

Access to Pharmacy Services and Pharmaceuticals in Montana

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Executive Summary

In 2005, Senate Bill 324, Section 2.2, directed the Montana Department of Public Health and Human Services (DPHHS) to determine the status, needs, and trends of pharmaceutical use in the state. Because pharmacy services may now include clinical monitoring and treatment services in addition to dispensing services, the evaluation was expanded to include this information.

The process used to evaluate pharmacy services status, needs, and trends involved secondary analysis of existing data from individual, state, and federal sources. Extra effort was made to identify subpopulations or areas where gaps between needs and access are most likely to occur now or in the near future. Information in the report can be divided into several categories: demographic data related to healthcare access or use, common chronic diseases, pharmaceuticals, and clinical pharmacy services not related to dispensing.

Key Findings:

- One-in-five Montanans do not have health insurance coverage. The percent of Montanans who do not have any type of health insurance increased from 13.6% (2001) to 19% (2005). Health insurance is highly correlated with pharmacy benefits, so a lack of health insurance means a lack of pharmacy benefits. (pp. 16-17)
- One-in-six employed adult Montanans do not have employer-based health insurance benefits. The percent of adult Montanans in the civilian labor force who were unemployed is 4%, but the percent of adult Montanans who do not have health insurance benefits is 24.9% (2005 data). (pg. 19)
- Most health insurance plans (98-100%) provide pharmacy benefits for medications, but these benefits are increasingly offered as tiered prescription plans (90% now compared to 76% in 2000), which increases out-of-pocket expenses for the enrollees. (pp. 16,18,19)
- Expenditures for prescription medications remain a small proportion of overall healthcare spending, but a large proportion (37%) of the out-of-pocket expenses experienced by patients. (pp. 35-36)
- Overall, the number of licensed retail pharmacies in Montana has remained constant at 228 in 2000 and 229 in 2006. What is not apparent from these numbers is the loss of retail pharmacies in the more sparsely populated counties. (pp. 21-23)
- During the past five years, 18 counties each lost at least one retail pharmacy. There are now 10 counties that do not have a retail pharmacy located within their borders. (Table 15, pp. 22-23)
- At the community level, 22 towns lost at least one of their local retail pharmacies in the past five years; seven of those towns no longer have any retail pharmacies. There are 40 towns that currently have only one retail store remaining, which puts them at risk of losing local service in the coming years if the trend continues. (pg. 24)

- Rural, independent retail pharmacies are having a difficult time remaining in business. In spite of reimbursements for medication costs that should generate revenue, the disparity between the high dispensing costs (\$10.27) and low dispensing fee reimbursement (\$2.87 to \$4.70 depending on payor) is eroding their financial gain. (pg. 35)
- There are currently 301 mail order pharmacies licensed to serve Montana residents. Of the five mail order businesses that fill the majority of the mail order prescriptions for Montanans, only one is located within the state (Ridgeway Pharmacy). Mail order pharmacies are usually accessed through pharmacy benefit packages in health insurance plans. (pg. 32)
- Internet pharmacies are not licensed by the Board of Pharmacy, so there is no information about the extent to which Montana residents use those sites or the number of sites doing business in Montana. National surveys found 4% of adults have ordered prescriptions via the Web. (pg. 34)
- In 2005, over nine million (9,073,366) prescriptions were filled by retail pharmacies in Montana. This equals 9.7 prescriptions per capita, which is below the national level of 10.8 per capita. Being below the national average may indicate unmet need. (pg. 34)
- The use of prescription medications is not equal across the population. Residents over 65 years old are more likely to use prescription medications than younger residents. Per capita prescriptions for the under 18, 19-64, and 65+ age groups were 4.9, and 22.5 respectively. (Table 20, pg. 36)
- Intensive clinical pharmacy services, such as monitoring patients who are on anticoagulation (Coumadin®) therapy has increased since 2000, but is still not widely available to all Montana residents. Currently, most of these extensive clinical pharmacy services are found primarily in federally-supported care sites, such as VA. These programs can contribute to the state-wide efforts to prevent morbidity and mortality due to heart disease, diabetes, cancer, and stroke. (pp. 37-38)
- Geographical barriers of distance and lack of transportation are a concern in a state the size of Montana. National estimates of 5 miles to pharmacy may be accurate within our towns and cities, but rural Montanans can expect to drive an average of 21.7 miles to a retail store if it is located in their county and an average of 74.1 miles if they must go out of the county. (pg. 21)

