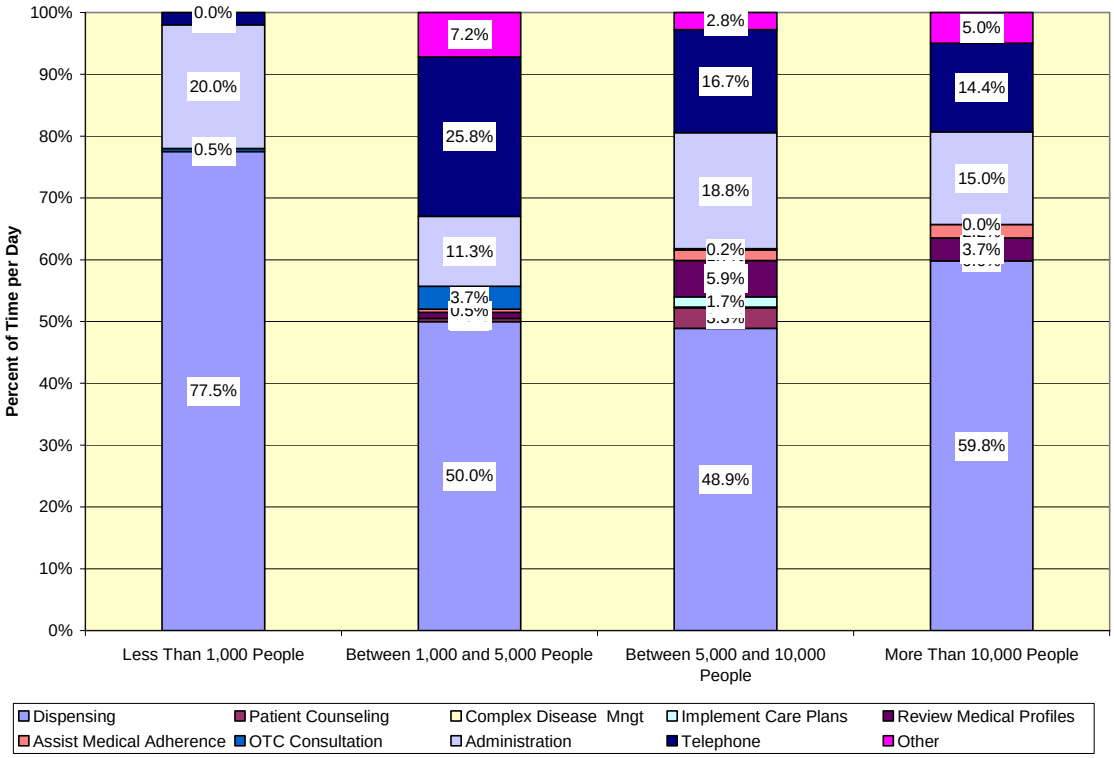
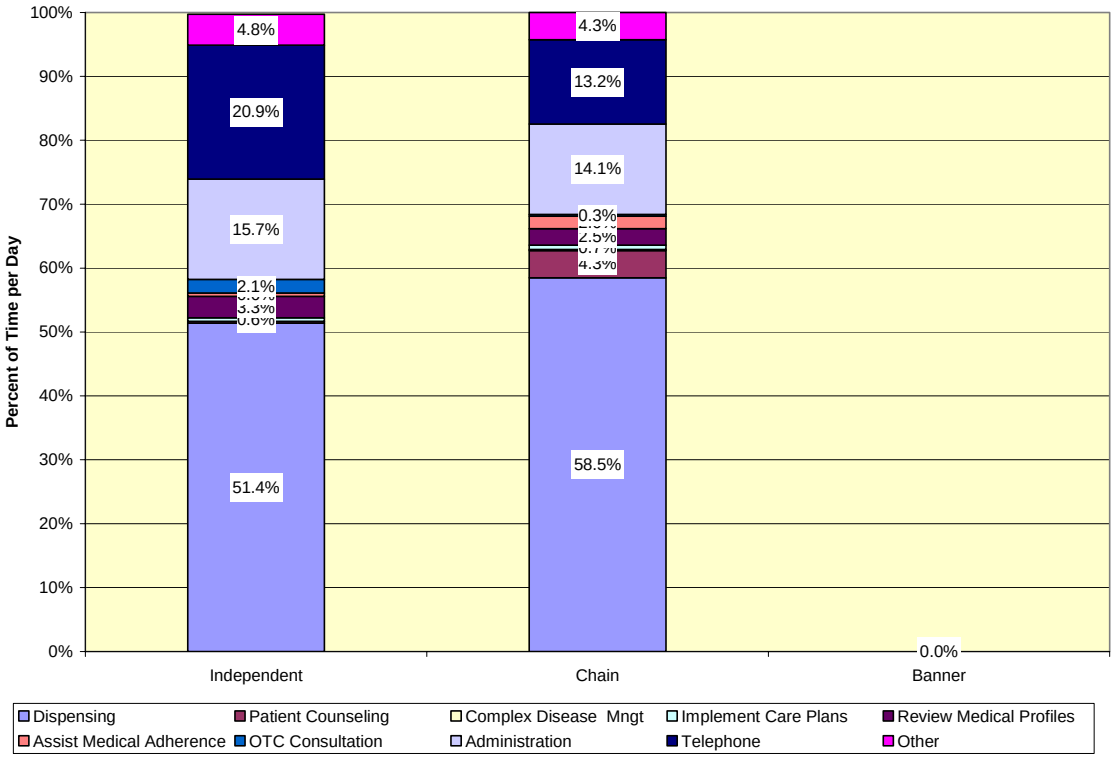


Table 37: Distribution of Pharmacy Technician's Time by Type of Activity by Type of Pharmacy

Community Size	Percent of Technician's Time Allocated to Dispensing	Percent of Technician's Time Allocated to Routine Patient Counseling	Percent of Technician's Time Allocated to Complex Disease Management	Percent of Technician's Time Allocated to Implementing Care Plans	Percent of Technician's Time Allocated to Review Patient Medical Profiles
Independent Pharmacy	51.4%	0.3%	0.0%	0.6%	3.3%
Chain Store	58.5%	4.3%	0.1%	0.7%	2.5%
Banner Store	0.0%	0.0%	0.0%	0.0%	0.0%
Sample Total	**53.4%**	**1.4%**	**0.0%**	**0.6%**	**3.1%**
Community Size	**Percent of Technician's Time Allocated to Assist w/ Patient Medical Adherence**	**Percent of Technician's Time Allocated to OTC Consultation**	**Percent of Technician's Time Allocated to Administration**	**Percent of Technician's Time Allocated to Telephone**	**Percent of Technician's Time Allocated to Other**
Independent Pharmacy	0.6%	2.1%	15.7%	20.9%	4.8%
Chain Store	2.0%	0.3%	14.1%	13.2%	4.3%
Banner Store	0.0%	0.0%	0.0%	0.0%	0.0%
Sample Total	**1.1%**	**1.6%**	**15.3%**	**18.8%**	**4.7%**

Figure 37: Distribution of Pharmacy Technician's Time by Type of Activity by Type of Pharmacy



6.2 What Pharmacy Technicians Do – By Dispensing Activity

Table 38 and Figure 38 illustrate how pharmacy technician dispensing time is allocated to the different functions encompassed by the general rubric dispensing time. The largest amount of dispensing time is spent on filling prescriptions (33.8%). This is followed in the proportion of the technician's time allocated to dispensing activity by time spent collecting payments (12.6%), interviewing patients (11.2%), managing inventory and records (10.4%), re-stocking drugs (8.3%), receiving prescriptions (7.8%), processing prescriptions (5.9%), delivery to patients (5.2%) and validating an dispensing prescriptions (4.7%).

The proportion of time utilized in each of these function does vary by the size of community. For example, filling prescriptions takes up most of the pharmacy technician's time in all communities except very large communities. For very large communities, there is a more equal distribution of the technician's time devoted to collecting payment (17.5%), receiving prescriptions (16.9%), filling prescriptions (16.3%), interviewing patients (13.1%) and managing inventory and records (10.4%).

Table 39 and Figure 39 profile the proportion of dispensing activity by function for independent pharmacies and chain stores. Technicians in independent pharmacies spent higher proportion of their time filling prescription (37.3%) than their counterparts in chain stores (25.0%). On the other hand, the chain store technicians spend more time

receiving prescriptions (11.8%) than do their independent store counterparts (6.3%). The shares of time spent in the other activities are similar across both independent pharmacies and chain stores.

Table 38: Distribution of Pharmacy Technician's Time Allocating to Dispensing by Type of Activity by Community Size

Community Size	Percent of Technician's Time Allocated to Dispensing Spent on Receiving Prescription	Percent of Technician's Time Allocated to Dispensing Spent on Interviewing Patients	Percent of Technician's Time Allocated to Dispensing Spent on Processing Prescriptions	Percent of Technician's Time Allocated to Dispensing Spent on Filling Prescriptions	Percent of Technician's Time Allocated to Dispensing Spent on Validating & Dispensing Prescriptions
Less Than 1,000 People	12.5%	5.0%	0.0%	32.5%	0.0%
Between 1,000 and 5,000 People	6.9%	10.4%	4.3%	41.6%	2.1%
Between 5,000 and 10,000 People	3.8%	12.6%	8.9%	33.3%	8.4%
More Than 10,000 People	16.9%	13.1%	6.3%	16.3%	5.0%
Total	**7.8%**	**11.2%**	**5.9%**	**33.8%**	**4.7%**
Community Size	**Percent of Technician's Time Allocated to Dispensing Spent on Collecting Payment**	**Percent of Technician's Time Allocated to Dispensing Spent on Delivering to Patient**	**Percent of Technician's Time Allocated to Dispensing Spent on Re-Stocking Drugs**	**Percent of Technician's Time Allocated to Dispensing Spent on Managing Inventory & Records**	
Less Than 1,000 People	20.0%	2.5%	12.5%	15.0%	
Between 1,000 and 5,000 People	10.5%	6.9%	9.0%	8.3%	
Between 5,000 and 10,000 People	11.1%	4.1%	6.8%	10.9%	
More Than 10,000 People	17.5%	5.0%	7.5%	12.5%	
Total	**12.6%**	**5.2%**	**8.3%**	**10.4%**	

Figure 38: Distribution of Pharmacy Technician's Time Allocating to Dispensing by Type of Activity by Community Size

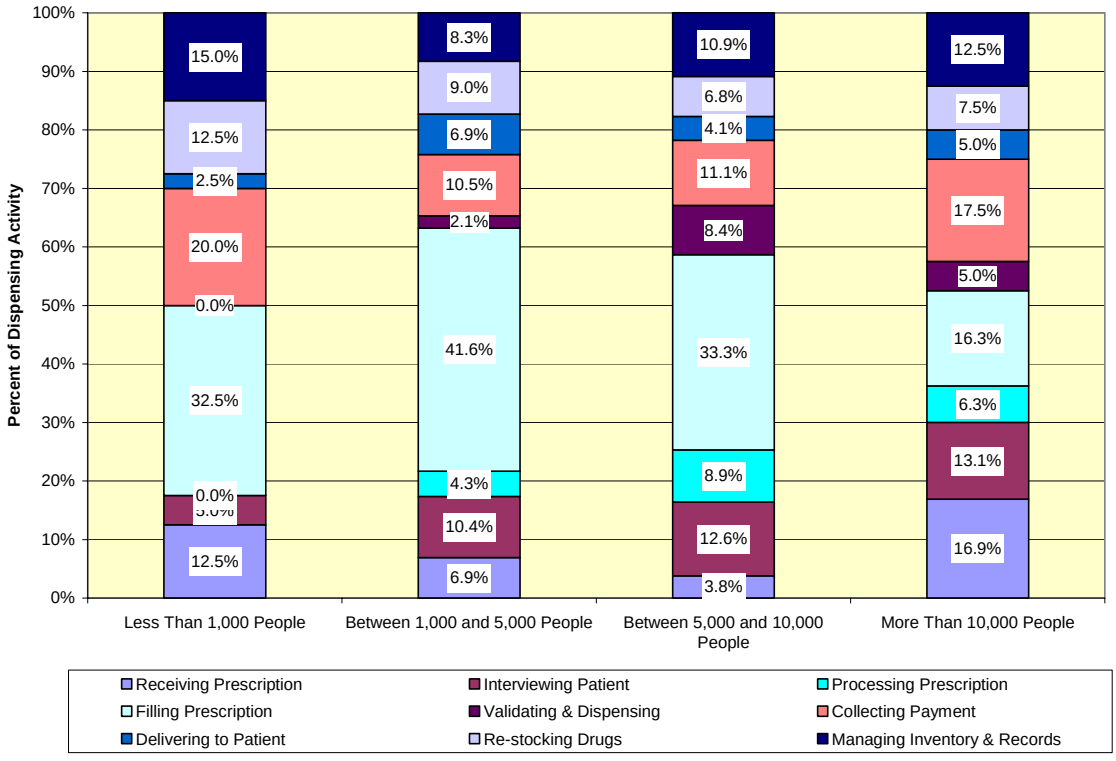
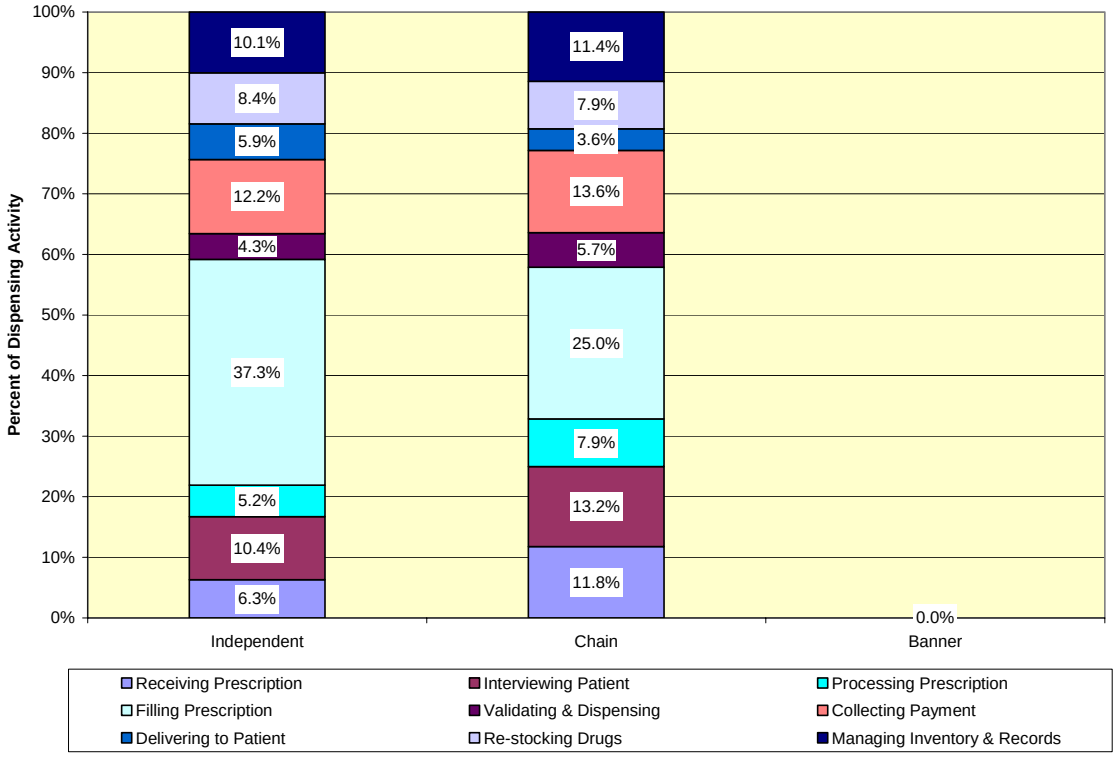


Table 39: Distribution of Pharmacy Technician's Time Allocating to Dispensing by Type of Activity by Type of Pharmacy

Community Size	Percent of Technician's Time Allocated to Dispensing Spent on Receiving Prescription	Percent of Technician's Time Allocated to Dispensing Spent on Interviewing Patients	Percent of Technician's Time Allocated to Dispensing Spent on Processing Prescriptions	Percent of Technician's Time Allocated to Dispensing Spent on Filling Prescriptions	Percent of Technician's Time Allocated to Dispensing Spent on Validating & Dispensing Prescriptions
Independent Pharmacy	6.3%	10.4%	5.2%	37.3%	4.3%
Chain Store	11.8%	13.2%	7.9%	25.0%	5.7%
Banner Store	0.0%	0.0%	0.0%	0.0%	0.0%
Sample Total	**7.8%**	**11.2%**	**5.9%**	**33.8%**	**4.7%**
Community Size	**Percent of Technician's Time Allocated to Dispensing Spent on Collecting Payment**	**Percent of Technician's Time Allocated to Dispensing Spent on Delivering to Patient**	**Percent of Technician's Time Allocated to Dispensing Spent on Re-Stocking Drugs**	**Percent of Technician's Time Allocated to Dispensing Spent on Managing Inventory & Records**	
Independent Pharmacy	12.2%	5.9%	8.4%	10.1%	
Chain Store	13.6%	3.6%	7.9%	11.4%	
Banner Store	0.0%	0.0%	0.0%	0.0%	
Sample Total	**12.6%**	**5.2%**	**8.3%**	**10.4%**	

Figure 39: Distribution of Pharmacy Technician's Time Allocating to Dispensing by Type of Activity by Type of Pharmacy



6.3 What Pharmacy Technicians Do – Average Number of Prescriptions and Time to Fill

Table 40 and Figure 40 profile the average number of prescriptions received per day by the technician, the average time required to process each and the percent of prescription

that require more time because of third part insurance. Technicians receive approximately 124 prescriptions per day and it take 5.6 minutes per prescription to fill. As well, 9.5% of prescription take extra time to fill because of third party insurance. Technicians working in small communities report an average of 95 prescription per day and those in large communities 134 prescriptions per day. A similar variation in the time to fill prescription is also observed. The time taken to fill a prescription by a pharmacy technician ranges from 3.8 minutes in small communities to 6.8 minutes in very large communities. The proportion of prescription that take extra time because third party insurance in very large communities is more than double the average reported across all communities.

Table 40: Distribution of Prescriptions Received by Pharmacy Technician by Community Size

Community Size	Number of Prescriptions Received per day by Technician	Time Required by Technician to Fill Prescription	Percent of Prescriptions that Take More Time for Technician to Process because of 3rd Party Insurance
Less Than 1,000 People	95.0	3.8	10.0%
Between 1,000 and 5,000 People	128.5	6.1	8.0%
Between 5,000 and 10,000 People	134.4	5.0	6.3%
More Than 10,000 People	102.3	6.8	20.0%
Total	**123.8**	**5.6**	**9.5%**

Figure 40: Distribution of Prescriptions Received by Pharmacy Technician by Community Size

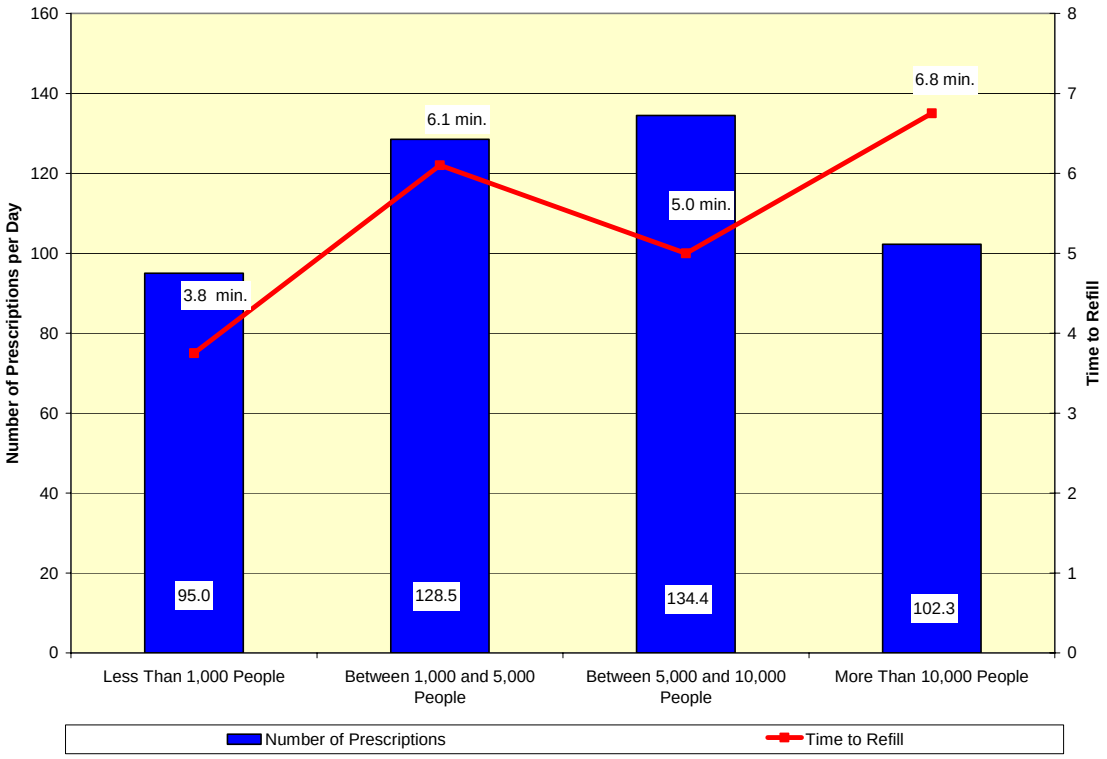
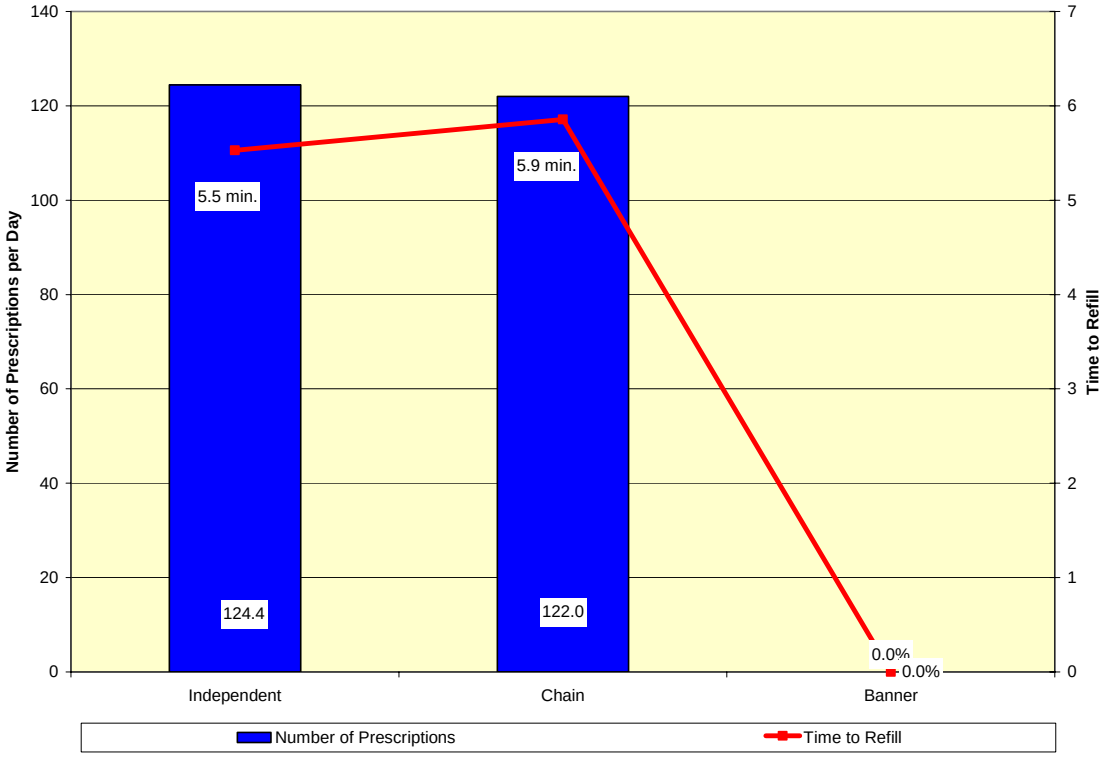


Table 41 and Figure 41 indicate take the average number of prescription and the average time to fill a prescription are similar for independent pharmacies and for chain stores. On the other hand, the proportion of prescription that take more time because of third party insurance for chain stores is more than twice the proportion found in independent pharmacies.