Historically, the populations most in need of health insurance and access to pharmacy services were the young, old, and the very poor. Recent expansion of public insurance programs such as CHIP and Medicare Part D have begun to improve access to pharmacy services, although there is still concern that older Montanans may not be able to pay the premiums or expenses associated with the new Part D. Hopefully, this will be mitigated with the passage of SB 324 in the 2005 Legislative session. The Big Sky Rx Program was implemented in January 2006, and provides

Part D monthly premium assistance up to \$33.11/mo to qualified Montana Medicare beneficiaries.

There is an emerging group of Montanans with unmet health needs - adults whose incomes are low and/or whose employers do not offer health insurance benefits (which are usually linked pharmacy benefits). These adults often earn too much to qualify for public insurance, but too little to purchase their own health insurance or afford pharmacy services as out-of-pocket expenses.

Recommendations for Increasing Access to Pharmacy Services and Pharmaceuticals:

- 1: Expand employer-based health insurance coverage of working adults.
- 2: Evaluate the feasibility of changing Medicaid eligibility Federal Poverty Level (FPL) criterion.
- 3: Support Montana pharmacies that serve rural and frontier populations.
- 4: Expand clinical pharmacy services in areas where dispensing services are already available.
- 5: Further explore barriers and possible solutions for identified pharmacy services access issues.

(To see the complete narrative for the recommendations, go to page 41)

Senate Bill 324 Update:

The 2005 Legislature passed Senate Bill 324, which created Big Sky Rx, a State of Montana Program to assist in paying Medicare Prescription Drug Plan premiums for eligible Montana residents. In order to qualify for Big Sky Rx, an individual must be enrolled in a Medicare Part D plan, be a Montana resident, and have annual family income less than 200% of the federal poverty level. Enrollment began in January 2006 and to date 5225 applications have been processed and 3115 individuals are receiving monthly premium payments up to \$33.11.

Plans are currently underway for a 2006 DPHHS educational resource website addressing the costs and benefits of various drugs. Resources will be provided for consumers and medical practitioners to compare the clinical effectiveness and cost comparisons between prescription drugs. Additionally, links to Pharmaceutical Patient Assistance Programs will be provided. Information will be added to the website as additional resources are discovered.

The Department has partnered with the Skaggs School of Pharmacy at The University of Montana and various stakeholders to formulate a program for the citizens of Montana to receive pharmacy consultation by licensed and credentialed pharmacists. The credentialing will be developed and conducted by the University with continuing education credits available at no charge to the pharmacists. Referrals to the program will be made by prescribers and pharmacists; clients may also self-refer. The Department will pay claims for procedure codes submitted upon completion of the counseling. The pharmacist will provide reporting to the patients' primary care provider (e.g., physician) and the program and follow-up will be conducted with clients. The program will track data to measure program effectiveness, volume of referrals, and potential cost savings for the client.

The bill also calls for a drug discount program, which is still in the research phase. Since this bill was written, most of the major drug manufacturers have been participating in Pharmacy Assistance Programs that provide free or discounted prescription drugs. Some manufacturers are reluctant to form a State partnership for drug rebates because they already provide other forms of drug assistance and are hesitant to duplicate efforts. Efforts in the drug discount area will continue.

I. Introduction

A. Mandate for an Evaluation of Pharmacy Access

This report was prepared as mandated by SB 324, Section 2.2, as passed by the 59th Montana Legislature. This report is part of an overall effort by SB 324 to assure Montana residents' access to pharmacy services. The Department of Public Health and Human Services (The Department) has been assigned the task of evaluating pharmacy access, and developing and administering programs to promote pharmacy access.

Section 2.2 of SB 324:

“Section 2. Department Administration – pharmacy access.

(1) The department shall administer the pharmacy access program. The department shall provide for outreach and enrollment in the pharmacy access program. The department shall integrate the enrollment and outreach procedures with other services provided to individuals and families eligible for other related programs.

(2) The department shall report on Montana’s prescription drug use, needs, and trends and submit a report with recommendations to the governor and to the legislature by September 15, 2006.” (SB 324)

B. Purpose of Report

The purpose of this report is to evaluate access to pharmacy services in Montana by examining the needs and existing resources in the state. The evaluation will result in recommendations to guide efforts to improve access to pharmacy services as needed.

C. Intended Audience

This report was prepared primarily for state legislators, the Governor, and the Department of Public Health and Human Services. It will be of interest to any individual or group involved in pharmacy and healthcare access in Montana.

D. Focus of the Report

To conduct a comprehensive assessment of pharmacy access in Montana, both pharmacy clinical services and pharmaceutical dispensing must be considered. While describing current resources

and use, extra effort will be made to identify where gaps in access exist, where access may be improved, and which needs may remain unmet.

E. Major Contributors to the Report

Many Montanans, agencies, and organizations contributed to this report during its preparation and review by sharing information, ideas, and suggestions.

People and Agencies that Provided Information for the Report (in alphabetical order):

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II. Methods

A. Scope of the Report

To include an analysis of the trends, the report timeframe was set from 2000 to 2006. This timeframe was chosen for two reasons: 1) Census information was obtained in 2000 and 2) it provides a baseline measurement of pharmacy services prior to the passage of the new 2001 Pharmacy Practice Act (MCA 37-7), which supported an expansion of pharmacy services for Montana residents.

The scope of the report was set broadly to include demographics that impact access to pharmacy services (e.g., health insurance), need for pharmacy services (e.g., prevalent chronic diseases), and barriers (e.g., geographical distances). The report also includes an assessment of pharmacy resources in the state including the number and location of pharmacies, pharmacy personnel, prescribers, and data related to pharmacy services (e.g., medication monitoring or collaborative practice agreements) and pharmaceuticals (e.g., prescription usage).

Where possible, data are presented at the county or reservation level to help further identify locations where needs or resources exist. When county data are not available, state or federal level data are used to estimate local access or need.

B. Use of Existing Data and Information

This report was prepared using data already collected by federal and state agencies, state organizations, and researchers. This approach was used because much of the data are already available from these sources. When possible, data from multiple sources were used to further validate the report findings and original sources of data were used. Although the data were already collected by the primary source, the process of identifying, reviewing, evaluating data quality, and compiling the data into a report required time.

C. Sources of Data

This report used publicly available data and reports from federal agencies of the US DHHS, national pharmacy and patient organizations, Montana agencies and organizations, and individual researchers. A full list of sources is in the Reference section of the report. (pp. 42-46)

D. Variables Used

Variables used in the report analysis fall into four main categories: demographics, prevalent chronic diseases, pharmacy resources, and pharmacy services.

Table 1. Variables Used in the Analysis by Major Category

Major Category	Variables	Purpose of variable
Demographic	Population by age and race Population by insurance coverage Population by economic status Distribution of the population by county	Describe population; plus groups with increased need or decreased access: medically indigent and older populations
Pharmacy Resources	Number, type, location of pharmacies Number, type, location of personnel Number of pharmacists certified Number of collaborative practice agreements Number of pharmacists with provider status Number of HIS, VA, CHC pharmacists and sites Number of mail-order pharmacies	Describe current resources for dispensing medications and providing clinical pharmacy services
Pharmacy Use	Number and type of prescriptions dispensed Patterns of prescription use in older residents Percent with co-payments vs. out of pocket	Describe actual use of dispensing services
Disease States	Most commonly used medications by age Chronic diseases by age groups	Prevalence of chronic diseases with a significant medication therapy component

III. Analysis

A. Overview

The focus of the analysis was descriptive and results were reported as frequencies or percents unless means or medians were more appropriate. Data available at the county level was shown on maps and in tables to allow for comparisons by the reader. When multiple sources of the same type of data were used, the data were combined to form a range of values unless the groups from which the data were originally measured differed greatly (e.g., population > 65 versus teenaged females).

B. Analysis of Trends

The timeframe used for analyzing trends was set from 2000 to 2006. For data that are not available for later years, some extrapolation based on prior percent changes or published forecasted estimates were used. Such extrapolations were noted in the results section or on the table or map. If appropriate, tests of statistical significance will be conducted on changes.