Table 41: Distribution of Prescriptions Received by Pharmacy Technician by Type of Pharmacy

Pharmacy Type	Number of Prescriptions Received per day by Technician	Time Required by Technician to Fill Prescription	Percent of Prescriptions that Take More Time for Technician to Process because of 3rd Party Insurance
Independent Pharmacy	124.4	5.5	6.7%
Chain Store	122.0	5.9	16.7%
Banner Store	0.0%	0.0%	0.0%
Sample Total	**123.8**	**5.6**	**9.5%**

Figure 41: Distribution of Prescriptions Received by Pharmacy Technician by Type of Pharmacy



7.0 Additional Services Provided by Pharmacists

Not only do pharmacies dispense prescriptions, they also provide many other professional services to the community for which there is no direct charge to the patient and from which the residents of NL receive specific benefits. For example, as shown in Table 42 and Figure 42, 31% of pharmacies offer community health programs, 62% of pharmacies

make available disease management clinics, 54% of pharmacies help develop individual care plans, 88% of pharmacies review patient medication regimens, 91% of pharmacies facilitate medical adherence for patients, 77% supply emergency counsel and/or referrals, 100% of pharmacies furnish income tax receipts to their patients, 29% of pharmacies are members of primary health care teams, 11% of pharmacies participate in emergency preparedness committees and 80% of pharmacies are involved in communicating information on drug product withdrawal and drug safety issues to patient and physicians.

There are less community health programs, disease management clinics and development of individual care plans in the small communities than in the mid-sized and larger communities. Review of patient medication regimen is more prevalent in the small communities.

There is not a large disparity in the proportion of pharmacies by type that offer each of the additional pharmacy services, see Table 43 and Figure 43.

Table 42: Distribution of Additional Services Provided by Pharmacies by Community Size

Community Size	Percent of Providing Community Health	Percent of Providing Disease Management Clinics	Percent of Providing Development of Individual Care Plans	Percent of Providing Review of Patient Medication Regimen	Percent of Providing Assistance with Medication Adherence
Less Than 1,000 People	10.0%	30.0%	40.0%	100.0%	90.0%
Between 1,000 and 5,000 People	33.3%	52.4%	57.1%	85.7%	90.5%
Between 5,000 and 10,000 People	35.0%	75.0%	50.0%	90.0%	95.0%
More Than 10,000 People	33.3%	69.7%	57.6%	84.8%	87.9%
Total	**31.0%**	**61.9%**	**53.6%**	**88.1%**	**90.5%**
Community Size	**Percent of Providing Emergency Counsel &/or Referral**	**Percent of Providing Income Tax Receipts**	**Percent of Providing Participation in Primary Health Care Teams**	**Percent of Providing Participation in Emergency Preparedness Committees**	**Percent of Providing Patient/Physician Communication Drug Product Withdrawal/Drug Safety Issues**
Less Than 1,000 People	70.0%	100.0%	30.0%	10.0%	70.0%
Between 1,000 and 5,000 People	76.2%	100.0%	47.6%	9.5%	71.4%
Between 5,000 and 10,000 People	90.0%	100.0%	20.0%	10.0%	75.0%
More Than 10,000 People	72.7%	100.0%	21.2%	12.1%	90.9%
Total	**77.4%**	**100.0%**	**28.6%**	**10.7%**	**79.8%**

Figure 42: Distribution of Additional Services Provided by Pharmacies by Community Size

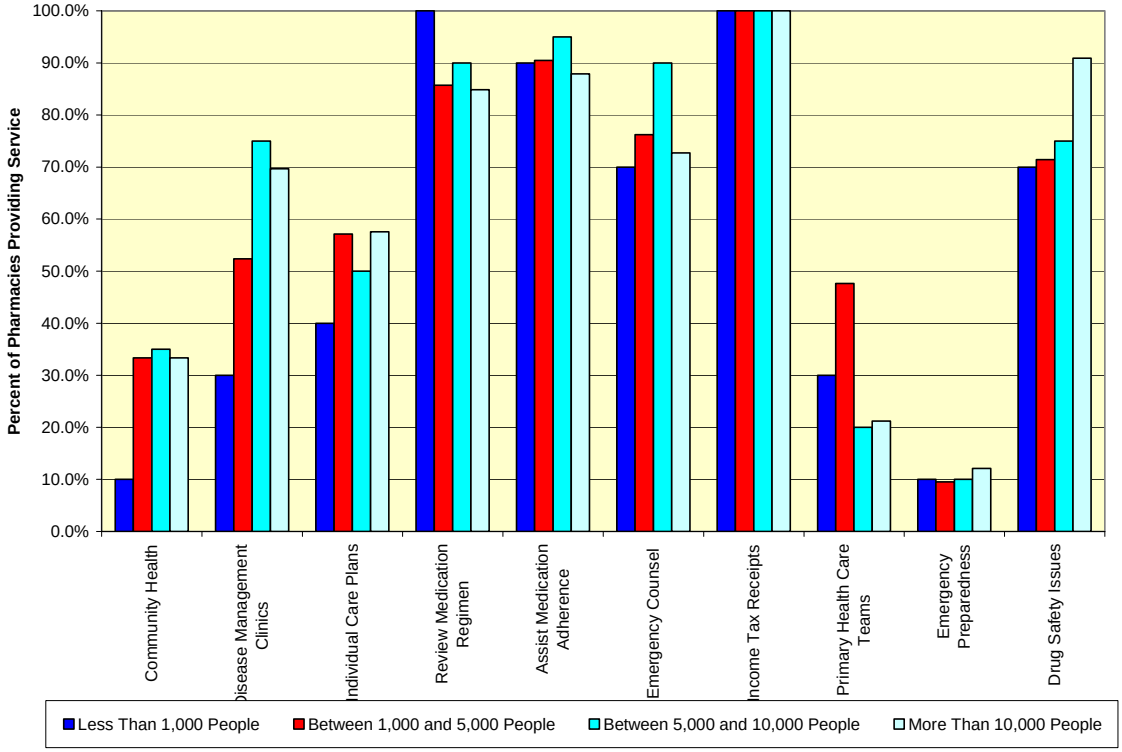
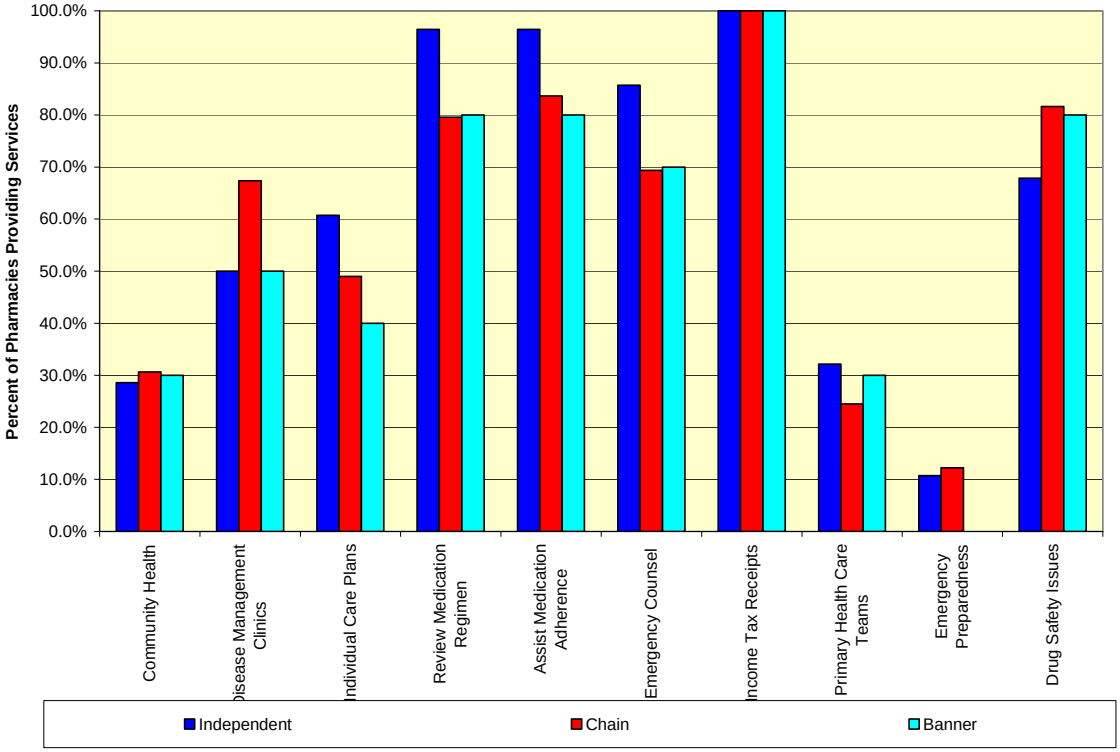


Table 43: Distribution of Additional Services Provided by Pharmacies by Type of Pharmacy

Community Size	Percent of Providing Community Health	Percent of Providing Disease Management Clinics	Percent of Providing Development of Individual Care Plans	Percent of Providing Review of Patient Medication Regimen	Percent of Providing Assistance with Medication Adherence
Independent Pharmacy	**28.6%**	**50.0%**	**60.7%**	**96.4%**	**96.4%**
Chain Store	**30.6%**	**67.3%**	**49.0%**	**79.6%**	**83.7%**
Banner Store	**30.0%**	**50.0%**	**40.0%**	**80.0%**	**80.0%**
Sample Total	**31.0%**	**61.9%**	**53.6%**	**88.1%**	**90.5%**
Community Size	**Percent of Providing Emergency Counsel &/or Referral**	**Percent of Providing Income Tax Receipts**	**Percent of Providing Participation in Primary Health Care Teams**	**Percent of Providing Participation in Emergency Preparedness Committees**	**Percent of Providing Patient/Physician Communication Drug Product Withdrawal/Drug Safety Issues**
Independent Pharmacy	85.7%	100.0%	32.1%	10.7%	67.9%
Chain Store	69.4%	100.0%	24.5%	12.2%	81.6%
Banner Store	70.0%	100.0%	30.0%	0.0%	80.0%
Sample Total	**77.4%**	**100.0%**	**28.6%**	**10.7%**	**79.8%**

Figure 43: Distribution of Additional Services Provided by Pharmacies by Type of Pharmacy



7.1 Additional Services Provided by Pharmacists - Delivery

As illustrated in Table 44 and Figure 44, over 70% of pharmacies deliver prescriptions to patients and 95% of those that delivery do not charge the patient for the cost of delivery. While there is an obvious benefit to their patients from home delivery, there is almost never a charge to the patient for this service.

Table 44: Distribution of Pharmacies by whether they Deliver Prescriptions to Patients and who Pays for the Service by Community Size

Community Size	Percent of Pharmacies Providing Delivery	Percent of Pharmacies that Provide Delivery which is Paid for by the Pharmacy
Less Than 1,000 People	72.7%	87.5%
Between 1,000 and 5,000 People	73.9%	94.1%
Between 5,000 and 10,000 People	47.6%	100.0%
More Than 10,000 People	81.8%	96.3%
Total	**70.5%**	**95.2%**

A high proportion (90%) of independent pharmacies deliver, while only 60% of chain stores deliver and 80% of banner stores deliver, see Table 45 and Figure 45

Figure 44: Distribution of Pharmacies by whether they Deliver Prescriptions to Patients and who Pays for the Service by Community Size

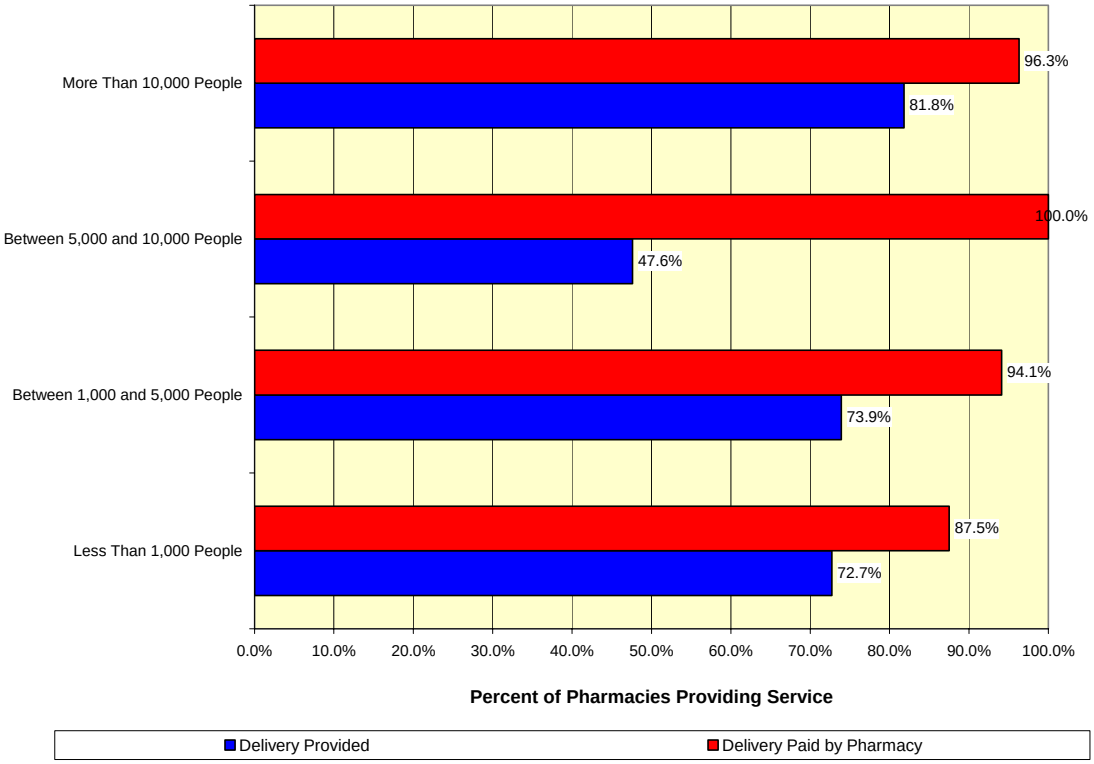
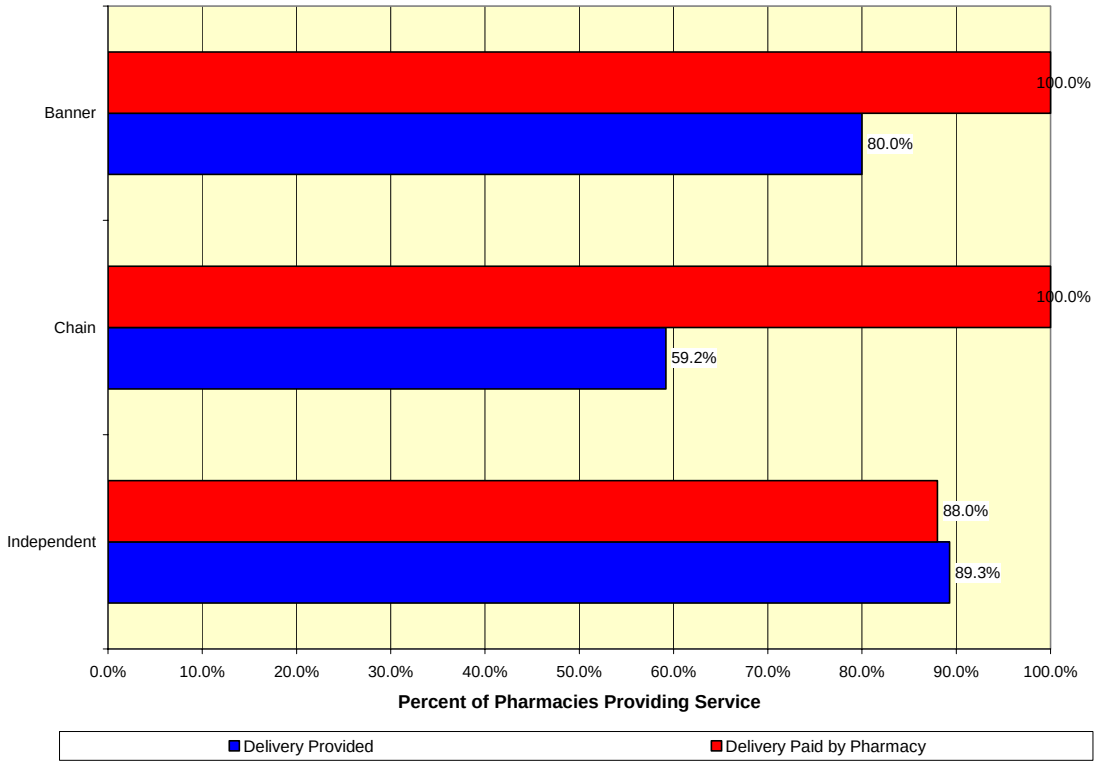


Table 45: Distribution of Pharmacies by whether they Deliver Prescriptions to Patients and who Pays for the Service by Type of Pharmacy

Pharmacy Type	Percent of Pharmacies Providing Delivery	Percent of Pharmacies that Provide Delivery which is Paid for by the Pharmacy
Independent Pharmacy	89.3%	88.0%
Chain Store	59.2%	100.0%
Banner Store	80.0%	100.0%
Sample Total	**70.5%**	**95.2%**

Figure 45: Distribution of Pharmacies by whether they Deliver Prescriptions to Patients and who Pays for the Service by Type of Pharmacy



8.0 Extra Time and Effort

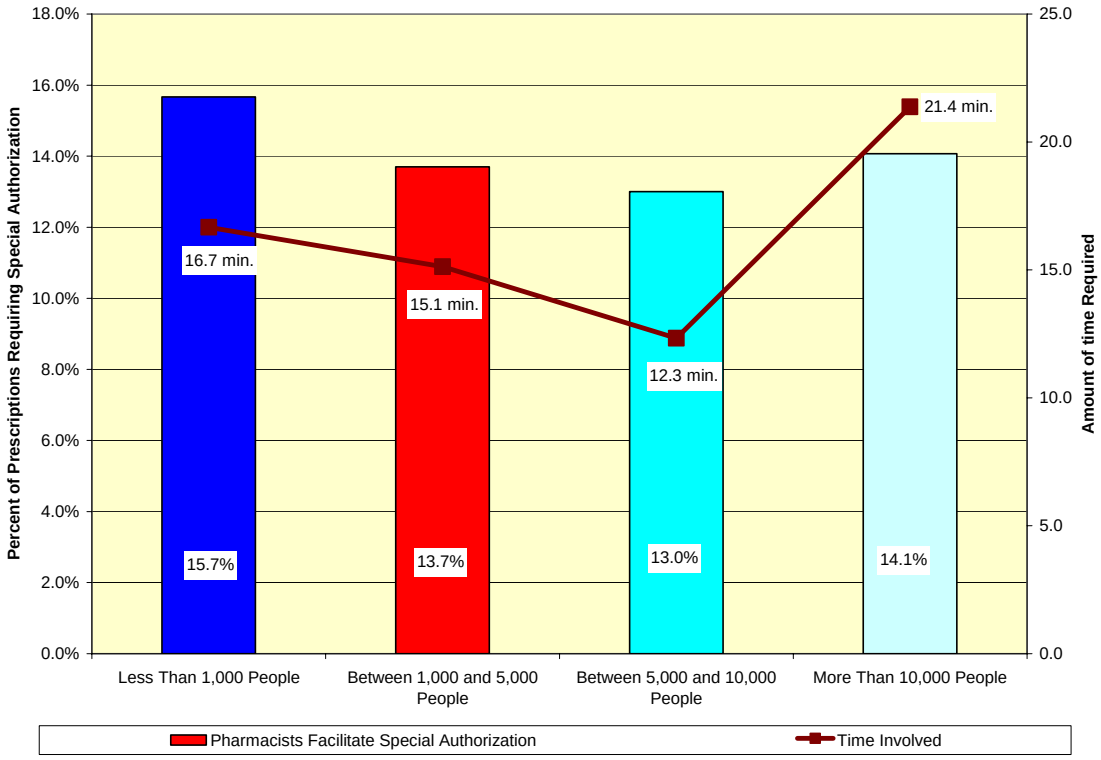
8.1 Extra Time and Effort – Special Authorization

Table 46 and Figure 46 illustrate that approximately 14% of all prescription require the pharmacist to facilitate special authorization and this was similar across all community sizes. These special authorization do required significantly greater amount of the pharmacist's time than does a regular prescription. In fact, it took an average of 16.6 minutes to secure a special authorization on average. This ranged from a low of 12.3 minutes in large communities to a high of 21.4 minutes in very large communities.