IV. Results

A. Population & Demographics

Demographic information is helpful in assessing pharmacy access and planning future programs because certain portions of the population will be eligible for federal programs and certain portions of the population will have greater need. Tables and maps showing the distribution and characteristics of the population at the county level are included in Appendices A and B, respectively.

1. Distribution

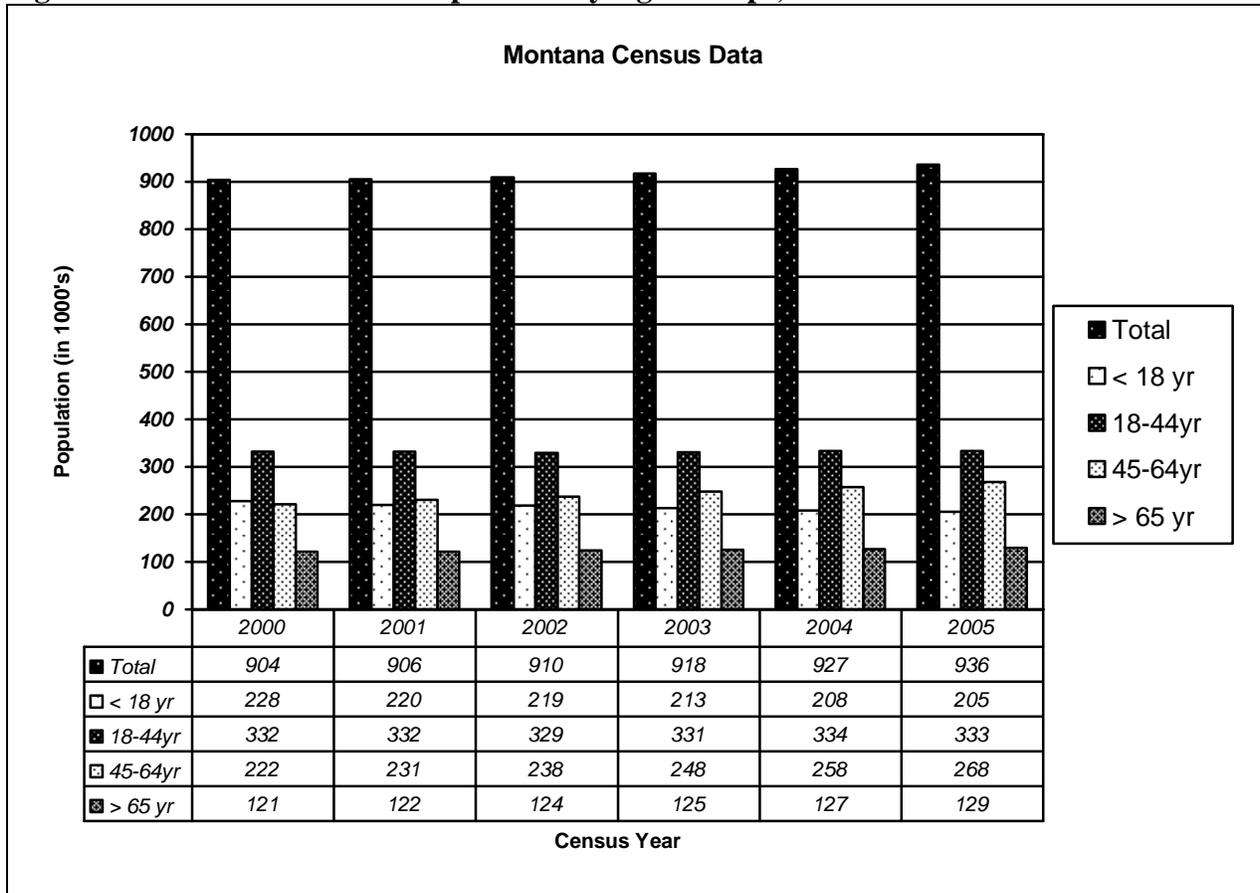
Since services often follow populations, it is important to understand where Montanans are living and how densely the populations are in the various parts of the state. The population of the state was measured at 903,510 in the 2000 census; as of July 1, 2005, the population was estimated to be 935,670, which is about a 3.6% increase. The population is distributed unevenly across 56 counties, and populations range from a high of 136,691 (14.6%) in Yellowstone County to a low of 470 (<1%) in Petroleum County.(1)

There is also an unequal distribution of the population across metropolitan areas. Nine counties in the state have 20,000 or more residents; the population of these nine counties accounts for 637,396 residents, which is two-thirds (68%) of the total state population. The nine counties are Yellowstone, Missoula, Flathead, Cascade, Gallatin, Lewis & Clark, Ravalli, Silver Bow, and Lake. The 10 most populated cities in Montana are Billings, Missoula, Great Falls, Bozeman, Butte, Helena, Kalispell, Havre, Anaconda, and Miles City; each is located in a different county. These 10 metropolitan areas account for one-third (38%) of the state's population.(1)

2. Age

Age is considered because older individuals are more likely to need pharmacy services by virtue of increased prevalence of disease and use of multiple medications. Since 2000, there has been a gradual increase in the number of Montanans aged 65 or older and a gradual decline in the number of Montanans under the age of 18. When viewed as a percentage of the total population, residents under 18 years have decreased from 25.2% in 2000 to 21.9% in 2005. The 65 years and older group increased slightly over the past five years from 13.4% in 2000 to 13.8% of the total population in 2005.(1,2) (See Figure 1)

Figure 1. Trends in Montana Population by Age Groups, 2000 to 2005



Sources: US Census Bureau (1,2)

While the percentage of Montana residents in the 65 year or older age group is estimated at 13.7%, the percentage of residents in this age group varies widely across the state. Percents range from a low of 8.6% in Gallatin County to 25.5% Sheridan County, a three-fold difference. These variations have implications for types of pharmacy services needed. The Table 2 shows the counties with the highest and lowest percentages of residents 65 years or older. (1,2)

Table 2. Number and Percentage of Residents 65 Years or Older by County, 2005

County	Total Population	Number 65 or Older	Percent 65 or older
Sheridan	3,524	897	25.5
Wibaux	951	227	23.9
Liberty	2,003	471	23.5
Daniels	1,836	428	23.3
Prairie	1,105	249	22.5
McCone	1,805	388	21.5
Fergus	11,551	2,367	20.5
Phillips	4,179	852	20.4
Garfield	1,199	242	20.2
Valley	7,143	1,428	20.0
Yellowstone	136,691	18,506	13.5
Flathead	83,172	10,875	13.1
Hill	16,304	2,085	12.8
Toole	5,031	640	12.7
Blaine	6,629	833	12.6
Lewis & Clark	58,449	7,266	12.4
Jefferson	11,170	1,196	10.7
Roosevelt	10,524	1,120	10.6
Missoula	100,086	10,405	10.4
Glacier	13,552	1,356	10.0
Big Horn	13,149	1,233	9.4
Rosebud	9,212	860	9.3
Gallatin	78,210	6,760	8.6

Source: US Census Bureau (1,3)

Another way to look at where the most need for services for residents aged 65 and older is to look at number of residents. Counties with a low percentage of the population in that age group may have a large total population and their actual need may be greater. Four of the five counties with a low percentage of older residents were in the top five counties with total numbers of residents 65 or older (See Table 3). Two of the counties, Garfield and Wibaux, were in the group of counties with the fewest number of older residents, but these folks accounted for over 20% of their populations. A table with information about county populations for each age group is located in Appendix A.

Table 3. Number of Residents 65 Years or Older by County, 2005 (Highest and Lowest Five Counties)

County	Total Population	Number 65 or older	Percent 65 or older
Yellowstone County**	136,691	18,506	13.5
Cascade County	79,569	11,875	14.9
Flathead County**	83,172	10,875	13.1
Missoula County**	100,086	10,405	10.4
Lewis & Clark County**	58,449	7,266	12.4
Garfield County***	1,199	242	20.2
Wibaux County***	951	227	23.9
Golden Valley County	1,159	186	16.0
Treasure County	689	123	17.9
Petroleum County	470	84	17.9