Table 46: Distribution of Pharmacies by Whether the Pharmacist had to Facilitate Special Authorization and Time Involved by Community Size

Community Size	Percent of Prescriptions for Pharmacist had to Facilitate Special Authorization	Amount of Time Involved in Securing Special Authorization (Minutes)
Less Than 1,000 People	15.7%	16.7
Between 1,000 and 5,000 People	13.7%	15.1
Between 5,000 and 10,000 People	13.0%	12.3
More Than 10,000 People	14.1%	21.4
Total	**13.7%**	**16.6**

Figure 46: Distribution of Pharmacies by Whether the Pharmacist had to Facilitate Special Authorization and Time Involved by Community Size

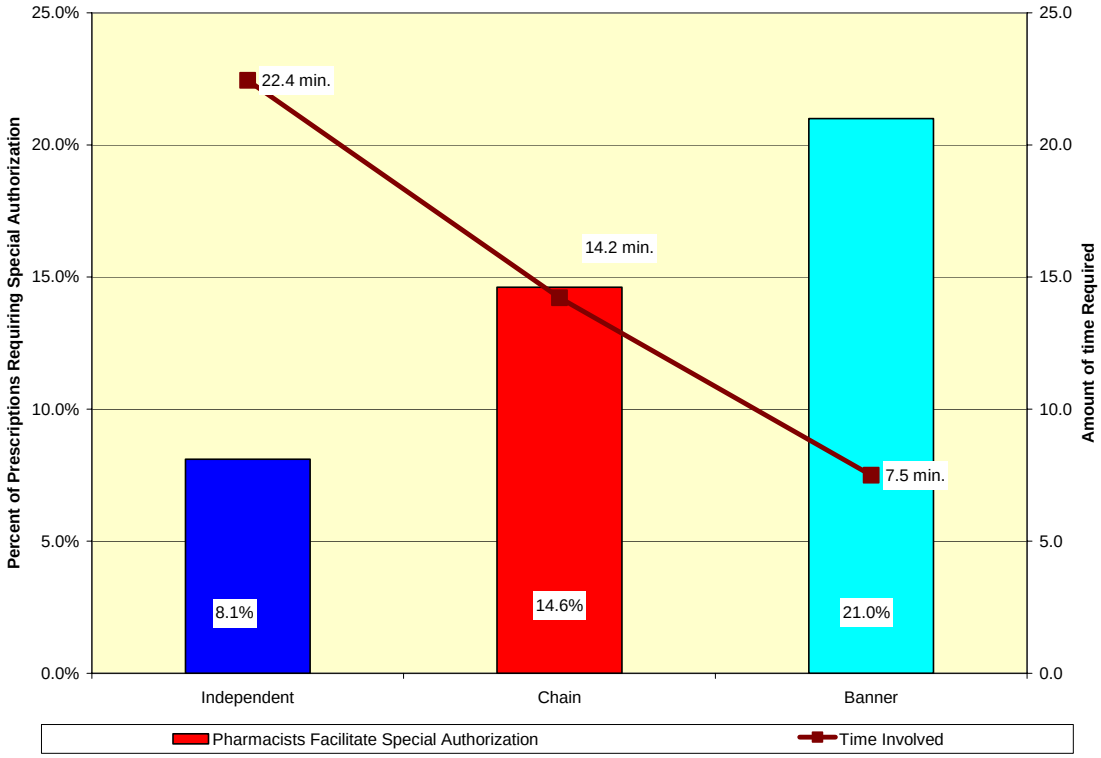


When the survey responses are broken down by type of pharmacy, see Table 47 and Figure 47, one observes a significant amount of variation across the different type of pharmacies that operate in NL. For instance, 8.1% of prescription processed by independent pharmacies requires the pharmacies to facilitate special authorization and take an average of 22.4 minutes, while banner stores report that 21.0% of prescriptions require special authorization and take an average of 7.5 minutes to secure. Chain stores fall in the middle of both of these estimates.

Table 47: Distribution of Pharmacies by Whether the Pharmacist had to Facilitate Special Authorization and Time Involved by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions for Pharmacist had to Facilitate Special Authorization	Amount of Time Involved in Securing Special Authorization (Minutes)
Independent Pharmacy	8.1%	22.4
Chain Store	14.6%	14.2
Banner Store	21.0%	7.5
Sample Total	**13.7%**	**16.6**

Figure 47: Distribution of Pharmacies by Whether the Pharmacist had to Facilitate Special Authorization and Time Involved by Type of Pharmacy



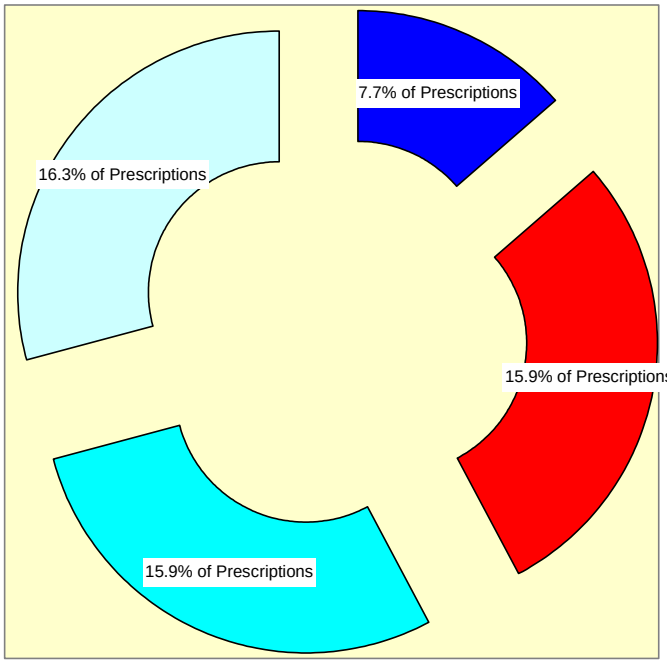
8.2 Extra Time and Effort – Correction of Errors

Table 48 and Figure 48 show that approximately 15% of prescriptions require pharmacist intervention because of errors. This is consistent across all community sizes except small communities, where only 8% of prescriptions require pharmacist intervention because of errors. This is an important and often overlooked service that pharmacist fulfill. If the wrong prescription were taken by a patient, then there could be additional medical complications and additional costs to the patient, in particular and to the health case sector, in general.

Table 48: Percent of Prescriptions which Required Pharmacist Intervention Due to Errors by Community Size

Community Size	Percent of Prescriptions Requiring Intervention Due to Errors
Less Than 1,000 People	7.7%
Between 1,000 and 5,000 People	15.9%
Between 5,000 and 10,000 People	15.9%
More Than 10,000 People	16.3%
Total	**15.0%**

Figure 48: Percent of Prescriptions which Required Pharmacist Intervention Due to Errors by Community Size

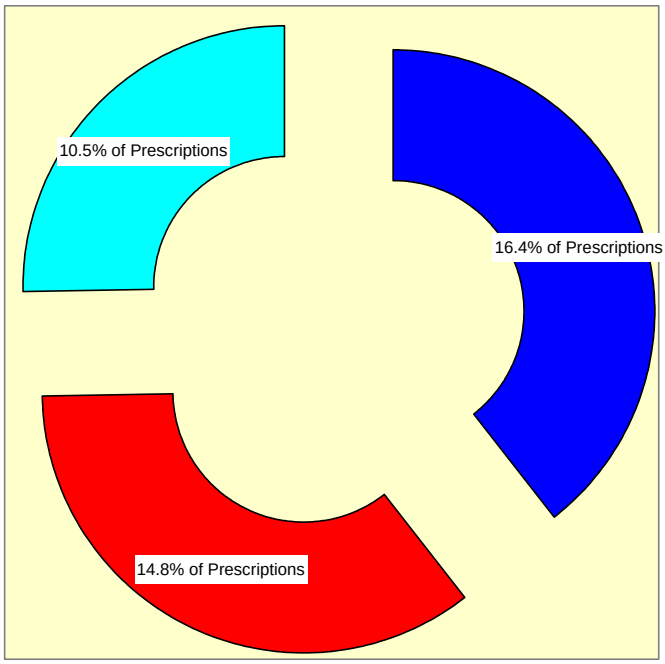


From Table 49 and Figure 49, one observes that a higher proportion of prescriptions (16.4%) in independent pharmacies require pharmacist intervention due to errors. Nearly 15% of prescriptions dispensed by chain stores and 11% of prescriptions in banner stores require pharmacist intervention due to errors.

Table 49: Percent of Prescriptions which Required Pharmacist Intervention Due to Errors by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions Requiring Intervention Due to Errors
Independent Pharmacy	16.4%
Chain Store	14.8%
Banner Store	10.5%
Sample Total	**15.0%**

Figure 49: Percent of Prescriptions which Required Pharmacist Intervention Due to Errors by Type of Pharmacy



8.3 Extra Time and Effort – Prescriptions Reversed

Another factor that adds to the cost of dispensing without any offsetting revenue is the proportion of prescriptions that are reversed for any number of reasons. As shown in Table 50 and Figure 50, between 2 and 3% of prescription are reversed and this could take between 20 and 30 minutes per prescription.

Table 50: Percent of Prescriptions Reversed and Time Required by Community Size

Community Size	Percent of Prescriptions Reversed	Amount of Time Required to Reverse Prescriptions (Minutes)
Less Than 1,000 People	3.0%	23.3
Between 1,000 and 5,000 People	2.5%	19.2
Between 5,000 and 10,000 People	2.8%	25.3
More Than 10,000 People	2.5%	27.3
Total	**2.6%**	**24.3**

The type of store, as presented in Table 51 and Figure 51, does not have a significant difference on the proportion of prescriptions that are reversed. This seems to take less time for banner stores than it does for chain stores or independent pharmacies.

Figure 50: Percent of Prescriptions Reversed and Time Required by Community

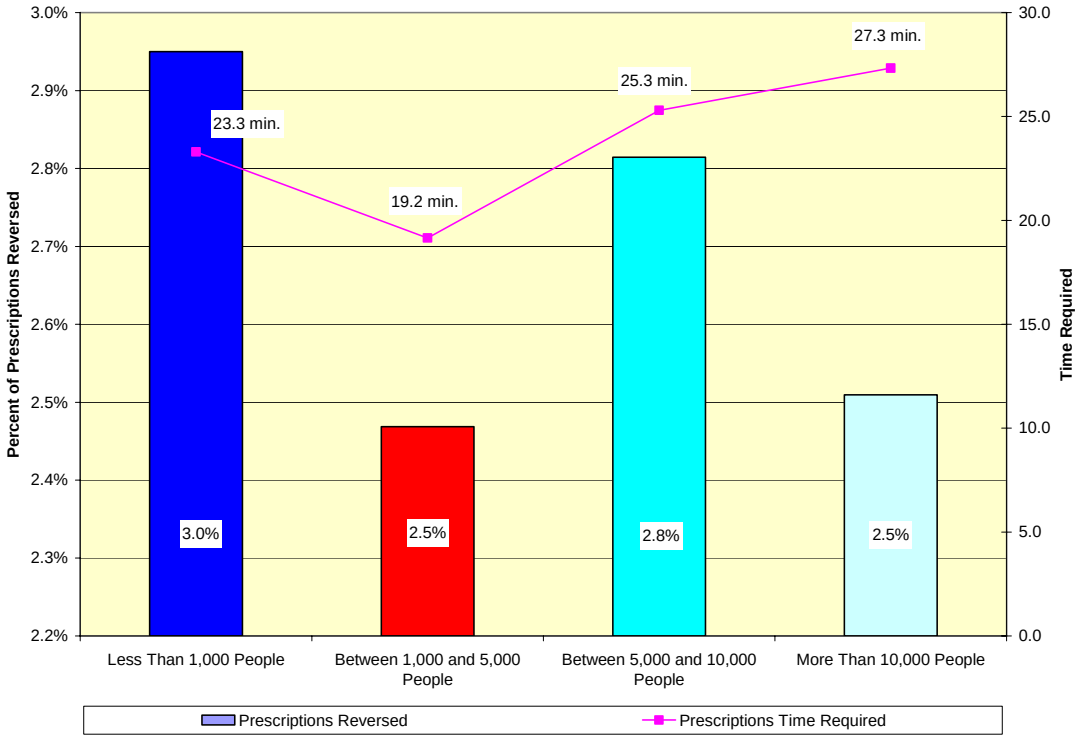


Table 51: Percent of Prescriptions Reversed and Time Required by Type of Pharmacy

Pharmacy Type	Percent of Prescriptions Reversed	Amount of Time Required to Reverse Prescriptions (Minutes)
Independent Pharmacy	2.4%	23.8
Chain Store	2.7%	25.4
Banner Store	2.1%	17.6
Sample Total	**2.6%**	**24.3**

8.4 Extra Time and Effort – Third Party Pick Up

As shown in Table 52 and Figure 52, between 14 and 15% of prescriptions are pick-up by someone other than the patient. This adds between three and five minutes to the time it takes to fill the prescription.

Figure 51: Percent of Prescriptions Reversed and Time Required by Type of Pharmacy

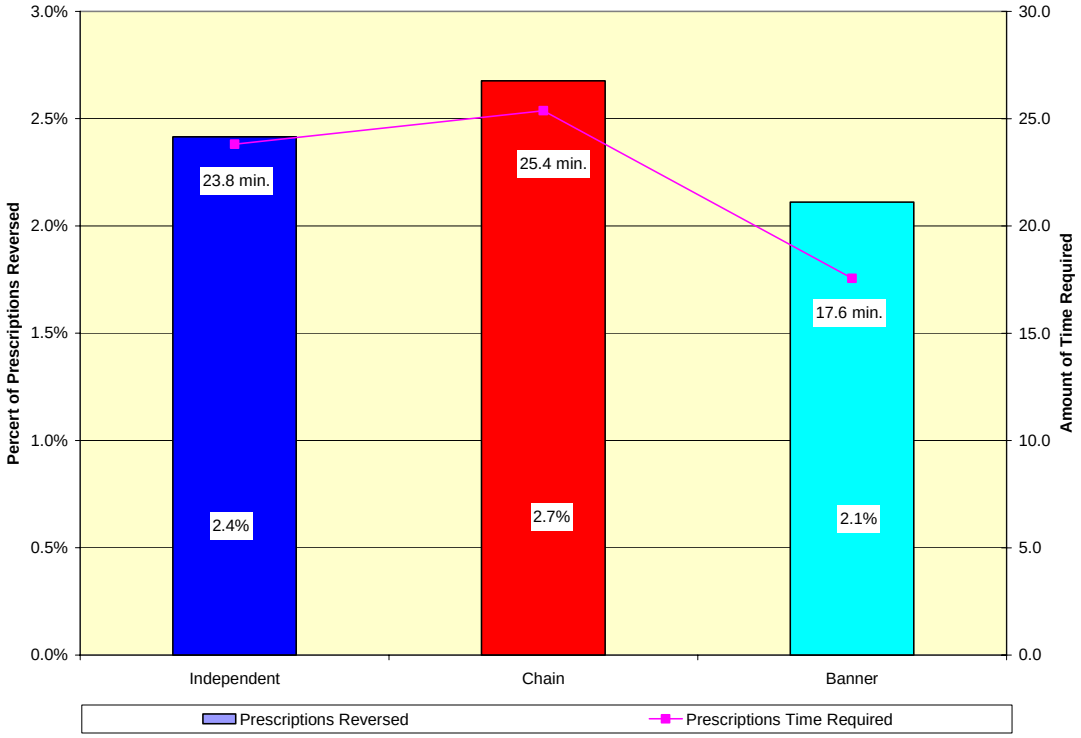


Table 52: Distribution of Pharmacies by Extra Time Required Filling Prescriptions Due to 3rd Party Pick-up and Frequency of Occurrence by Community Size

Community Size	Extra Time to Fill Prescription Due to 3rd Party Pick-up (Minutes)	Percent of Prescriptions that are 3rd party Pick-ups
Less Than 1,000 People	3.1	14.1%
Between 1,000 and 5,000 People	4.8	13.1%
Between 5,000 and 10,000 People	3.7	15.0%
More Than 10,000 People	4.8	14.7%
Total	**4.3**	**14.3%**

Only about 10% of prescriptions at banner stores are picked up by someone other than the patient, see Table 53 and Figure 53. The corresponding percentage for independent pharmacies and chain store are 14% and 15.5%, respectively. As well, it typically takes less extra time for banner stores to fill these prescriptions (4.3 minutes) than it does for chain stores (5.7 minutes) or for independent pharmacies (5 minutes)

Figure 52: Distribution of Pharmacies by Extra Time Required Filling Prescriptions Due to 3rd Party Pick-up and Frequency of Occurrence by Community Size

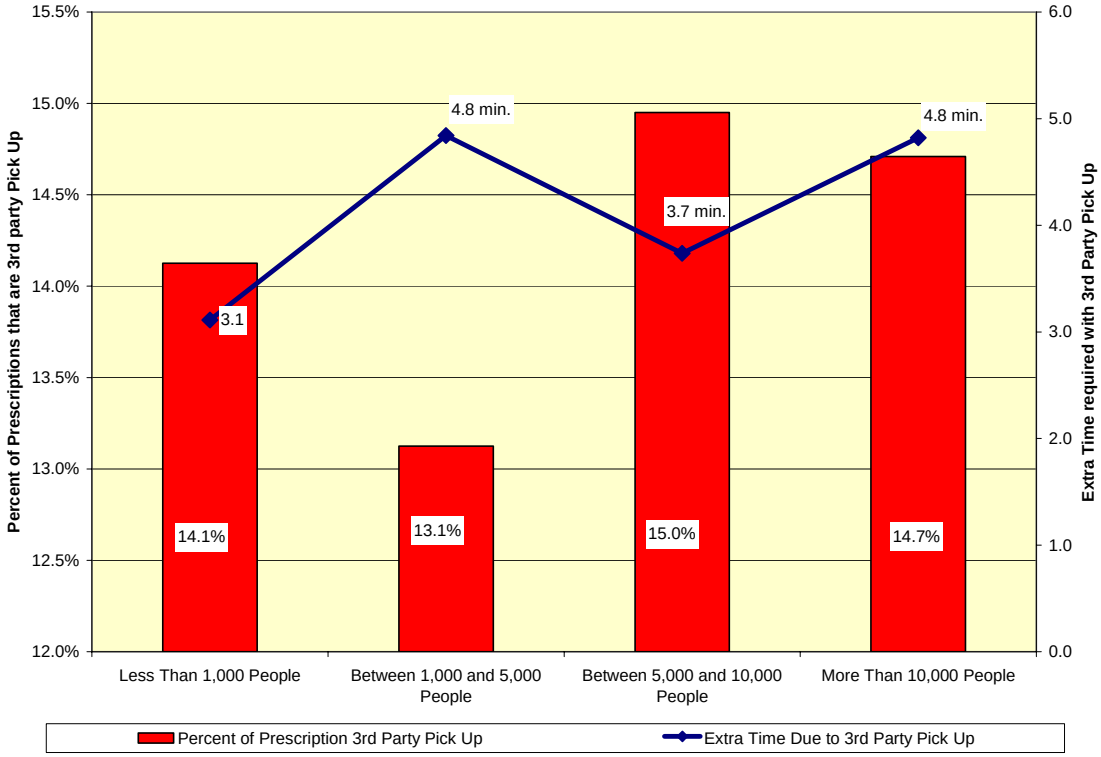
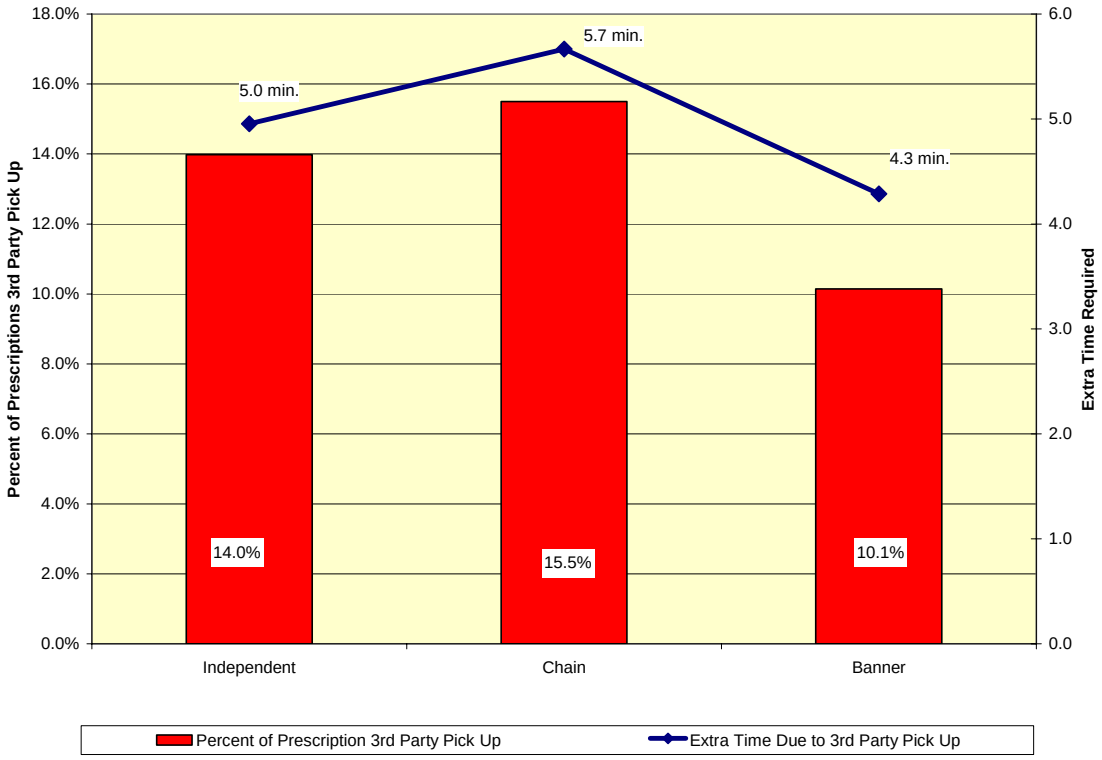


Table 53: Distribution of Pharmacies by Extra Time Required Filling Prescriptions Due to 3rd Party Pick-up and Frequency of Occurrence by Type of Pharmacy

Pharmacy Type	Extra Time to Fill Prescription Due to 3rd Party Pick-up (Minutes)	Percent of Prescriptions that are 3rd party Pick-ups
Independent Pharmacy	5.0	14.0%
Chain Store	5.7	15.5%
Banner Store	4.3	10.1%
Sample Total	**4.3**	**14.3%**

Figure 53: Distribution of Pharmacies by Extra Time Required Filling Prescriptions Due to 3rd Party Pick-up and Frequency of Occurrence by Type of Pharmacy



9.0 Insurance Issues

Table 54 and Figure 54 profile the distribution of new and refill prescription covered by the Newfoundland and Labrador Prescription Drug Plan (NLPDP), versus third party insurance and no insurance. Since the type of insurance affects the amount of time required to process and the amount of revenue received as a dispensing fee, the composition of prescription by type of insurance coverage may help explain part of the cost difference observed across NL pharmacies.