** County was listed in previous table as having a low percentage of older residents

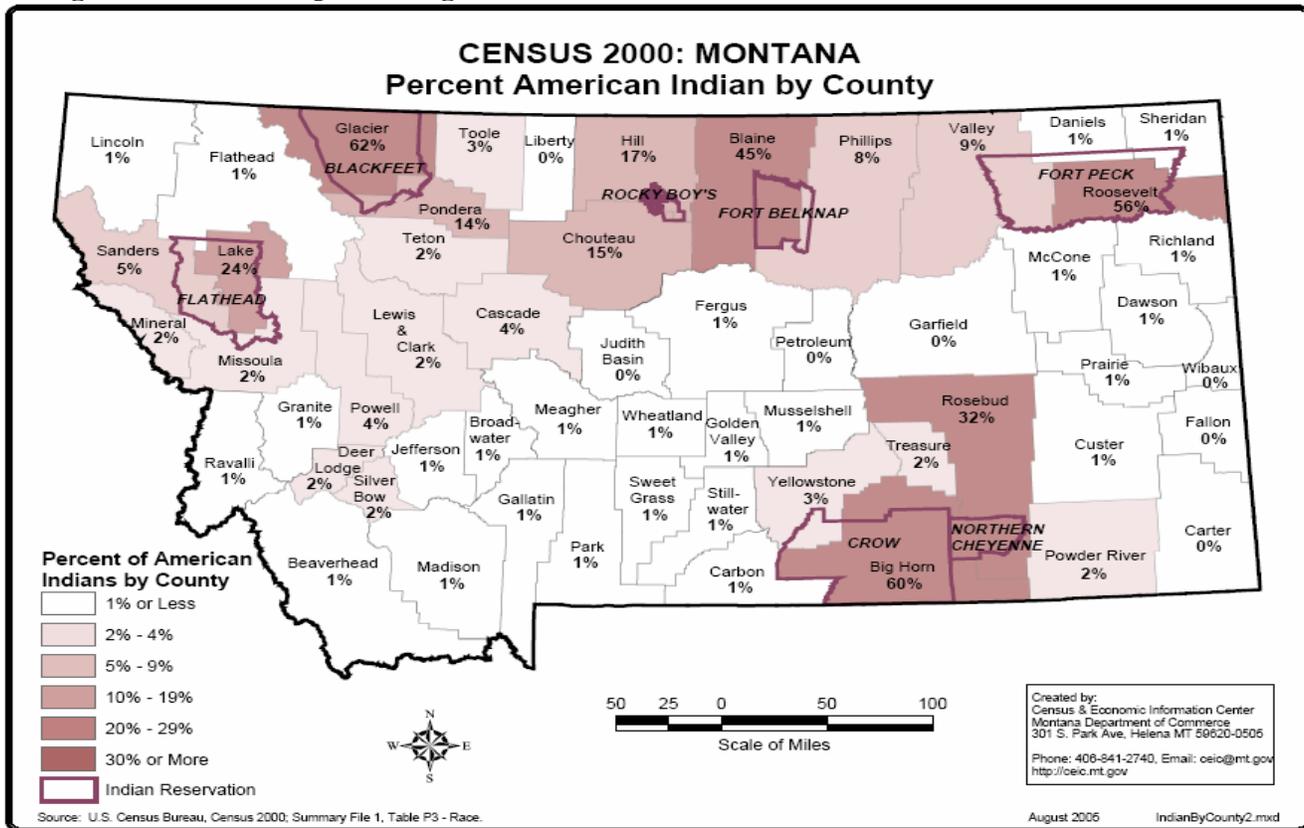
*** County was listed in previous table as having a high percentage of older residents

Source: US Census Bureau (1,3)

3. Race

Some diseases are more prevalent in some races, so a consideration of the race characteristics of the population was included. The state has been relatively stable in its mix of races with the state predominately populated by residents listed as White or Caucasian (92%). Native American residents continue to constitute the largest minority population in Montana at 7% with all other races comprising less than 1% of the total population. For that reason, subsequent analyses including race will focus only on the White and Native American populations.(4)

Figure 2. CEIC Map Showing Location of Native American Residents



Source: Census and Economic Information Center(CEIC)(5) Used with permission.

The number of Native American residing in Montana was 66,461 in 2000 and estimated at 69,866 for 2005.(4) As the Census and Economic Information Center (CEIC) 2000 Census map (Figure 2) shows, most of the Native American residents live on or near one of seven reservations located around the state. (5) The map also shows how reservation and county lines vary and may impact efforts to delineate where some Native American residents are counted in population estimates.