Approximately 36% of prescription filled are covered by the NLPDP —18.4% of these being new prescriptions and 17.6% being refills. Another 38.7% of prescription are covered by third party insurance — 21.8% as new prescriptions and 16.9% are refills. This leaves 25.2% of prescriptions that are not covered by any insurance — 14.0% for new prescriptions and 11.2% for refill prescriptions.[8]

There is not a pronounced difference across communities in the proportion of prescription that are not covered by any insurance option. However, the proportion of third party insurance coverage is more prevalent in large (37.7%) and very large (45.6%) communities than in small (24.3%) and mid-sized communities (30.4%).

[8] The 25% of prescriptions not covered by insurance are actually cash transactions. It is highly likely that some of the receipts issued are eventually submitted as insurance claims. The extent to which this occurs is impossible to determine from the responses received to the survey.

Correspondingly, the proportion of prescription covered by the NLPDP is higher in smaller and mid-sized communities.

Table 54: Distribution of Prescriptions by Type of Insurance Coverage and by New Prescriptions and Refills by Community Size

Community Size	Percent of New Prescriptions Covered by NLPDP	Percent of New Prescriptions Covered by 3rd Party Insurance	Percent of New Prescriptions Not Covered by Any Insurance	Percent of Refills Covered by NLPDP	Percent of Refills Covered by 3rd Party Insurance	Percent of Refills Not Covered by Any Insurance
Less Than 1,000 People	28.8%	15.8%	19.7%	16.0%	8.5%	11.2%
Between 1,000 and 5,000 People	21.3%	18.2%	14.7%	22.1%	12.2%	11.5%
Between 5,000 and 10,000 People	19.7%	20.0%	12.8%	18.7%	17.7%	11.1%
More Than 10,000 People	14.7%	25.5%	13.3%	15.2%	20.1%	11.2%
Total	**18.4%**	**21.8%**	**14.0%**	**17.6%**	**16.9%**	**11.2%**

Figure 54: Distribution of Prescriptions by Type of Insurance Coverage and by New Prescriptions and Refills by Community Size

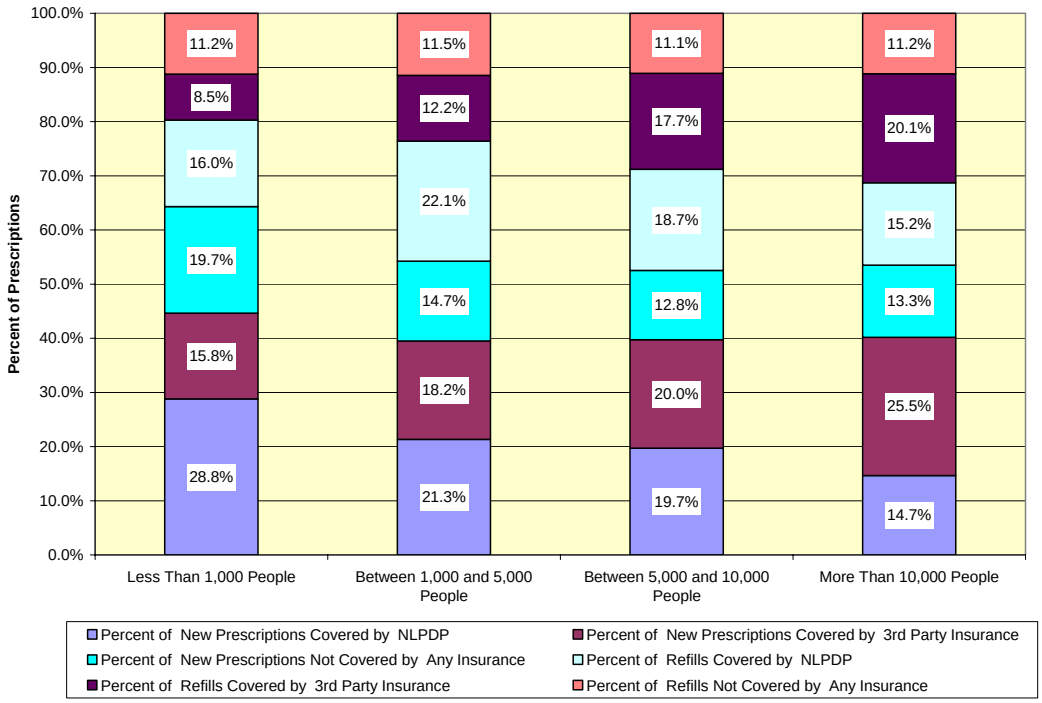


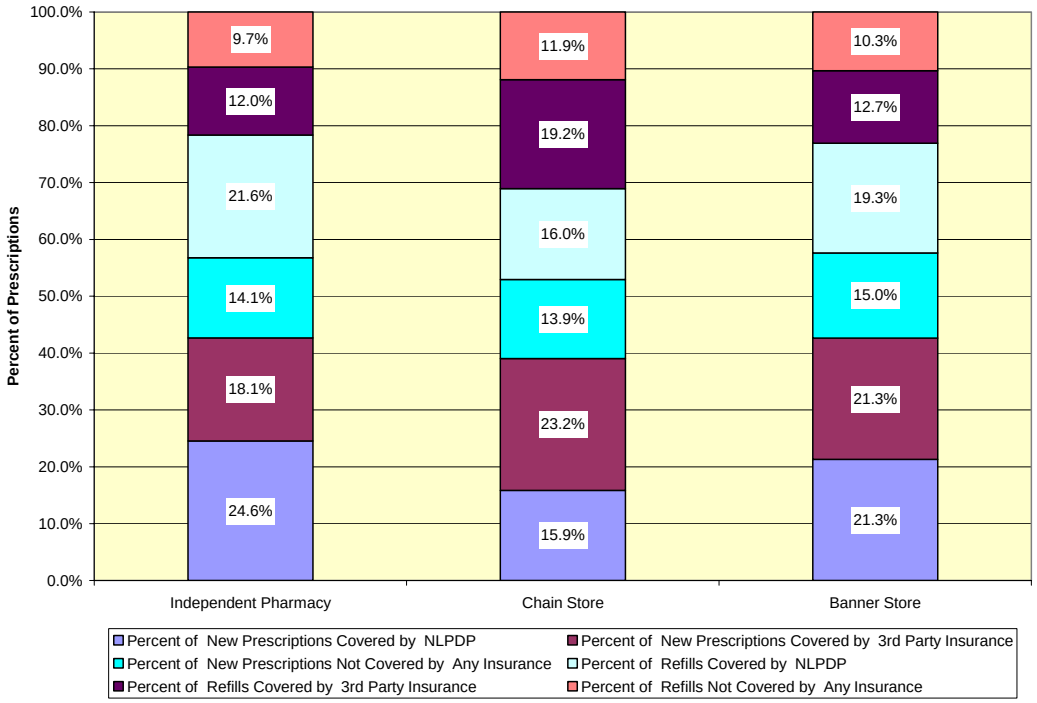
Table 55 and Figure 55 present the same information by type of pharmacy. For independent pharmacies slightly more than 46% of prescription are covered by the NLPDP — 24.6% of new prescriptions and 21.6% of refills; approximately 30% of prescriptions are covered by third party insurance — 18.1% as new prescriptions and 12.0% as refills; and nearly 24% of prescriptions are not covered by any insurance — 14.1% for new prescriptions and 9.7% as refills. The corresponding percentage for chain stores are: 31.9% of prescription covered by the NLPDP — 15.9% as new prescriptions

and 16.0% as refills; 42.4% of prescriptions are covered by third party insurance — 23.2% as new prescriptions and 19.2% as refills; and 25.8% of prescriptions are not covered by insurance — 13.9% are new prescriptions and 11.9% are refills. Finally, the proportions of prescriptions by type of insurance coverage for banner stores are: 40.60% NLPDP — 21.3% as new prescriptions and 19.3% as refills, 34.0% for third party insurance — 21.3% as new prescriptions and 12.7% as refills and 25.3% without any insurance — 15.0% as new prescriptions and 10.3% as refills.

Table 55: Distribution of Prescriptions by Type of Insurance Coverage and by New Prescriptions and Refills by Type of Pharmacy

Pharmacy Type	Percent of New Prescriptions Covered by NLPDP	Percent of New Prescriptions Covered by 3rd Party Insurance	Percent of New Prescriptions Not Covered by Any Insurance	Percent of Refills Covered by NLPDP	Percent of Refills Covered by 3rd Party Insurance	Percent of Refills Not Covered by Any Insurance
Independent Pharmacy	24.6%	18.1%	14.1%	21.6%	12.0%	9.7%
Chain Store	15.9%	23.2%	13.9%	16.0%	19.2%	11.9%
Banner Store	21.3%	21.3%	15.0%	19.3%	12.7%	10.3%
Sample Total	**18.4%**	**21.8%**	**14.0%**	**17.6%**	**16.9%**	**11.2%**

Figure 55: Distribution of Prescriptions by Type of Insurance Coverage and by New Prescriptions and Refills by Type of Pharmacy



10. Financial Characteristics

Table 56 and Figure 56 describe the financial situation faced by NL pharmacies by size of community. Also profiled are the factors that contribute the pharmacy profitability

within NL. On average, NL pharmacies earn a gross profit that corresponds to nearly 27% of their sales revenue. Wages and salaries account for nearly 15% of the revenue earned from sales and when occupancy costs and various overhead costs are included, the net expenses incurred by NL pharmacies amount to 23.1% of their sales revenue. This leaves a net profit before allowances of 3.8% of sales and 3.5% after allowances are considered. With net profits in the range of 3 to 4%, it is clear that under the current situation NL pharmacies are not earning excess profits. Moreover, it would be difficult for them to absorb the significant reduction in revenue expected to transpire as a result of NL's proposed legislative changes.

At this point, it is important to acknowledge that included in this profitability estimate is the professional allowances associated with generic drug rebates or professional allowances. The contribution to revenue from the professional allowance amounts to 9.4% of sales revenue on average. Should professional allowances be eliminated or substantially reduced as a result of the proposed legislative change being contemplated by the GNL, then many of the NL pharmacies will need to find alternate revenue sources, somehow economize on other costs or otherwise curtail operations.

Even though all pharmacies with NL will be adversely affected by the removal or reduction of revenues from the professional allowance, pharmacies in small and mid-sized communities will be most negatively affected. This is particular disconcerting since there is very little redundancy of these professional pharmacy services in these areas of the province.

As Figure 57 shows, professional allowances constitute 9.4% of sales revenue on average and 11.4% in large communities. Although small communities have the lowest contribution of professional allowances (7.3%), they are also the ones that are most likely to be disadvantaged by the proposed legislative change because they already have relatively low levels of profitability.

Table 56: Distribution of Financial Characteristics of Pharmacies by Community Size

Community Size	Gross Profits as a Percent of Sales	Wages & Benefits as a Percent of Sales	Occupancy Cost as a Percent of Sales	Selling Expense as a Percent of Sales	Prompt Payment Discounts as a Percent of Sales	Store Operations Overhead as a Percent of Sales
Less Than 1,000 People	28.1%	15.2%	3.3%	1.7%	0.4%	3.9%
Between 1,000 and 5,000 People	27.8%	16.3%	2.1%	1.8%	0.4%	2.9%
Between 5,000 and 10,000 People	24.0%	14.8%	3.1%	2.4%	0.1%	2.9%
More Than 10,000 People	27.4%	13.6%	2.8%	1.8%	0.4%	2.1%
Total	**26.9%**	**14.9%**	**2.7%**	**1.9%**	**0.4%**	**2.4%**
Community Size	**Corporate Overhead as a Percent of Sales**	**Net Expenses as a Percent of Sales**	**Profit/Loss (before Allowances) as a Percent of Sales**	**Depreciation as a Percent of Sales**	**Net Profit/Loss as a Percent of Sales**	**Professional Allowance for Generic Drugs as a Percent of Sales**
Less Than 1,000 People	4.1%	27.7%	0.4%	0.3%	0.1%	7.3%
Between 1,000 and 5,000 People	1.8%	24.5%	3.3%	0.2%	3.1%	11.4%
Between 5,000 and 10,000 People	0.5%	23.5%	0.5%	0.2%	0.4%	7.5%
More Than 10,000 People	1.2%	21.0%	6.4%	0.2%	6.1%	8.7%
Total	**1.6%**	**23.1%**	**3.8%**	**0.3%**	**3.5%**	**9.4%**

Figure 56: Distribution of Financial Characteristics of Pharmacies by Community

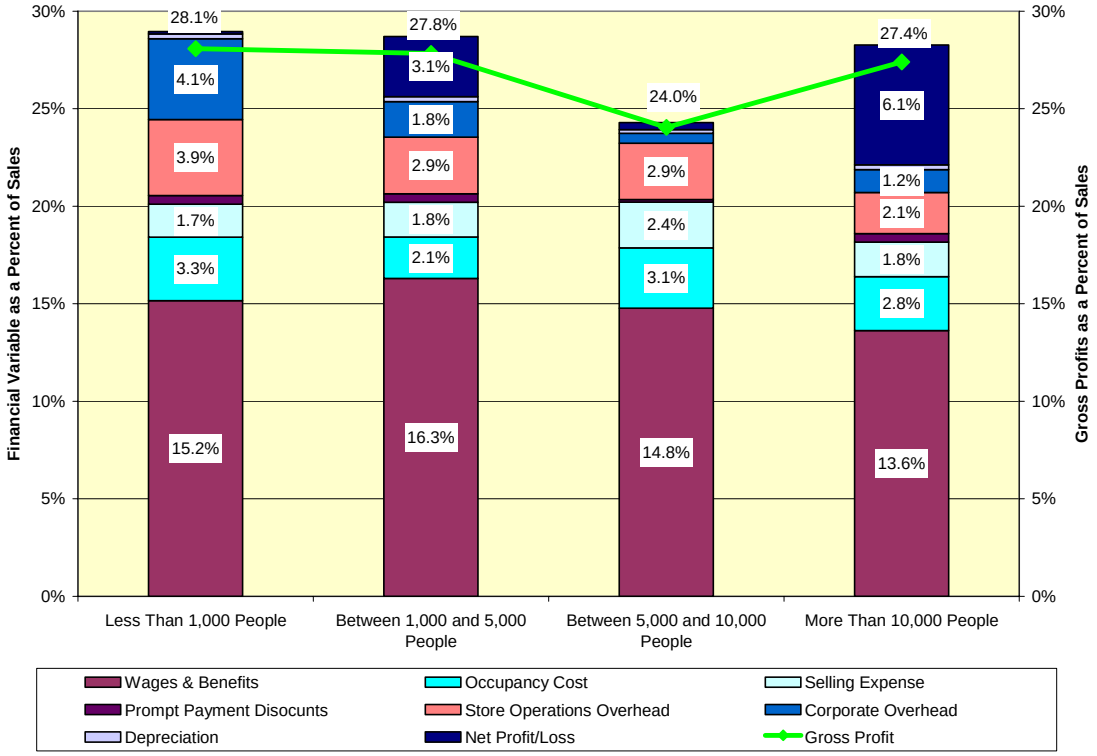
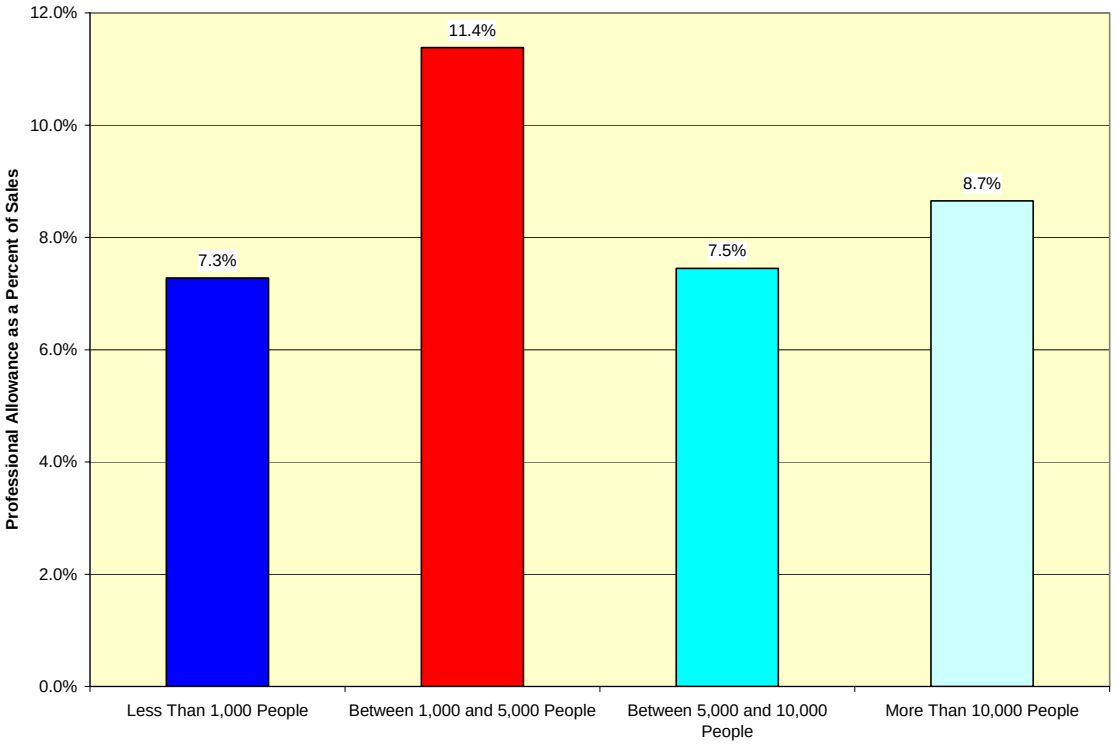


Figure 57: Professional Allowance as a Percent of Sales by Community Size



The financial situation by type of NL pharmacy is presented in Table 57 and Figure 58. Banner stores have the highest net profits after allowances, with profits at 8.4% of sales revenue. Independent pharmacies have a 5.4% net profit and chain stores have a 2.4% net profit. In all cases, a removal or reduction of the professional allowance will significantly compromise the viability of NL pharmacies. Professional allowances, as a percent of sales revenue, are most important to the independent stores (10.3%), followed by chain store (8.4%) and banner stores (4.9%).