Census data through 2000 show the percentage of Native Americans living off reservations has remained steady at the one-third level (35%) for several decades.(6) Where Native Americans reside is an important issue in assessing access to pharmacy services since it may affect eligibility for Indian Health Service (IHS) programs. Because one criterion to qualify for IHS service is residence on tribal lands including reservations, the IHS estimated 17.1% (10,169 out of 56,568) tribal members were living in “non-service” areas in 2000, which is half of the “Off Reservation” population estimates.(7)

Table 4. Number (Percent) of Native Americans Living On or Off Reservations, 2000**

Number	2000 Census
Total Native Americans in Montana	56,068 (6.2%)
Native Americans living OFF reservations	19,609 (35.0%)
Native Americans living ON reservations	36,459 (65.0%)

**These estimates are higher than the IHS estimates because some Native Americans live on tribal lands that are not on the reservations, which makes them eligible for IHS services.

Source: *Census and Economic Information Center, Montana Department of Commerce (5)*

Urban versus Rural Dwelling Native Americans

Because one of the criteria for eligibility for IHS services is residency on tribal lands, concern has been raised about the healthcare access for Native Americans living in urban areas.(8) Data from the CEIC shows three of the seven reservations have towns large enough to qualify for the federal definition of urban (i.e., 2,500 or more densely settled residents), so not all urban-dwelling Native Americans are living outside of access areas.(5) Table 5 shows counties with the highest and lowest numbers of Native Americans living in urban areas.

Table 5. Number of Urban Dwelling Native American Residents by County, 2000

County	Urban Dwelling Native Americans
Glacier	4,847
Yellowstone	4,621
Roosevelt	4,306
Cascade	4,033
Missoula	2,310
Big Horn	1,256
Lewis and Clark	1,210
Hill	1,154
Silver Bow	929
Lake	825
TOTAL in Montana, 2000**	28,925

** 31 counties reported no urban dwelling Native American residents

Source: *CEIC 2000 Census Bureau (5)*

4. Military Personnel – active or retired

The number (percent) of Montanans who are active or retired military should be considered in an evaluation of pharmacy services access because these residents may be eligible for the Veterans' Affairs healthcare programs, which include prescription and clinical pharmacy services. In 2000, just over 16% of the state population was civilian veterans (108,476); by 2005, this population numbered around 133,800 or 14.3% percent.(9) In 2000, there were approximately 170,000 dependents eligible for VA services.(29) The percentage of civilian veterans varies by county from as low as 11% and as high as 22%.(9) Table 6 shows those counties with the highest and lowest percentages.

Table 6. Counties with Highest and Lowest Percentage of Civilian Veterans, 2000

County	Percent of Civilian Veterans	Number of Civilian Veterans
Sanders	22%	1,699
Mineral	21%	630
Powell	21%	1,174
Cascade	21%	11,658
Lincoln	20%	2,828
Ravalli	20%	5,254
Richland	12%	878
Powder River	12%	164
Gallatin	12%	6,139
Liberty	11%	173
Carter	11%	106

Source: Veterans' Affairs, Census 2000 data (9)

Because counties vary in total population, the percentages in Table 6 do not indicate the counties with the highest raw numbers of civilian veterans. Table 7 shows the counties with the highest and lowest number of veterans. Only two counties appear in both tables, Cascade for high numbers and percentages; Carter for low numbers and percentages.

Table 7. Counties with the Highest and Lowest Number of Civilian Veterans, 2000

County	Number of Civilian Veterans	Percent of Civilian Veterans
Yellowstone	14,809	15%
Cascade	11,658	21%
Missoula	10,263	14%
Flathead	9,441	17%
Lewis and Clark	7,067	17%
Golden Valley	113	15%
Treasure	106	17%
Carter	106	11%
Wibaux	101	13%
Petroleum	58	16%

Source: Veterans' Affairs, Census 2000 data (9)

The National Veteran Survey explored general health care coverage for this group and found 26% to 40.4% had private insurance for those under 65 and those 65 and older, respectively. Up to one-third (34.8%) of the veterans under 65 years old did not mention having any health insurance coverage compared to just 2.7% of those who are 65 or older.(10)

5. Socioeconomic Status

In 2003, approximately 14.2% of Montanans were living below the federal poverty level.(11) The percent of the population below poverty ranged from 9.2% in Jefferson County up to 26.2% in Roosevelt.(12) The number of residents living below federal poverty rates has implication for

access to low-income programs as well as ability to afford health insurance or out-of-pocket health care costs such as prescriptions.