Table 57: Distribution of Financial Characteristics of Pharmacies by Type of Pharmacy

Pharmacy Type	Gross Profits as a Percent of Sales	Wages & Benefits as a Percent of Sales	Occupancy Cost as a Percent of Sales	Selling Expense as a Percent of Sales	Prompt Payment Discounts as a Percent of Sales	Store Operations Overhead as a Percent of Sales
Independent Pharmacy	31.8%	16.3%	3.0%	2.1%	0.5%	2.9%
Chain Store	24.2%	14.5%	2.6%	1.8%	0.2%	1.9%
Banner Store	28.7%	12.2%	2.6%	1.3%	1.2%	2.2%
Sample Total	**26.9%**	**14.9%**	**2.7%**	**1.9%**	**0.4%**	**2.4%**
Pharmacy Type	**Corporate Overhead as a Percent of Sales**	**Net Expenses as a Percent of Sales**	**Profit/Loss (before Allowances) as a Percent of Sales**	**Depreciation as a Percent of Sales**	**Net Profit/Loss as a Percent of Sales**	**Professional Allowance for Generic Drugs as a Percent of Sales**
Independent Pharmacy	2.2%	26.1%	5.7%	0.4%	5.4%	10.3%
Chain Store	1.0%	21.6%	2.6%	0.2%	2.4%	8.4%
Banner Store	3.1%	20.2%	8.5%	0.1%	8.4%	4.9%
Sample Total	**1.6%**	**23.1%**	**3.8%**	**0.3%**	**3.5%**	**9.4%**

Figure 58: Distribution of Financial Characteristics of Pharmacies by Type of Pharmacy

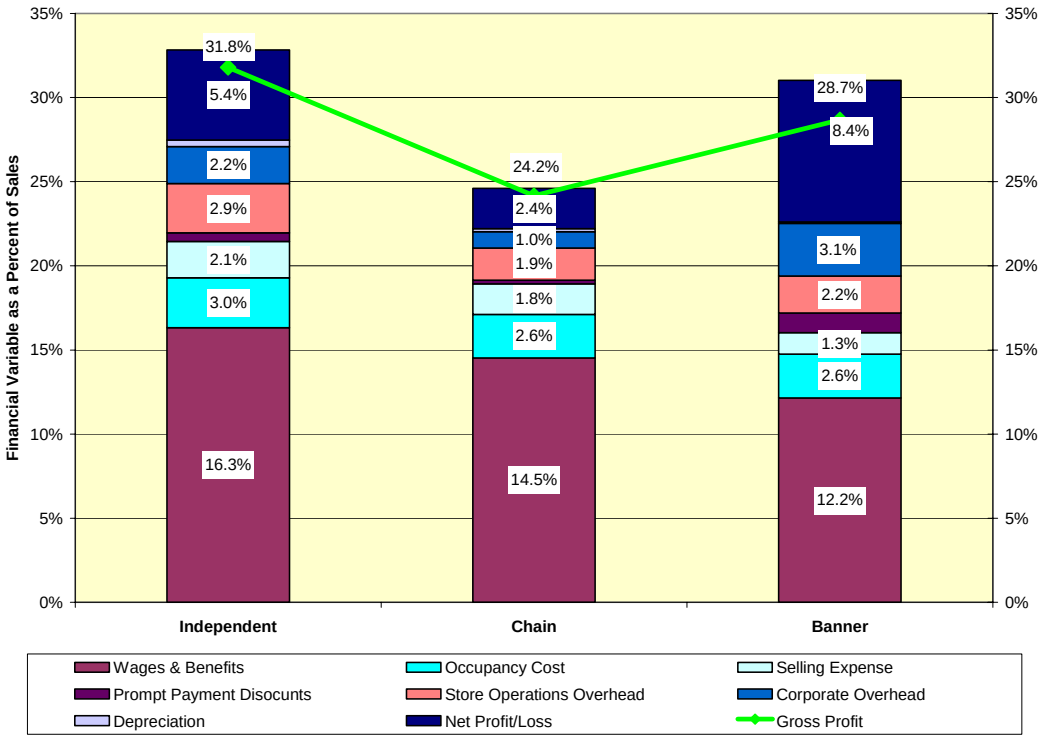
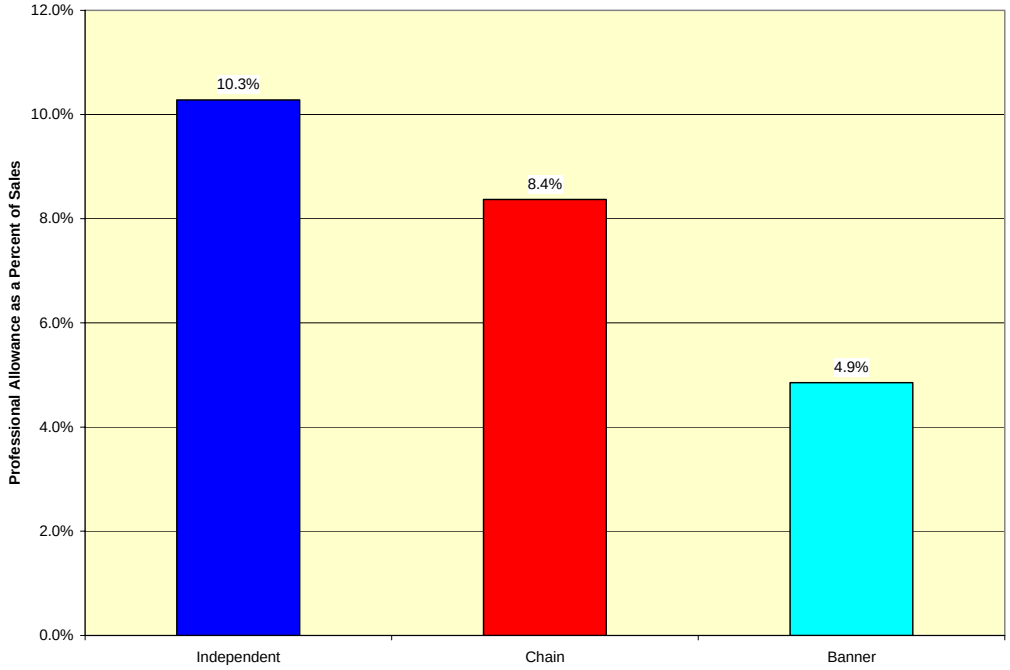


Figure 59: Professional Allowance as a Percent of Sales by Type of Pharmacy



11.0 Average Cost of Prescriptions

As illustrated in Table 58 and Figure 60, it costs NL pharmacies approximately $12 per prescription dispensed. While the cost varies by size of community, the range is within $1.50 per prescription — ranging from $11.11 per prescription for larger communities to $12.65 per prescription for mid-sized communities.

Part of the per prescription cost difference is accounted for by the difference in the volume of prescriptions dispensed across communities.[9] When the volume of prescriptions is controlled for, the weighted-average cost per prescription is $11.26. Whichever cost per prescription one wishes to use for the purpose of characterizing costs in NL pharmacies, it is clear that it is costing NL pharmacies more to dispense prescriptions than they are currently receiving as a dispensing fee.

At this point, it is important to recognize that the difference in dispensing costs and dispensing fees has been made up by the cross-subsidization of other professional services afforded by the availability of professional allowances from generic drugs. If the professional allowance is removed or substantially reduced without a compensatory replacement, NL pharmacies will be placed in the difficult situation of have to dispense prescriptions at a cost that exceeds the dispensing fee they receive. This is not tenable in the long run. The only way NL pharmacies can survive in the medium and longer term is to somehow lower costs; find additional revenue sources; or some combination of both.

[9] Because of economies of scale which exist in the pharmacy industry, those pharmacies with a higher volume of prescriptions will typically have a lower cost per prescription. A straight arithmetic average will not incorporate the significance of this effect, but a weighted average that uses the proportion of prescriptions as a weighting factor will this reality.

Table 58: Cost of Dispensing a Prescription by Community Size

Community Size	Cost per Prescription	Cost per Prescription Weighted by Share of Prescriptions
Less Than 1,000 People	$11.37	$10.92
Between 1,000 and 5,000 People	$12.65	$12.24
Between 5,000 and 10,000 People	$11.11	$10.15
More Than 10,000 People	$12.27	$11.42
Total	**$12.01**	**$11.26**

Figure 60: Cost of Dispensing a Prescription by Community Size

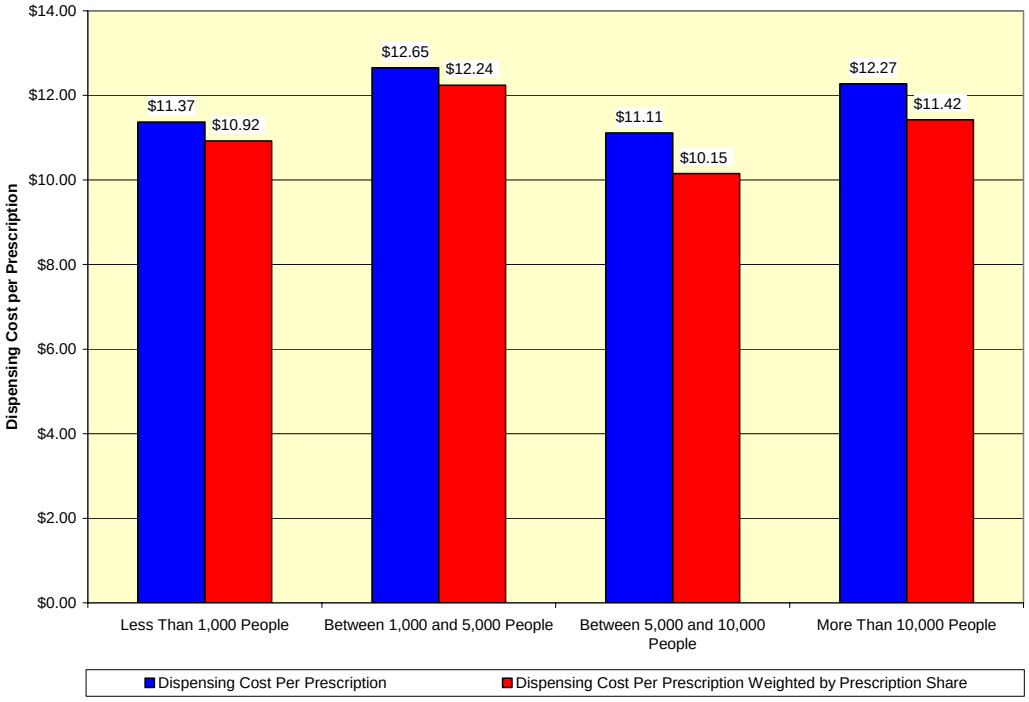
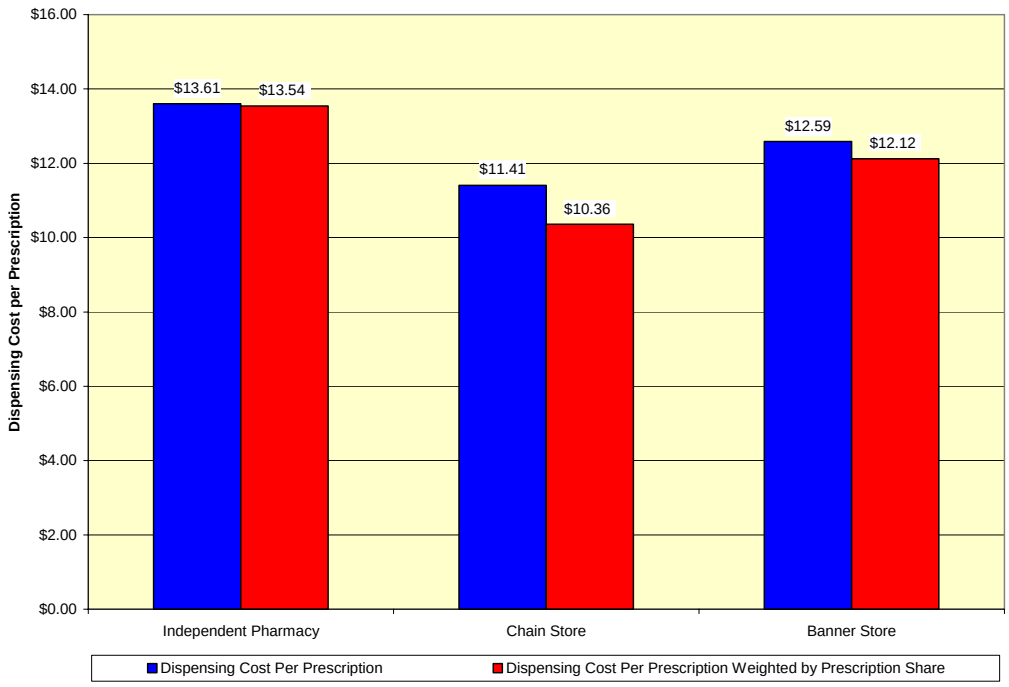


Table 59 and Figure 61 show that the cost of dispensing prescriptions in NL does not vary much by the type of pharmacy. Specifically chain stores have a cost of $11.41, while banner stores incur a cost of $12.59 per prescription dispensed. The corresponding estimate for independent pharmacies is $13.61 per prescription. Controlling for the volume of prescription does not change this pattern, but does lower slightly the cost per prescription for each type of store.

Table 59: Cost of Dispensing a Prescription by Type of Pharmacy

Pharmacy Type	Cost per Prescription	Cost per Prescription Weighted by Share of Prescriptions
Independent Pharmacy	$13.61	$13.54
Chain Store	$11.41	$10.36
Banner Store	$12.59	$12.12
Sample Total	**$12.01**	**$11.26**

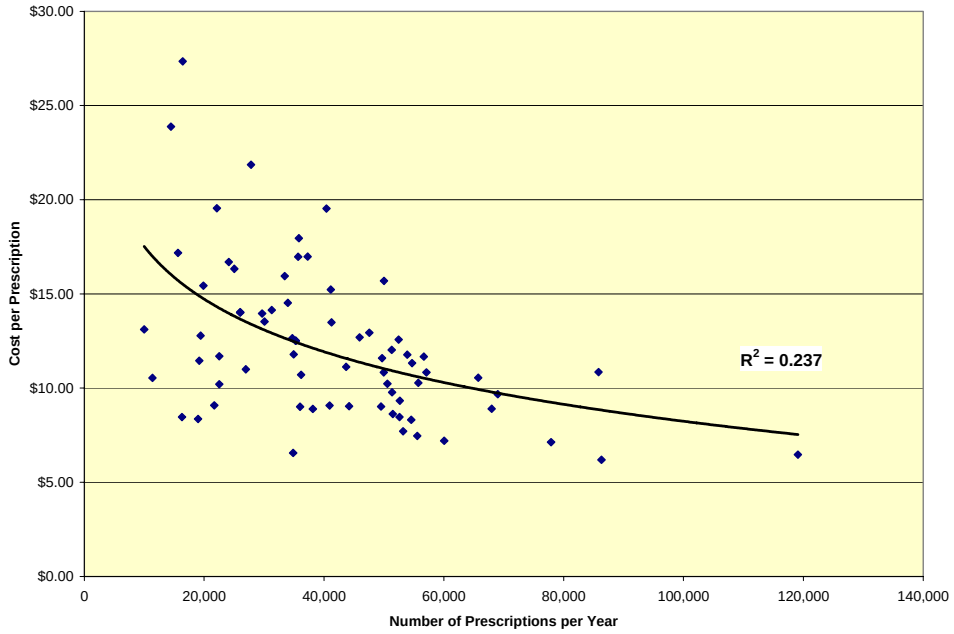
Figure 61: Cost of Dispensing a Prescription by Type of Pharmacy



11.1 Average Cost per Prescription and Volume of Prescriptions

Figure 62 provides a graphical analysis of the relationship between the annual volume of prescriptions dispensed and the cost per prescription. There is an obvious negative relation between the average cost to dispense a prescription and the volume of prescriptions annually. In fact, with out controlling for any other relevant factor such as rates of remuneration for pharamcists, nearly 25% of the variation in cost per prescription can be explained by the volume of prescriptions administered. In other words, there are significant economies of scale to be had by NL pharmacies. Of course, this works to the detriment of smaller pharmacies located in rural part of the province because the volume of business is not there to allow them to capture theses scale economies. Furthermore, with the removal or the substantial reduction in the revenues received through professional allowances, this competitive disadvantage for rural pharmacies will be compounded.

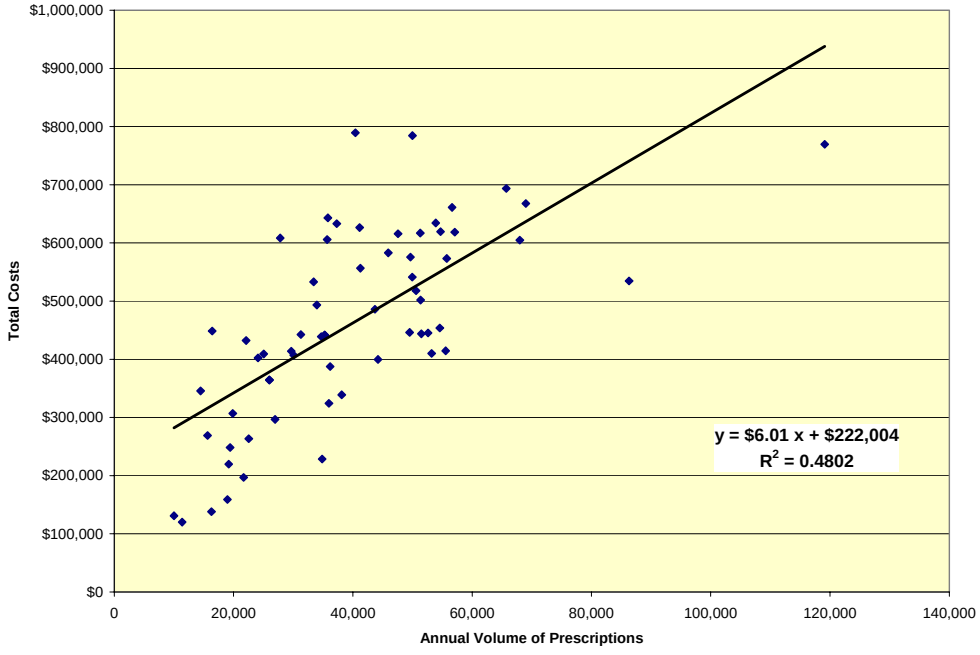
Figure 62: Relationship between Cost per Prescription and Volume of Prescriptions Dispensed per Year



11.2 Total Cost and Volume of Prescriptions

Figure 63 demonstrates that, not surprisingly, the total cost faced by NL pharmacies is in direct proportion to the volume of prescriptions dispensed. In fact, there is a strong linear relationship between the two parameters as indicated by the fact that more than 48% of the variation in costs can be explained through the volume of prescriptions.

Figure 63: Total Costs versus Annual Volume of Prescriptions



12.0 Consequence of Change in Legislation

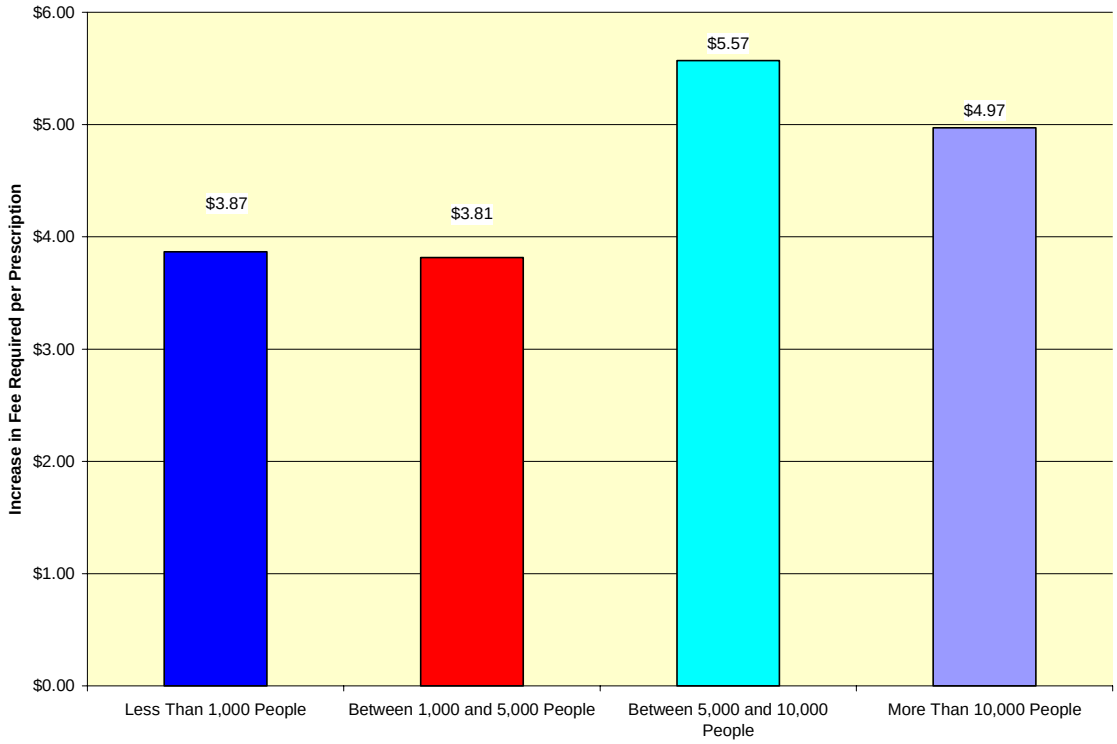
12.1 Consequence of Change in Legislation – Required Increase in Fees

To compensate for the removal or the reduction in professional allowances without compromising the viability of NL pharmacies, the dispensing fee paid in NL would have to increase by nearly $4 per prescription on average, see Table 60 and Figure 64. This required increase in dispensing fee is fairly robust across the spectrum of communities considered in this study. Specifically all the estimates are with a $1.76 range. For example, the lowest estimate is approximately $3.80 for pharmacies located in mid-sized communities. At the other extreme is an increase of nearly $5.60 in the dispensing fee that would be required on average in large communities.

Table 60: Increase in Dispensing Fee Required per Prescription to Compensate for the Change in Provincial Legislation by Community Size

Community Size	Increase in Dispensing Fee Required
Less Than 1,000 People	$3.87
Between 1,000 and 5,000 People	$3.81
Between 5,000 and 10,000 People	$5.57
More Than 10,000 People	$4.97
Total	**$3.94**

Figure 64: Increase in Dispensing Fee Required per Prescription to Compensate for the Change in Provincial Legislation by Community Size

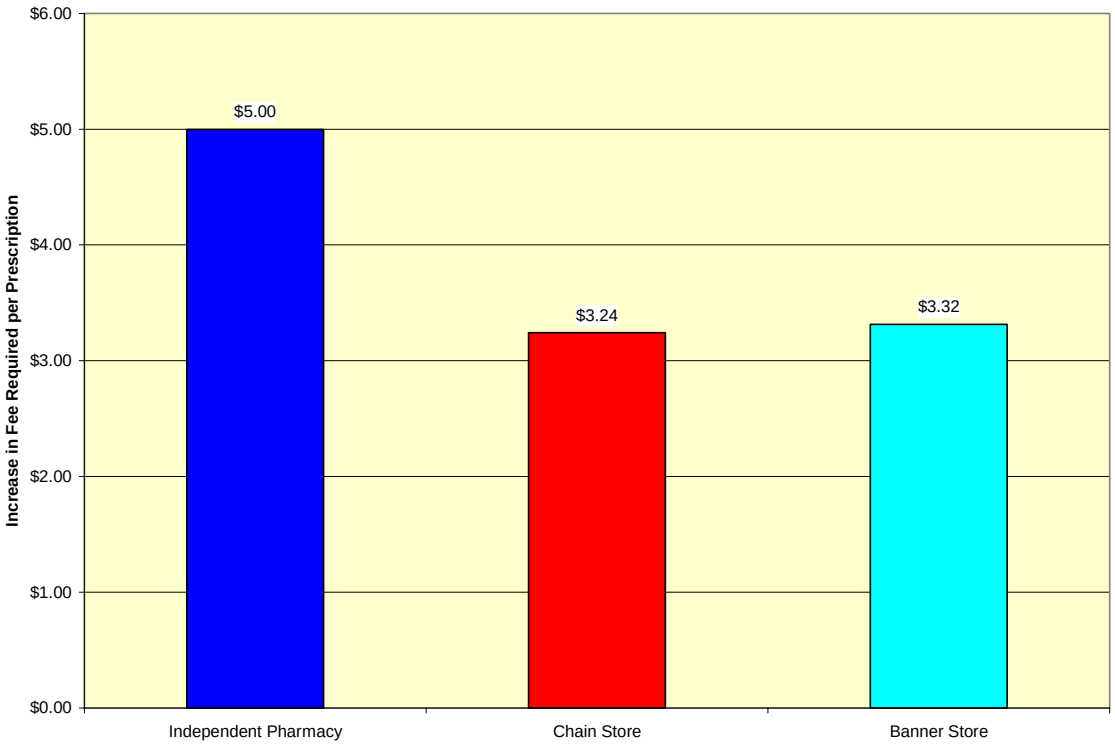


How the increase in dispensing fee needed to compensate for the loss of the professional allowance by type of pharmacy is considered in Table 61 and Figure 65. The largest increase in dispense fee, $5.00, would be needed by independent pharmacies to compensate for the loss of the professional allowance associated with generic drugs. This should not be terribly surprising given that independent pharmacies had the highest cost per prescription and represented the group for which professional allowances constituted the largest revenue source relative to sales. Chain and banner stores as a group would need an increase in dispensing fee between $3.25 and $3.30 to compensate for the loss of professional allowances.

Table 61: Increase in Dispensing Fee Required per Prescription to Compensate for the Change in Provincial Legislation by Type of Pharmacy

Pharmacy Type	Increase in Dispensing Fee Required
Independent Pharmacy	$5.00
Chain Store	$3.24
Banner Store	$3.32
Sample Total	**$3.94**

Figure 65: Increase in Dispensing Fee Required per Prescription to Compensate for the Change in Provincial Legislation by Type of Pharmacy



12.2 Consequence of Change in Legislation – Lost Revenue

Not only is the professional allowance important relative to the dispensing fee, but it will also have significant revenue implications for NL pharmacies as shown in Table 62 and Figure 66. Specifically, 85% percent of all NL pharmacies will lose more than $40,000 in revenue if the profession allowance is eliminated and almost 20% of NL pharmacies will lose more than $150,000 from their bottom line. That is, this will be a reduction in revenue with no offsetting revenue source so it has a direct and substantial impact on industry which is already experiencing low profitability. In other words, the proposed legislation will adversely impact the viability and sustainability of NL pharmacies. Moreover, this kind of impact will be felt throughout all communities in NL.

Table 62: Annual Revenue Loss Expected from the Proposed Change in the Pricing Formulary for Generic Drugs in NL by Community Size

Community Size	No Effect	Under $20,000	$20,000 to $39,999	$40,000-$59,999	$60,000-79,999	$80,000 to $99,999	$100,000 to $149,999	More than $150,000
Less Than 1,000 People	0.0%	1.5%	4.5%	0.0%	4.5%	3.0%	1.5%	0.0%
Between 1,000 and 5,000 People	0.0%	0.0%	3.0%	3.0%	3.0%	6.1%	6.1%	4.5%
Between 5,000 and 10,000 People	0.0%	0.0%	1.5%	3.0%	4.5%	3.0%	6.1%	1.5%
More Than 10,000 People	0.0%	1.5%	3.0%	9.1%	6.1%	3.0%	4.5%	12.1%
Sample Total	**0.0%**	**3.0%**	**12.1%**	**15.2%**	**18.2%**	**15.2%**	**18.2%**	**18.2%**

Figure 66: Annual Revenue Loss Expected from the Proposed Change in the Pricing Formulary for Generic Drugs in NL by Community Size

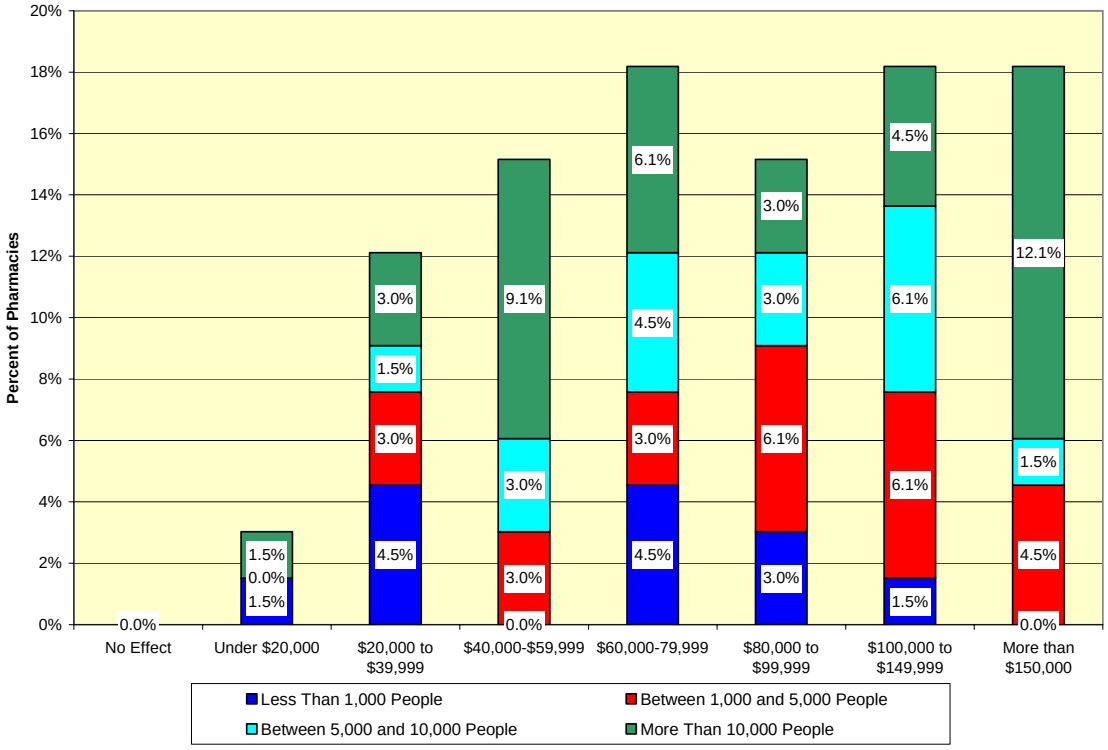
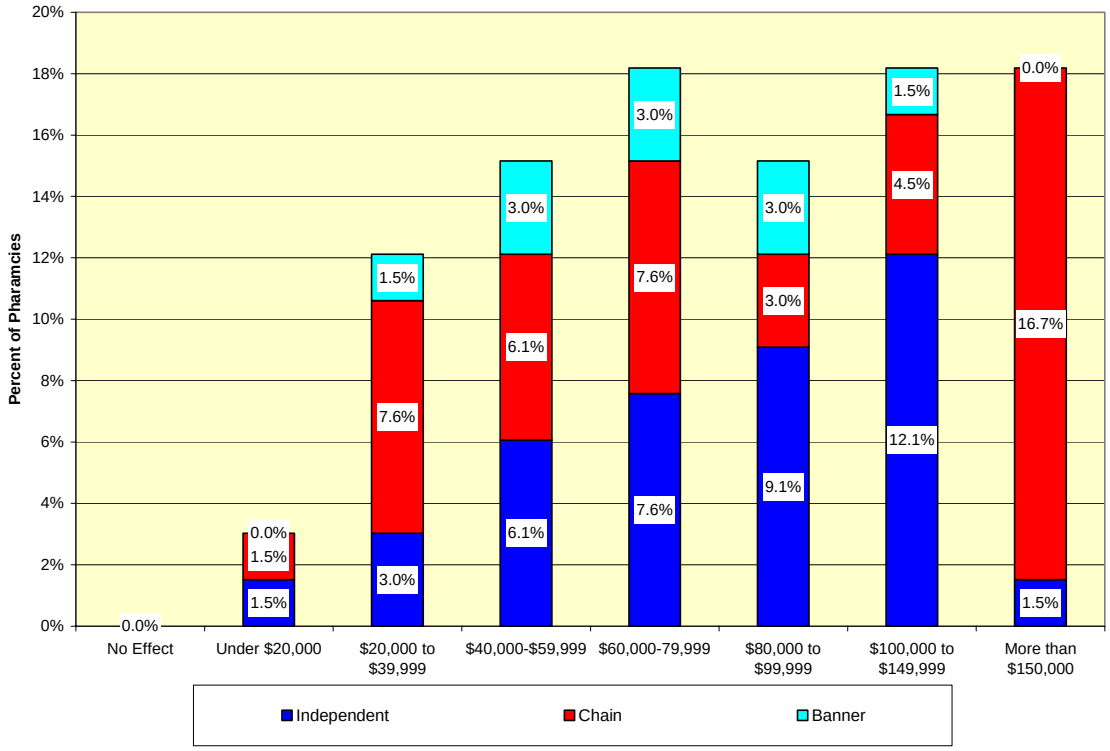


Table 63 and Figure 67 illustrate that all types of pharmacies in NL stand to take a big drop in revenues and profits should the proposed legislation in NL continue unaltered. Without knowing the detailed financial situation of each store, it is not possible to predict with accuracy how many stores may have to cease operations as a result of this situation. However, it is clear that this will reduce the viability of marginal stores and one might expect to see pharmacy closings throughout the province.

Table 63: Annual Revenue Loss Expected from the Proposed Change in the Pricing Formulary for Generic Drugs in NL by Type of Pharmacy

Community Size	No Effect	Under $20,000	$20,000 to $39,999	$40,000-$59,999	$60,000-79,999	$80,000 to $99,999	$100,000 to $149,999	More than $150,000
Independent	0.0%	1.5%	3.0%	6.1%	7.6%	9.1%	12.1%	1.5%
Chain	0.0%	1.5%	7.6%	6.1%	7.6%	3.0%	4.5%	16.7%
Banner	0.0%	0.0%	1.5%	3.0%	3.0%	3.0%	1.5%	0.0%
Sample Total	**0.0%**	**3.0%**	**12.1%**	**15.2%**	**18.2%**	**15.2%**	**18.2%**	**18.2%**

Figure 67: Annual Revenue Loss Expected from the Proposed Change in the Pricing Formulary for Generic Drugs in NL by Type of Pharmacy



13.0 Changes in Legislation – Implication for the Long-term Viability and Sustainability of the Industry

As a part of the survey questions sent to pharmacies, the owners, managers or designates were asked to rank from 1 to 10, with 10 being the most intense reaction, their likely response to the legislative change, where the range of options included do nothing to the

complete cessation of businesses. Table 64 and Figure 68 record the responses concerning the reaction of their pharmacy to the proposed legislative change.

Almost none of the pharmacies (an average response of 0.8 out of 10) indicated that they would absorb the loss and not react. If one were to interpret the intensity of response as a probability statement,[10] then approximately 8% (0.8/10) of the pharmacies are not likely to react and simply absorb the impact of the changes. On the other hand, most pharmacies did indicate that they would continue to operate, but 26% of pharmacies (an average response of 2.6 out of 10) are at least contemplating ceasing operations as the only viable reaction to the proposed legislation. Even though the number is small, it is still disconcerting in that it represents a significant number of pharmacies spread throughout NL.

The overwhelming majority of pharmacies (with an average response of 8.5 out of 10) would in all probability increase fees charged to patients. This is certainly credible given the importance of professional fees and the relatively low levels of profitability already experienced by NL pharmacies. Similarly, a large proportion of pharmacies (an average response of 8.1 out of 10) would increase their mark-ups. These two reactions indicate that more than 80% of NL pharmacies would increase fees and mark-ups to counteract the loss of professional allowances. Of course, this would tend to mitigate the intent of the proposed legislation, which is to reduce the cost of prescriptions to residents of the province.

With an average response in the range of 5 out of 10, some pharmacies will likely reduce hours and staff to reduce costs and counterbalance the revenues losses associated with the change in the legislation. It is equally likely that these pharmacies will start to offer other services for which a fee can be administered. Additionally, most pharmacies will look for operational efficiencies, but given the financial situation faced currently by NL pharmacies, it is not clear where operational excesses can be found in sufficient magnitude to overcome the revenue hit associated with the removal or reduction of professional allowances. On the other hand, NL pharmacies suggest that they are not likely to reduce discretionary advice (an average response of 3.3 out of 10) nor is it probably that they will diversify into non-pharmacy goods and services that are not already being provided (2.1 out of 10 for an average response).

The suggested pattern of responses is consistent across the range of communities considered in this study. There is no obvious difference in the intensity of response that stands out for one sized community over the others.

[10] While an individual response of to a particular question is an indication of their likelihood of reaction, it is not clear that the average of all the responses for a given question has the same precise probability interpretations. In other words, suppose we have two individuals, one of who indicates that he/she will not cease operations (i.e., responds with a zero for that question) and the other responds that he/she will definitely cease operations (i.e., responds with a 10 for that question). Does that then implies that there is a 50% probability of stores closing because the average response is 5 out of 10?

Table 64: Expected Reaction from 0 to 10 (with 10 being the strongest reaction and 0 being no reaction) of Pharmacies to Change in Legislation by Community Size

Community Size	Cease Operations	Increase Fees	Increase Mark-up	Reduce Hours	Reduce Pharmacy Employees
Less Than 1,000 People	2.2	9.2	8.9	5.7	5.5
Between 1,000 and 5,000 People	3.7	8.3	7.9	3.6	3.8
Between 5,000 and 10,000 People	2.4	7.8	6.9	4.8	4.7
More Than 10,000 People	2.0	8.7	8.5	4.5	5.7
Total	**2.6**	**8.5**	**8.1**	**4.5**	**5.0**

Community Size	Reduce Discretionary Advice	Offer Other Medical Services for which a Charge can be Administered	Look for Operational Efficiency	Diversify into Non-pharmacy Goods and Services	Absorb the Loss
Less Than 1,000 People	4.4	5.1	6.2	1.6	0.4
Between 1,000 and 5,000 People	3.4	3.9	6.3	1.7	0.1
Between 5,000 and 10,000 People	3.4	5.4	8.1	2.3	0.4
More Than 10,000 People	2.8	5.0	8.1	2.4	1.2
Total	**3.3**	**4.8**	**7.3**	**2.1**	**0.8**

Figure 68: Expected Reaction from 0 to 10 (with 10 being the strongest reaction and 0 being no reaction) of Pharmacies to Change in Legislation by Community Size

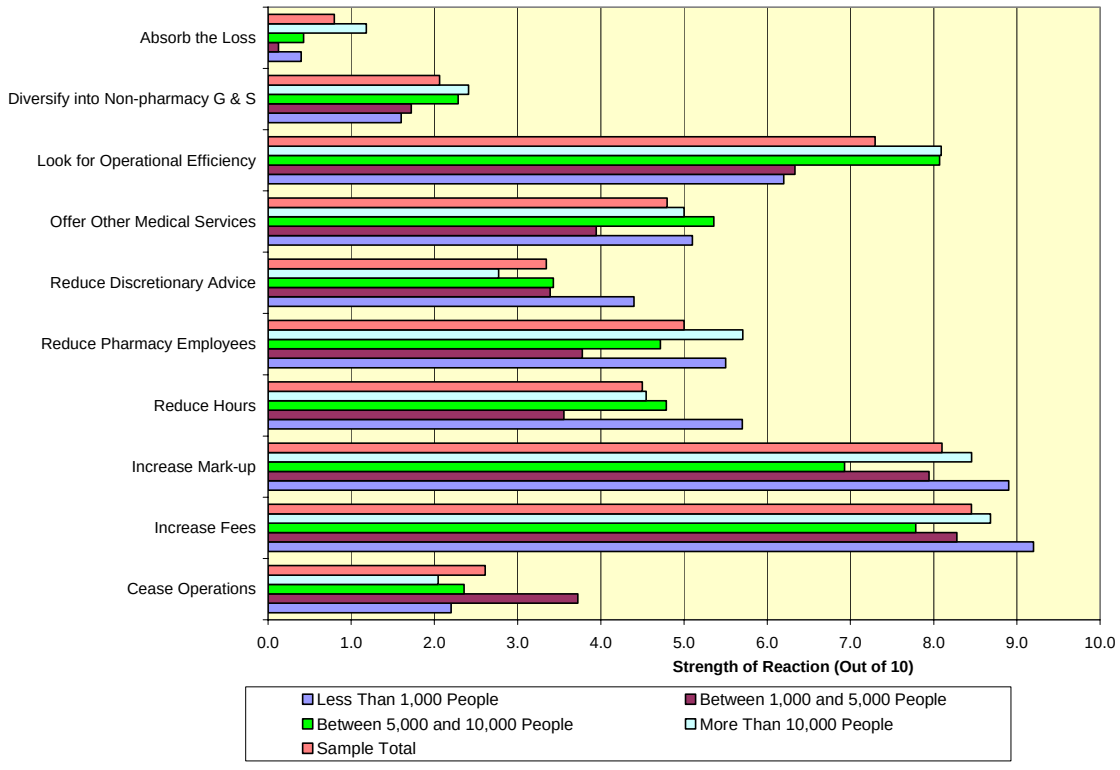
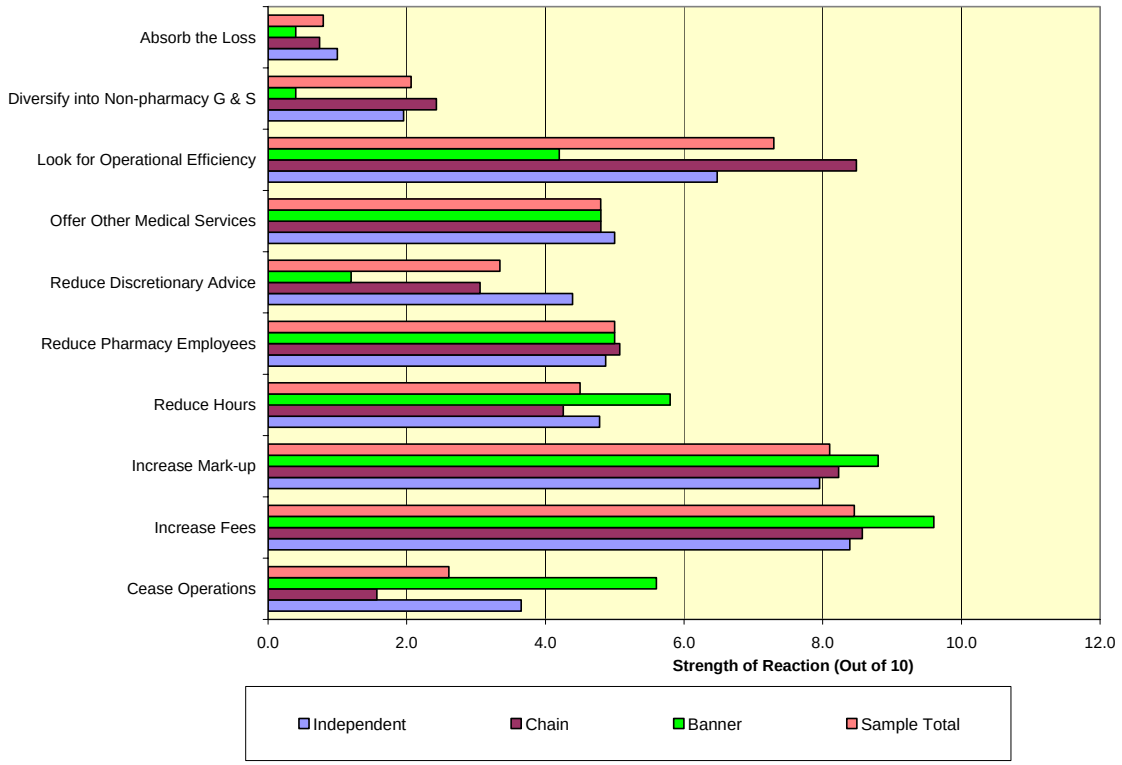


Table 65 and Figure 69 illustrate the suggested reaction to the proposed legislation by type of pharmacy. Banner stores and independents are more likely to cease operations than are chain stores. There is less variation in the other reactions by type of pharmacy.

Table 65: Expected Reaction from 0 to 10 (with 10 being the strongest reaction and 0 being no reaction) of Pharmacies to Change in Legislation by Type of Pharmacy

Community Size	Cease Operations	Increase Fees	Increase Mark-up	Reduce Hours	Reduce Pharmacy Employees
Independent	3.7	8.4	8.0	4.8	4.9
Chain	1.6	8.6	8.2	4.3	5.1
Banner	5.6	9.6	8.8	5.8	5.0
Sample Total	**2.6**	**8.5**	**8.1**	**4.5**	**5.0**
Community Size	**Reduce Discretionary Advice**	**Offer Other Medical Services for which a Charge can be Administered**	**Look for Operational Efficiency**	**Diversify into Non-pharmacy Goods and Services**	**Absorb the Loss**
Independent	4.4	5.0	6.5	2.0	1.0
Chain	3.1	4.8	8.5	2.4	0.7
Banner	1.2	4.8	4.2	0.4	0.4
Sample Total	**3.3**	**4.8**	**7.3**	**2.1**	**0.8**

Figure 69: Expected Reaction from 0 to 10 (with 10 being the strongest reaction and 0 being no reaction) of Pharmacies to Change in Legislation by Type of Pharmacy



14.0 Conclusion

The data collected and analyzed in this report provides a wealth of information on NL pharmacies. However, the most significant information and key findings are those that pertain most directly to the purpose for undertaking this study. Given that an important objective was to determine the average cost incurred by NL pharmacies per prescription dispensed, the distribution of average cost by size of community and type of pharmacy is a key piece of information calculated in this study. A second and equally important finding from this study is the potential impact that the change in the NL legislation with respect to the pricing of generic drugs will have on pharmacy profitability, long-run sustainability of NL pharmacies and the likely impact pharmacy resources, especially in rural parts of the province.

The average cost per prescription dispensed in NL is $12.00. This does not compare favorably to the NLPDP dispensing fee of $7.15 plus surcharge per prescription or $9.05 plus surcharge paid by some third party insurers. Although there is some variation in the average cost per prescription by size of communities, there is narrow range of costs across communities considered in this study. The lowest cost per prescription dispensed is $11.11 for pharmacies operating in communities with a population of between 5,000 and 10,000 people, while the highest average cost per prescription is found in pharmacies servicing communities with a population between 1,000 and 5,000 people. In fact, there were clear scale economies found in NL pharmacies in that the average cost per prescription fell significantly with the volume of prescriptions dispensed annually.

When the average cost by store type is examined, one observes that chain stores have the lowest average cost of $11.41 per prescription, which is followed by banner stores with an average cost of $12.59 and independent pharmacies with an average cost of $13.61. Again, none of these compare favorably to the dispensing fees received in NL.

The difference between average cost and dispensing fee revenue has been made up through professional revenues from generic drugs. Specifically, professional allowances were equivalent to 9.4% of average sales revenue in NL pharmacies. This ranged from a low of 7.3% for pharmacies located in communities with less than 1,000 people to a high of 11.4% for pharmacies located in communities serving between 1,000 and 5,000 people. When the type of store was considered, one observed a larger variation in the relative importance of professional allowances to the bottom line of NL pharmacies — for independent pharmacies, this represented the equivalent of 10.3% of sales revenue; it corresponded to 8.4% of sales revenues for chain stores and 4.9% for banner stores.

Even with the inclusion of professional allowance, it is clear that NL pharmacies are not making excessive profits that would allow them to easily absorb the loss of this important revenue source. The average net profitability of NL pharmacies was equivalent to 3.5% of sales. This ranged from a low of 0.1% for pharmacies operating in municipalities with less than 1,000 people to a high of 6.1% for pharmacies operating in communities with

more than 10,000 people. The corresponding range by type of store was 2.4% for chain stores and 8.4% for banner stores.

If the legislation stands unaltered, then more than 85% of all pharmacies stand to lose substantial amounts of revenue. It has been estimated that the dispensing fee would have to increase by $4.00 per prescription on average to offset the lost revenue.

Should there no replacement of this revenue lost through a change in the dispensing fee, one should expect that some pharmacies will cease operations, especially in rural parts of the province. As well, fees to patients and mark-ups will increase in the majority of pharmacies to offset the revenue loss. Finally, there will be some reduction in hours and employees as pharmacies attempt to find efficiencies to offset the revenue loss.

Clearly, there are likely to be unintended impacts on NL pharmacies that ultimately will adversely affect service availability and the quality of health care throughout the province. It is important that the Government of Newfoundland and Labrador consider some of these unintended impacts before finalizing its legislation with potentially irreversible impacts for some pharmacies and their patients.

Appendix A – Survey Instrument Administered to Pharmacies

Survey Instrument for Activity-Based Costing Study of Newfoundland and Labrador Pharmacy Services – Part A: Pharmacy Owner/Manager Survey

Thank you for agreeing to participate in this important study sponsored by the Pharmacists' Association of Newfoundland and Labrador (PANL) and undertaken by Wade Locke Economic Consulting (WLEC) of St. John's. The objectives of the study are:

- to determine through an activity-based costing study the actual costs of services provided by pharmacists to dispense medications and pharmaceutical services to the residents of Newfoundland and Labrador (NL);
- to evaluate the loss of revenue to the "Pharmacy" due to NL's new pricing formulary for generic drugs that is expected to take effect on April 1, 2008;
- to assess the possible impacts to services provided to clients due to the new pricing formulary; and
- to demonstrate the possible loss of infrastructure and health-care professionals (particularly in rural regions) due to the new pricing formulary.

The information provide in this survey will be used to associate cost and time resources to various pharmacy activities. **As well, please be advised that the information and data provided to WLEC through this survey and/or follow-up interviews that may be required as part of this study are protected by a confidentiality/non-disclosure agreement between WLEC and PANL.** This agreement guarantees that the information provided to the WLEC by pharmacists and companies participating in this research cannot be used for purposes other than this study. Furthermore, data on individual pharmacies or companies will be reported only in aggregated form (across pharmacies). In addition, individual company responses will not be shared with the sponsors or with other participants. This ensures that the proprietary information of individual companies and pharmacists are protected and no individual company or pharmacist will be identifiable from the information reported in this activity-based costing study.

Instructions

This survey consists of two parts — Part A which is to be completed by pharmacy owners, managers or designates and Part B, included as a separate word document, is to be completed by pharmacy employees (pharmacists and pharmacy technicians, but not front-store employees). Since the questions on Part B are complete for only one pharmacy employee, please copy the word document and have all employees who work in the pharmacy complete it. If data is not readily available for the time period requested, then please extrapolate the require data from the source that is most readily accessible. For example, if data is requested monthly, but is only available yearly, then please take the average over 12 months and report that.

If the survey response could be typed on the word file attached to this email and returned to Wade Locke Economic Consulting by email (l.locke@nf.sympatico.ca), it would greatly improve our ability to complete the report before the Minister of Health finalizes his decision on the new pricing formulary for generic drugs. Should you wish to complete a hard copy of the survey, then it can be faxed to 709-747-1209 or mailed to Wade Locke Economic Consulting, 53 Harrington Drive, St. John's, NL, A1E 5Y1. If you have questions on the survey or need clarification, then please feel free to contact Wade Locke at 709-745-1564.

The data requested relates to **calendar year 2007.** However, if the information is only available on a fiscal year basis, then please submit that but indicate that the fiscal year is being used and not the calendar year. **Finally, given that the Minister of Health will be making his final decision by April 1, 2007, it is important that all survey responses be received by March 4, 2008.**

Part A: To be Answered by Owner, Manager or Designate

Section A1: Pharmacy Background Data and Prescription Facts

Pharmacy Name		
Address		
City		
Postal Code		
Contact Name (for Survey)		
Title of Contact Person (for Survey)		
Contact telephone number		
Contact Email		
In what year and month did your pharmacy open?		
1. What hours is your pharmacy open each week?		
a. Monday Hours		
b. Tuesday Hours		
c. Wednesday Hours		
d. Thursday Hours		
e. Friday Hours		
f. Saturday Hours		
g. Sunday Hours		
2. On average, what are the total hours per week that your pharmacy operates?		
3. On average, what is reduction in hours per year due to holidays?		
4. What is the mix of prescription types served by your pharmacy for 2007 (Note: if refills cannot be separated from new prescriptions for 3rd party insurers, then list them under new prescriptions and indicated as such in the answer space for refills)	**Frequency**	**Number of Rxs**
a. New to store, covered by NL Prescription Drug Program (NLPDP)	**%**	
b. New to store, covered by 3rd party insurance	**%**	
c. New to store, not covered by any insurance	**%**	
d. Refill, covered by NLPDP	**%**	
e. Refill, covered by 3rd party insurance	**%**	
f. Refill, not covered by any insurance	**%**	
5. What is the mix of new prescriptions vs refill prescriptions for 2007	**Frequency**	**Number of Rxs**
a. New prescription for patient	**%**	
b. Authorized refill for patient	**%**	
6. What is the mix of controlled substance prescriptions vs non-controlled for 2007	**Frequency**	**Number of Rxs**
Controlled substance prescription	**%**	
7. How does the activity of processing a prescription order differ for controlled substances and what is the time impact?		

8. How frequently are the different packaging types used?	**Frequency**	**Number of Rxs**
a. Solids – Pills, Capsules, Tablets	**%**	
b. Liquids	**%**	
c. Compliance Packaging	**%**	
d. Manufacturing Packaging (inhaler, creams, shots)	**%**	
e. Compounding	**%**	
f. Other (please list)	**%**	
g.	**%**	
h.	**%**	

Section A2: Pharmacy Operational Statistics

9. Please answer the following questions related to the pharmacy building and layout:

Operational Statistics	Data
a. Building size (sq feet or sq meters)	
b. Pharmacy size (sq feet or sq meters)	
c. Amount of space outside of pharmacy area dedicated to pharmacy record retention/storage (sq feet or sq meters)	
d. Common area in the building (i.e., washrooms, checkout areas, etc.) (sq feet or sq meters)	
e. Pharmacy waiting area (sq feet or sq meters)	
f. Pharmacy area a percentage of building area (sum of rows b, c, d and e divided by row a) **This percentage will be used by the consultant to allocate facilities costs to the pharmacy.**	
g. Number of pharmacies (stories) supported by the corporation, if relevant	
h. Pharmacy FTE's (pharmacists, techs, etc)*	
i. Front-store FTEs (clerks, cleaners, stockroom, etc.)*	

** In the case that an employee is cross- trained (i.e., works as a tech and in the front store), please split that person into both Pharmacy and Front-store categories in relation to time spent in each.*

Section A3: Pharmacy Staffing

10. Please describe the employees and roles that staff the pharmacy or contribute to pharmaceutical services provided, by title and average hours per week.

Employee ID Number	Title	Average Hours per week for 2007	Notes about role

Note: The employee ID number does not have to be an actual ID number utilized by the store. It can a number assigned for the purposes of this survey, but it should be consistent with the employment number utilized by the pharmacy employees in Part B of the survey.

11. What is the typical staffing model during the hours the pharmacy is open (for example, one pharmacist, one technician, and one cashier)?

12. How (if at all) do holidays impact on wages paid?

13. How much vacation and sick time do pharmacy employees take in a normal year? _____

Section A4: Prescription Processing

14. How do you receive prescriptions?	**What percent of your prescriptions are received this way?**
a. Prescriptions are phoned in by patient	*%*
a. Prescriptions are phoned in by doctor	*%*
b. Prescriptions are faxed in	*%*
c. Prescriptions are dropped off by patient	*%*
d. Other (please explain)	*%*
e.	*%*

15. What percent of prescriptions on average are reversed (e.g., because they are not picked up), resulting in a need to restock drugs? _____%

16. How much time does this typically take? _____ minutes per week

17. What percent of total prescription requests are not able to be filled at the time of the request? _____%

18. For what percent of rejected prescriptions do you submit a special authorization claim [application for special authorization] to the Newfoundland and Labrador Prescription Drug Program? _____%

19. How often is a problem detected after the prescription is filled, resulting in the need to process the prescription again? (re-package the drug, re-submit the prescription claim, or both) _____%

20. If a third person (acting on behalf of the patient) is picking up the drug, how much longer (if any) does it take to dispense the prescription? _____ minutes

21. How frequently does this happen? _____%

22. Sometimes in lieu of or in addition to entering into direct dialogue with a patient regarding specific drug usage, a pharmacist can give the patient directions for proper use through written information leaflets, pictogram labels or even video programs. Under what circumstances would you use these alternative methods of relaying information instead of pharmacist-to-patient, in person dialogue?

23. Does this save or add time, and if so, how much? (*note for each method used)*

Section A5: Delivery Services

24. Does the pharmacy deliver prescriptions? _____ Yes _____ No

25. How is the delivery decision made?

26. Who pays for the cost of delivery?

27. If so, what percent of prescriptions are delivered because it is required (i.e., in the sense that the patient has no other way of receiving the prescription)? _____%

28. By what method are they delivered?

29. Do pharmacy employees deliver prescriptions? Is a pharmacy-owned vehicle used?

Section A6: Process and Technology

30. What Vendor and version of local pharmacy system software do you have?
_____*Vendor* _____*Version*

31. Aside from processing a prescription, what other features or services can you get from your local system?

32. Do you use your local system for other, non-dispensing related purposes?

a. Marketing pharmacy health-related programs	____ *Yes*	____ *No*
b. Relationship building	____ *Yes*	____ *No*
c. Send refill reminders	____ *Yes*	____ *No*
d. Track patient compliance patterns	____ *Yes*	____ *No*
e. Marketing of in-store sales or sending local area flyers	____ *Yes*	____ *No*
f. Educational purposes	____ *Yes*	____ *No*
g. Pharmacist resource material	____ *Yes*	____ *No*

33. Do system outages have any impact on the time required to dispense prescriptions? If so, please describe:

34. Does your pharmacy use any special packaging machines, technology or equipment to automate or improve efficiency in the dispensing process?

35. Does your pharmacy provide specialized packaging for certain patients or drugs? If so, please describe process and benefits.

36. Please describe the process for submitting a typical claim electronically to a 3rd party drug plan.

37. Is the process for submitting claims to all 3rd parties fully automated or does it require additional time to create reports or reconcile receivables? Please explain.

38. Please describe how inventory is tracked and reordered – frequency, time required, who is responsible?

39. How are pharmaceutical orders received, verified and restocked?

40. Who is involved in this process, how frequently does this happen and long does it take?

41. Has your pharmacy taken actions to improve the efficiency of the dispensing process?
If so, please describe:

42. Are any actions planned to improve efficiency?

Section A7: Non-Dispensing Pharmacy Services

43. Are pharmacists used in the "non-prescription medication" area of the front store to answer questions? If so, please explain how this is scheduled and how much of their time is made available for this service?

44. Non-prescription drugs behind the pharmacy counter (Schedule 2 drugs, non-prescription narcotics, and others according to your pharmacy's policy): Describe the activities typically involved in the sale of these products, and the time required.

45. How much time does it take to dispense narcotic OTCs and please describe the process involved.

46. Other than to comply with regulatory requirements (i.e., Schedule 2), why are some non-prescription drugs kept behind the pharmacy counter in your pharmacy?

47. Some pharmacies provide additional pharmaceutical services to benefit their customers. Does your pharmacy provide any of the following – or other such services?

	Description	Overall % Staff Time
a. _____ YES _____ NO	Community Health Programs	
b. _____ YES _____ NO	Disease Management Clinics	
c. _____ YES _____ NO	Development of Individual Care Plans	
d. _____ YES _____ NO	Review of Patient Medication Regimen	
e. _____ YES _____ NO	Assist with Medication Adherence	
f. _____ YES _____ NO	Emergency Counsel and/or Referral	
g. _____ YES _____ NO	Provide Income Tax receipts for Customers	
h. _____ YES _____ NO	Participation in Primary Health Care Teams	
i. _____ YES _____ NO	Participate in Emergency Preparedness Committees	
j. _____ YES _____ NO	Patient and Physician Communication re Drug Product Withdrawals/Drug Safety Issues	
k. _____ YES _____ NO	Other (please explain)	
l. _____ YES _____ NO		
m. _____ YES _____ NO		

48. For each response above, please describe including who is responsible, how frequently services are provided, and funding arrangements where applicable

a. Community Health Programs (e.g influenza vaccination clinics)

b. Disease Management Clinics

c. Development of Individual Care Plans

Review of Patient Medication Regimen

e. Assistance with Medication Adherence

f. Emergency Counsel and/or Referral

g. Providing Income Tax Receipts to Customers

h. Participate in Primary Health Care teams

i. Participate in Emergency Preparedness Committees

j. Patient and Physician Communication
(re Drug Product Withdrawals/Drug Safety Issues)

k. Other

49. Is any of the pharmacy space dedicated to providing these services?
If so, describe:

Section A8: Unusual Situations

50. During the last fiscal year (2006/07), were there any unusual situations in the staffing or operation of the pharmacy or in your community that would affect the volume or costs of providing services?

Section A9: Pharmacy Payroll Statistics

51. Please answer the following questions with respect to pharmacy payrolls.

Instructions: Enter **2007 TOTALS** for all employees who provided pharmaceutical services. Please include all employees during **2007**, including partial year employees. For partial year employees, include actual payroll costs for duration of employment (not an annualized amount). Please add in the blue rows any other employee-related costs not included in rows "i" through "xiii". Finally, please note any unusual circumstances or events during this year

Item	Description	Pharmacist 1	Pharmacist 2	Pharmacist 3	Pharmacist 4	Pharmacist 5	Pharmacist 6
i. Employee ID in case interviews are required							
ii. Ave. hours worked per week							
iii. Weeks worked in 2007 – excluding vacation and sick leave							
iv. Sick days taken in 2007							
v. Days of vacation taken in 2007							
vi. Salaries & Wages	Pharmacy employee salaries and wages						
vii. Overtime	Overtime wages						
viii. Bonus	All bonuses paid to pharmacy employees						
ix. Benefits	CPP< RRSP, medical, dental, vision, sick leave, vacation						
x. Taxes	Government, provincial, income tax etc.						
xi. Insurance	EI, life insurance, disability insurance, etc						
xii. Workers Comp.	Amount related to workers comp claims						
xiii. Contract/Temp Labour	Amount paid for temporary or contract labour						
xiv. Other 1							
xv. Other 2							
xvi. Other 3							
xvii. Other 4							
xviii. Other 5							
Item	**Description**	**Tech 1**	**Tech 2**	**Tech 3**	**Tech 4**	**Tech 5**	**Tech 6**
i. Employee ID in case interviews are required							
ii. Ave. hours worked per week							
iii. Weeks worked in 2007 – excluding vacation and sick leave							
iv. Sick days taken in 2007							

v. Days of vacation taken in 2007							
vi. Salaries & Wages	Pharmacy employee salaries and wages						
vii. Overtime	Overtime wages						
viii. Bonus	All bonuses paid to pharmacy employees						
ix. Benefits	CPP< RRSP, medical, dental, vision, sick leave, vacation						
x. Taxes	Government, provincial, income tax etc.						
xi. Insurance	EI, life insurance, disability insurance, etc						
xii. Workers Comp.	Amount related to workers comp claims						
xiii. Contract/Temp Labour	Amount paid for temporary or contract labour						
xiv. Other 1							
xv. Other 2							
xvi. Other 3							
xvii. Other 4							
xviii. Other 5							
Item	**Description**	**Clerk 1**	**Clerk 2**	**Clerk 3**	**Clerk 4**	**Clerk 5**	**Clerk 6**
i. Employee ID in case interviews are required							
ii. Ave. hours worked per week							
iii. Weeks worked in 2007 – excluding vacation and sick leave							
iv. Sick days taken in 2007							
v. Days of vacation taken in 2007							
vi. Salaries & Wages	Pharmacy employee salaries and wages						
vii. Overtime	Overtime wages						
viii. Bonus	All bonuses paid to pharmacy employees						
ix. Benefits	CPP, RRSP, medical, dental, vision, sick leave, vacation						
x. Taxes	Government, provincial, income tax etc.						
xi. Insurance	EI, life insurance, disability insurance, etc						
xii. Workers Comp.	Amount related to workers comp claims						
xiii. Contract/Temp Labour	Amount paid for temporary or contract labour						
xiv. Other 1							
xv. Other 2							
xvi. Other 3							
xvii. Other 4							
xviii. Other 5							

Section A10: Pharmacy Costs

52. Please answer the following questions with respect to pharmacy costs.

Instructions: Include requested total cost information for calendar year 2007 in Column D. In the case of extraordinary or one-time costs were incurred during 2007, enter those amounts in Column E (but also include them in the total reported in column D).

Resources (A)	Line Item (B)	Description (C)	2007 Total (D)	Amount of one-time or extraordinary costs (E)
Pharmacy Payroll	i. Salary and Wages	Pharmacy employee salaries and wages	$	$
	ii. Overtime	Overtime wages	$	$
	iii. Bonus	Bonuses paid to pharmacy employees	$	$
	iv. Benefits	CPP, RRSP, medical, dental vision, sick leave,	$	$
	v. Taxes	Government, provincial income tax, etc	$	$
	vi. Insurance	EI, life insurance, disability insurance, etc.	$	$
	vii. Worker's	Amount related to workers comp claims	$	$
	viii. Contract/Temp Labour	Amount paid for temporary or contract labour	$	$
	ix. Other 1		$	$
	x. Other 2		$	$
	xi. Other 3		$	$
Total Payroll (sum rows i to xi)			**$**	**$**
Resources (A)	**Line Item (B)**	**Description (C)**	**2007 Total (D)**	**Amount of one-time or extraordinary costs (E)**
Inventory	Cost of capital for average inventory value – Pharmaceuticals	Pharmaceutical related cost of capital use – WACC, etc.	$	$
	Drug/inventory insurance – Pharmaceuticals	Pharmaceutical insurance premiums to cost inventory value	$	$
	Inventory write-offs – Pharmaceuticals	Pharmaceutical write-offs related to shrinkage, expired drugs, etc.	$	$
	Expired or defective drug disposal cost – Pharmaceutical	Cost to destroy or dispose of pharmaceutical drugs	$	$
	Other 1		$	$
	Other 2		$	$
	Other 3		$	$
Total Inventory			**$**	**$**

Resources (A)	Line Item (B)	Description (C)	2007 Total (D)	Amount of one-time or extraordinary costs (E)
Pharmacy Equipment & Supplies	i. Uniform expense	Expenses related to pharmacy uniforms or labs coats	$	$
	ii. Packing equipment	Expensed packaging equipment	$	$
	iii. Depreciation – packing equipment	Depreciation of packaging equipment assets	$	$
	iv. Computers and peripheral expenses	Expensed printers, computers, hardware, maintenance, etc.	$	$
	v. Depreciation – computers and peripherals	Depreciation of capitalized printers, computers, hardware, etc	$	$
	vi. Software – pharmacy related	Expensed pharmacy software packaging (i.e., dispensing software)	$	$
	vii. Depreciation – software pharmacy	Depreciation of capitalized pharmacy software	$	$
	viii. Software – shared software with entire store	Expensed shared software packages (i.e., Microsoft windows, etc.)	$	$
	ix. Depreciation – software entire store	Depreciation of capitalized shared store software	$	$
	x. Furniture and fixtures	Expensed furniture and fixtures or depreciation. Coolers, shelving, point of sale, etc.	$	$
	xi. Depreciation – furniture and fixtures	Depreciation of capitalized furniture and fixtures	$	$
	xii. Other equipment	Other expensed equipment	$	$
	xiii. Depreciation – other equipment	Depreciation of other equipment not already specified	$	$
	xiv. Cell phone	Company provided cell phones to pharmacy employees	$	$
	xv. Office supplies	Paper, toner, pens, pencils, etc. used in pharmacy	$	$
	xvi. Drug packaging containers	Packaging material costs (i.e., vials, bottles, blister packs, etc.)	$	$
	xvii. Library or reference materials	Legally required reference materials	$	$
	xviii. Other 1		$	$
	xix. Other 2		$	$
	xx. Other 3		$	$
Total Pharmacy Equipment and Supplies (sum rows i to xx)			**$**	**$**

Section A11: Pharmacy Facility Costs

53. Please answer the following questions with respect to pharmacy facility costs.

Instructions: Include requested total cost information for calendar year 2007 in column D if pharmacy specific information is available or include the facility costs in Column E and the pharmacy specific costs will be calculated by the consultant based on information provided in row "f" of question 1. **Do not complete both columns D and E.** In the case of extraordinary or one-time costs were incurred during 2007, enter those amounts in column F on the same basis of Column D (pharmacy specific) or Column E (facility specific) (but also include them in the total reported in columns D or E).

Resources (A)	Line Item (B)	Description (C)	Direct Pharmacy Costs 2007 (D)	Total Facility Costs (to be allocated) 2007 (E)	Amount of one time or extraordinary costs (F)
Facilities	i. Lease expenses	Annual lease costs			
	ii. Common area maintenance costs (CAM)	Costs related to shared spaces such as parking garages, sidewalks, etc.			
	iii. Building depreciation	Depreciation associated with capitalized building costs			
	iv. Repairs & maintenance	Internal repairs & maintenance (e.g., janitorial services, maintenance labour and materials)			
	v. External building repairs & maintenance	Lawn care, snow removal, etc.			
	vi. Security expenses	Security, alarm service			
	vii. HVAC/utilities	Heating, ventilating, air conditioning, water, trash removal, etc.			
	viii. Taxes	Real estate, property taxes			
	ix. Leasehold improvement expense	Any leaseholds that are expensed			
	x. Depreciation – leasehold improvements	Depreciation of leasehold improvements assets			
	xi. Other 1				
	xii. Other 2				
	xiii. Other 3				
Total Facilities (sum rows i to xiii)			**$**	**$**	**$**

Resources (A)	Line Item (B)	Description (C)	2007 (D)	Amount of one time or extraordinary costs (E)
Overhead (include 100% of costs for the following items in column D)	i. Pharmacy Professional fees	PANL membership, etc		
	ii. Malpractice insurance	Cost of malpractice insurance		
	iii. Professional development fees	Conferences, tuition, continuing education for pharmacy employees		
	iv. Pharmacy licensing fees	Pharmacy or Pharmacists licensing fees		
	v. Company vehicle expenses for pharmacy employees	Lease expense, insurance, fuel, maintenance, licensing, parking, etc. for any company vehicles provided to pharmacy staff		
Resources	**Line Item**	**Description**	**2007**	**Amount of one**

(A)	(B)	(C)	(D)	time or extraordinary costs (E)
Multiple Pharmacy % of Total Store revenue (Pharmacy revenue divided by total store revenue) by each line item and enter the result in Column D (i.e., Pharmacy accounts for 75% of total revenue, include 75% of telecommunications costs in Column D)	vi. Telecommunications	Telephones, fax machines, etc		
	vii. Technology support	Maintenance contracts, on-site services, etc.		
	viii. Credit card	Credit card usage fees associated with prescription purchases		
	ix. Internet connectivity	Network and internet connections- monthly service fees (if applicable)		
	x. Royalties or franchise fees	Expenses associated with franchise or banner membership		
	xi. Business licensing fees	Municipal government fees to own/operate a business		
	xii. Accounting support	Accounting support or costs		
	xiii. Pharmacy management	Managers or operations managers (other than acting pharmacists). Support costs such as corporate pharmacy groups, directors, etc.		
	xiv. Operations support costs	Centralized purchasing, supply chain, store operations support, etc.		
	xv. Bad debt expense/unsettled claims	Write-off receivable that will not be collected		
	xvi. Advertising costs	Costs related to television, radio, print, etc., advertising		
Resources (A)	**Line Item (B)**	**Description (C)**	**2007 (D)**	**Amount of one time or extraordinary costs (E)**
Calculate pharmacy employees as % of total store employees. Multiply this % by each line item and enter the result in column D	xvii. Payroll costs	Payroll department or payroll outsourcing costs		
	xviii. HR/Admin support/benefits administration	Allocated corporate or administrative overhead – i.e., employee relations, benefits, HR, etc.		
	xix. Other 1			
	xx. Other 2			
	xxi. Other 3			
Total Overhead (sum rows I to xxi)				

Resources (A)	**Line Item (B)**	**Description (C)**	**2007 (D)**	**Amount of one time or extraordinary costs (E)**
Prescription delivery	i. Payroll – internal driver	Salary, wages, benefits (see above items) related to dedicated delivery drivers.		
	ii. Lease expense for vehicles	Cost of vehicles used for delivery		
	iii. Fuel expense	Fuels costs for those vehicles		
	iv. Vehicle maintenance and insurance	Repairs, maintenance and insurance for company vehicles used for delivery		
	v. Contract delivery costs	Actual cost of 3rd party delivery		
	iii. Other 1			
	iv. Other 2			
	v. Other 3			
Total Prescription Delivery				

Section A12: Impact on Business Viability and Services to Customers

54. Please complete the following information for calendar year 2007 to enable the research team to assess the impact of professional allowances from generic drugs on the long-term viability of pharmacy in Newfoundland and Labrador.

Explanation of Terms	Example A Representative sample of Stores		Example B Smaller sample size and/or independents	
Note: Sales = 100% and all other items are a % of sales				
Sales = adjudicated cost plus markup plus fee	Sales	100%	Sales	100%
Gross Profit = Sales minus acquisition costs	Gross Profit	%	Gross Profit	%
Wages and Benefits for pharmacist and technicians	Wages & Benefits	%	Wages & Benefits	%
Occupancy = Rent, common area maintenance, taxes, utilities and repairs	Occupancy	%	Occupancy	%
Selling Expenses = Advertising, computer costs, supplies, vials, labels, etc.	Selling Expense	%	Selling Expense	%
Prompt payment discounts are income and reduced net expenses	Prompt Payment Discounts	%	Prompt Payment Discounts	%
Store Operations Overhead = Operations field staff	Store Operations Overhead	%	Store Operations Overhead	%
Corporate Overhead – Head office expenses, program development and support	Corporate Overhead	%	Corporate Overhead	%
	Net Expenses	%	Net Expenses	%
	Profit/Loss (before allowances)	%	Profit/Loss (before allowances)	%
	Depreciation	%	Depreciation	%
	Profit /Loss	%	Profit /Loss	%
	Professional Allowance from Generic Drugs as a percent of Sales	%	Professional Allowance from Generic Drugs as a percent of Sales	%
	Example A Represents over _____community pharmacies		**Example B** Represents:	

55. Given the change in the pricing formulary for generic drug in NL, please indicate by how much do you expect your revenues to fall per store annually:

___ not at all ___ less than $20,000 ___ $20,000 to $39,999

___ $40,000- $59,999 ___ $60,000-79,999 ___ $80,000 to $99,999

___ $100,000 to $149,999 ___ more than $150,000

56. What percent of dispensing revenues did professional allowance make up in calendar year 2007? _____

55. Given the fall in revenue indicated in question 54, please indicated how you might react to this change (Please use 0 to indicate no and 10 to indicate a definite reaction and numbers between 0 and 10 to indicate the strength or likelihood of the reaction:

___ cease operations

___ increase fees

___ increase mark-up

___ reduce hours of service for pharmacy operations

___ reduce pharmacy employees

___ reduce discretionary advice to patients

___ offer other medical services for which a charge can be administered

___ look for operational efficiency

___ diversify into non-pharmacy goods and services (e.g., convenience store items)

___ absorb the loss and not react

___ other (please explain)

57. Given the potential fall in revenue associated with the change in the pricing formulary related to generic drugs, please explain the likely impacts upon your store and the provincial industry in general and please explain how you see the store and the provincial industry reacting to this.

58. In your estimation, what would the increase in the dispensing fee need to be to make up the loss from the reduced professional allowances due to the change in the provincial pricing formulary related to generic drugs and allow the profession to continue to provide unpaid professional consultation to you clients?
_____ dollars per prescription.

59. Many pharmacists participate in recruiting programs in pharmacies for pharmacy students to ensure there is a pool of pharmacists continuously available for the provision of pharmacy services in the future. How much time per month does your store devote to this activity? _____ hours

Appendix B – PANL Memo to Its Members

DATE: ***February 15, 2008***

TO: ***PHARMACISTS'***

SUBJECT: ***Study by Dr.L. Wade Locke***

URGENT MEMO

As you are aware Government has delayed the implementation of the new reimbursement policy until March 31st, 2008 given the negative impact it would have on pharmacies, pharmacists and patient care and services.

The Association is in the process of launching an independent, expert study to analyze the cost of providing pharmacy services to the residents of Newfoundland and Labrador. This study is a critical piece in our strategy in dealing with this issue which if implemented will have a devastating negative impact on pharmacies and pharmacists. We have contracted Dr. L. Wade Locke a well known and highly respected senior economist to conduct a study with the following objective:

> To demonstrate the following:
>
> > The actual costs of services provided by pharmacists to dispense medications,
> >
> > The loss of revenue to the "Pharmacy" due to the new pricing formulary,
> >
> > The possible impacts to services provided to clients due to the new pricing formulary, and
> >
> > The possible loss of infrastructure and health-care professionals (particularly in rural regions) due to the new pricing formulary.

In the very near future Dr. Locke will be sending you a survey to collect relevant information needed for his analysis. **It is absolutely imperative that you complete this survey as soon as possible and as accurately as possible. Your cooperation is absolutely critical to this process if this study is to have the desired result.**

You are reminded of the Working Group established to define key factors in this study and manage a communications strategy to ensure that all pharmacists are kept updated on important developments on this issue. Contact information has been provided below, should you have any questions or concerns you wish to direct to the working group.

- Robin Vatcher – Tel: (709) 629-3208 or Email: rvatcher@nwipharmacy.nf.ca
- Brenda Bursey – Tel: (709) 576-8617 / 687-0970 or Email: bobbursey@nf.sympatico.ca
- Rick Elliott – Tel: (709) 579-9609 / 682-9186 or Email: raelliott@nl.rogers.com
- Dwight Ball – Tel: (709) 635-3961 / 636-4018 / 635-2454 or Email: dwightball@nf.sympatico.ca
- Phil O'Keefe – Tel: (709) 488-3390 / 488-3211 / 722-3175 or Email: pokeefe@panl.net
- Rod Forsey – Tel: (709) 579-1415 or Email: rodney.forsey@lawtons.ca
- Wayne Morris – Tel: (709) 489-2335 or Email: jwm@nfld.net
- George Skinner/Alice Abbott – Tel: (709) 753-7881 / (866) 753-7881 or Email: gskinner@panl.net

Appendix C – Survey Instrument Administered to Pharmacists and Technicians

Survey Instrument for Activity-Based Costing Study of Newfoundland and Labrador Pharmacy Services – Part B: Pharmacy Employee Survey

Thank you for agreeing to participate in this important study sponsored by the Pharmacists' Association of Newfoundland and Labrador (PANL) and undertaken by Wade Locke Economic Consulting (WLEC) of St. John's. The objectives of the study are:

- to determine through an activity-based costing study the actual costs of services provided by pharmacists to dispense medications and pharmaceutical services to the residents of Newfoundland and Labrador (NL);
- to evaluate the loss of revenue to the "Pharmacy" due to NL's new pricing formulary for generic drugs that is expected to take effect on April 1, 2008;
- to assess the possible impacts to services provided to clients due to the new pricing formulary; and
- to demonstrate the possible loss of infrastructure and health-care professionals (particularly in rural regions) due to the new pricing formulary.

The information provide in this survey will be used to associate cost and time resources to various pharmacy activities. **As well, please be advised that the information and data provided to WLEC through this survey and/or follow-up interviews that may be required as part of this study are protected by a confidentiality/non-disclosure agreement between WLEC and PANL.** This agreement guarantees that the information provided to the WLEC by pharmacists and companies participating in this research cannot be used for purposes other than this study. Furthermore, data on individual pharmacies or companies will be reported only in aggregated form (across pharmacies). In addition, individual company responses will not be shared with the sponsors or with other participants. This ensures that the proprietary information of individual companies and pharmacists are protected and no individual company or pharmacist will be identifiable from the information reported in this activity-based costing study.

Instructions

This survey consists of two parts — Part A which is to be completed by pharmacy owners, managers or designates and Part B, included as a separate word document, is to be completed by pharmacy employees (pharmacists and pharmacy technicians, but not front-store employees). Since the questions on Part B are complete for only one pharmacy employee, please copy the word document and have all employees who work in the pharmacy complete it. If data is not readily available for the time period requested, then please extrapolate the require data from the source that is most readily accessible. For example, if data is requested monthly, but is only available yearly, then please take the average over 12 months and report that.

If the survey response could be typed on the word file attached to this email and returned to Wade Locke Economic Consulting by email (l.locke@nf.sympatico.ca), it would greatly improve our ability to complete the report before the Minister of Health finalizes his decision on the new pricing formulary for generic drugs. Should you wish to complete a hard copy of the survey, then it can be faxed to 709-747-1209 or mailed to Wade Locke Economic Consulting, 53 Harrington Drive, St. John's, NL, A1E 5Y1. If you have questions on the survey or need clarification, then please feel free to contact Wade Locke at 709-745-1564.

The data requested relates to **calendar year 2007.** However, if the information is only available on a fiscal year basis, then please submit that but indicate that the fiscal year is being used and not the calendar year. **Finally, given that the Minister of Health will be making his final decision by April 1, 2007, it is important that all survey responses be received by March 4, 2008.**

Questions for Pharmacy employees

Section B1: Background Information

Position: _____ Average Hours per week: _____

Employee ID (from Section A) _____

Store location (community) _____

1. Could you please briefly describe your role and the activities you do in a typical day?

2. How long have you been working at this pharmacy? _____

3. Prior pharmacy experience? _____

4. How would you describe the "philosophy" or strategy of this pharmacy with respect to services provided, other products sold, customer relationships and costs?

5. For a typical day, please allocate how your time is spent across the following activities (Note that there are spaces to describe additional responsibilities or services not provided daily below).

Typical Day	Dispensing	Routine Patient Counseling	Complex Disease Mgmt	Implement Care Plans	Review Patient Med Profiles
Percentage	%	%	%	%	%
Typical Day	**Assist w/ Patient Med Adherence**	**OTC Consultation**	**Administrative**	**Time spent of telephone**	**Other (please describe)**
Percentage	%	%	%	%	%

Note: Administrative includes claims reconciliation or end-of-day summary reports, staffing or scheduling responsibilities, lunch and breaks, etc.

6. Are there any of the activities above, or others, that you engage in at less frequent intervals during the year (for example, clinics on special health topics)? If so, please note above or describe here:

Activity	Amount of time (hrs)	Number of times per year

7. For Dispensing activities only - Given the time in a typical day that you spend dispensing prescriptions or assisting in the dispensing of prescriptions, what percent of that time is spent performing the following steps.

	Receive Prescription	Interview Patient	Process Prescription	Fill Prescription	Validate & Dispense Prescription
Includes	- Receive Rx	- collect patient info, including patient info, medical info & insurance info	- check for dosage & follow-up if required with patient, doctor, insurance or other pharmacy	- fill container or compliance package & apply label	- check drug label & contents & provide counsel on interactions, directions
Excludes	- any clarification	- conferring with prescriber or insurance			
Total Dispense (100%)	%	%	%	%	%
Variation	+/- %	+/- %	+/- %	+/- %	+/- %
	Collect Payment	**Deliver to Patient**	**Re-stock Drugs**	**Manage Inventory & Records**	
Includes	- collect patient payment & conform payment request to 3rd party insurance	- collect delivery directions, transfer to delivery & confirm delivery	- return usable drugs to bulk	- place & receive orders, dispose unusable drugs & fill & store required records	
Excludes	- reconciliation of payment from NLPDP or 3rd parties	- any cost of delivery	- re-ordering bulk drug	- disposing of prescriptions	
Total Dispense (100%)	%	%	%	%	
Variation	+/- %	+/- %	+/- %	+/- %	

8. For a typical new prescription and new client, how much of your time (in minutes and partial minutes) does this process take with 3rd party insurance? _____ minutes

9. For a typical new prescription and new client, how much of your time (in minutes and partial minutes) does this process take without 3rd party insurance? _____ minutes

10. How much time would it take to fill a new prescription for an existing client? _____ minutes

11. What steps does this change (in relation to the above chart)? Please explain.

12. How much time would it take to fill a refill prescription for an existing client? _____ minutes

13. What steps does this change? Please explain

Section B2: Receive Prescription

14. Of the time you spend receiving prescriptions, how much of your time is spent receiving prescriptions is from

All Prescription Received	Telephone	FAX	Dropped off	Other
100% (of your time) =	%	%	%	%

15. Roughly how many prescriptions do you typically receive in a day from all sources? _____ prescriptions

16. How long does it take to refill a prescription? _____ minutes

Section B3: Interview Patient

17. How do you identify a change in the patient's medical condition? Once identified, what is the interview process? How much longer does it take to interview the patient? Please explain.

18. How is the length of time in this step affected if the patient has a 3rd party insurer?

19. What percent of the prescriptions take more time to interview the patient because of a 3rd party insurer? _____

20. What other situations cause variations in how much time is required to interview a patient? (*how often, how much…)* Please explain

Section B4: Process Prescription Order

21. We understand that processing a prescription order can vary depending upon issues or clarifications encountered, and would like to understand how frequently various clarifications are required, how these affect the time required, and what drives the need for different actions.
(Note: Time can be indexed, where no calls uses 100 "time units" vs. 200 for a call that doubled the time, or estimated).

	Time Required	% of New Prescriptions*	% of Refill Prescriptions*	Reasons additional contacts made
No Follow-up Calls	100 or ____in/sec			
Call to Prescriber				
Call to Patient				
Call to 3rd Party Insurance				
Call to other Pharmacy				

** Percentages do not need to add to 100*

22. For each of the 'Reasons additional contact made", which reason that you listed is most common or most frequent? _____

Section B5: Fill Prescription

23. If filling solids (pills, capsules, tablets, etc.) in a bottle takes 100 units of time, what ratio would the following packaging types take to fill?

Fill Type	Time Units to Fill Type	% of Prescriptions filled that way
Solids – pills/capsules/tablets	100 Time Units	%
Liquids	___ Time Units	%
Compliance Packaging	___ Time Units	%
Manufacturing Packaging (inhaler, creams, shots, etc)	___ Time Units	%
Compounding	___ Time Units	%
Methadone	___ Time Units	%
Other	___ Time Units	%

24. Are there other conditions or situations that affect how much time is required for the fill prescriptions step? Please explain:

Section B6: Validate and Dispense Prescription

25. Recognizing that counseling of a new prescription is required by law, please describe your role in providing counsel to the patient regarding specific prescriptions. This should include what you do and how long it takes on average.

26. Does your pharmacy dispense methadone? ____ Yes _____ NO

27. How long does it take to fill a methadone prescription? _____ minutes

28. How many prescriptions do you "log on" per day and how long doe sit take? _____ prescriptions and _____ minutes in total

29. What are some of the reasons or circumstances that would change how much time is required for counseling with the patient? For each reason, what is the magnitude of time it would take to dispense the prescription, and how often does that occur?

Issue that prolongs dispensing	Magnitude of Time Units	For what % of Prescription does this occur?
No issues in dispensing	100 Time Units	%
	___ Time Units	%
	___ Time Units	%
	___ Time Units	%

Section B7: Collecting Payment

30. What issues would prolong the amount of time it takes to collect payment from the patient (e.g., adjudication at cash, can't find Rx…)?

31. How frequently do these occur, and how much time do they add?

32. Are there any other factors that lengthen or shorten dispensing time that has not been covered in this survey?

Section B8: Other

33. Many pharmacists participate in recruiting programs in pharmacies for pharmacy students to ensure there is a pool of pharmacists continuously available for the provision of pharmacy services in the future. How much time per month do you devote to this activity? _____ hours

34. Given the potential fall in revenue associated with the change in the pricing formulary related to generic drugs, please explain the likely impacts upon your store and the provincial industry in general and please explain how you see the store and the provincial industry reacting to this.

Appendix D – Questions That Were Re-Surveyed

Earlier your pharmacy responded to a survey on the impact of the proposed change in the pricing formulary for generic drug in NL. Unfortunately, some of the questions were ambiguous and may have caused confusion in some of the responses received. As such, it was decided to resurvey respondents with the four questions provided below. We apologize for any inconvenience this may cause and thank you for your cooperation in providing these responses. Please respond to this email (l.locke@nf.sympatico.ca) or fax your response to 709-747-1209 by July 3, 2008. If you have nay questions, they can be addressed to Wade Locke at 709-745-1564.

Store _____

Location _____

Contact Person: _____

What percent of dispensing revenues [defined as: Total Dispensary Sales minus Cost of Dispensary Sales] did professional allowance make up in calendar year 2007? _____ %

What percent of prescription requires the pharmacist to facilitate on behalf of the patient for special authorization approval? _____ %

How much time is involved in this process? _____ minutes

What percent of prescriptions requires pharmacist intervention because of errors in prescription or missing information or drug interactions?_____ %