The Federal Poverty Level (or FPL) is calculated using household income and number of people residing in the household. According to the 2006 Poverty Guidelines, a single person is designated as being below the FPL if he/she earns less than \$9,800 in a year. In a household with four people, an income total of \$20,000 a year would be at 100% of the FPL. The Poverty Guidelines provide information for determining if a household is at 100%, 150%, 200%, and 250% of the Federal Poverty Level. A household with four people at the 250% FPL would earn about \$50,000 per year.(13) Table 8 shows the current levels.

Table 8. Federal Poverty Level Guidelines, 2006

Household Size	Percent Federal Poverty Level			
	100% (= FPL)	150% (1.5xFPL)	200% (2xFPL)	250%(2.5xFPL)
1	9,800	14,700	19,600	24,500
2	13,200	19,800	26,400	33,000
3	16,600	24,900	33,200	41,500
4	20,000	30,000	40,000	50,000
5	23,400	35,100	46,800	58,500
6	26,800	40,200	53,600	67,000
7	30,200	45,300	60,400	75,500
8	33,600	50,400	67,200	84,000

Source: DHHS, 2006 Poverty Guidelines (13)

Table 9. Counties with the Highest and Lowest Number (Percent) of Residents living at or below Federal Poverty Level (100% FPL), 2003 Estimate

County	Number	Percent
Roosevelt County	2,737	26.2
Glacier County	3,429	25.6
Big Horn County	3,087	24.0
Blaine County	1,476	22.2
Wheatland County	381	20.1
Powder River County	194	11.0
Sweet Grass County	375	10.2
Fallon County	267	9.7
Stillwater County	787	9.4
Jefferson County	986	9.2

Source: US Census Bureau, Small Area Income and Poverty Estimates, 2003 (12)

6. Insurance Coverage

Health insurance coverage is closely linked to pharmacy benefits and increased access to pharmacy services, so these statistics are relevant to this report. A study by the Kaiser Family Foundation shows that about 98% of health insurance plans offered by employers have some form of pharmacy benefit. This implies that residents with health insurance will most likely have some coverage to reduce the out-of-pocket expenses for medications. (14)

The percent of the population in Montana that is uninsured is 19%, which means almost one in five residents do not have either private or public health insurance.(15) This implies that one in five residents is also lacking pharmacy benefits that would reduce out-of-pocket expenses.

A common misconception is that only the unemployed do not have health insurance. In their January 2006 primer about uninsured Americans, the Kaiser Commission on Medicaid and the Uninsured (KCMU) described the gap in coverage seen with residents who are under 65 years of age. The group in greatest need of assistance are adults without children who are in families with one wage earner whose income is in the low to moderately low range.(16)

Most chronic diseases appear most frequently in the older population, but Diabetes mellitus (i.e., Type 2 or adult-onset diabetes) is an exception. Adults in the 45 to 64 years age group are diagnosed with diabetes at the same rate as Montanans who are 65 or older.(17)

In Montana, the most frequent source of insurance coverage in 2003-04 was through the employer (45%) followed by Medicare (14%), Medicaid (12%), Individual private (8%), and public insurance other than Medicare or Medicaid (2%).(17) The number of uninsured Montanans is now 175,820, which is 19% (or one-in-five) of the population.(15) Table 10 shows the counties with the highest and lowest numbers of residents who are uninsured to illustrate the absolute magnitude of the problem. All other counties fall somewhere in between. The data are from 2000, but it is likely that the relative ranks are similar today.

Table 10. Counties with the Highest and Lowest Number of Uninsured, All Ages, 2000

County	Number Uninsured	Percent Uninsured
Yellowstone	17,770	13.8
Missoula	14,069	14.9
Cascade	11,727	15.0
Flathead	11,102	14.7
Gallatin	9,074	13.5
Garfield	243	19.4
Prairie	228	19.0
Wibaux	190	18.8
Treasure	143	17.5
Petroleum	141	28.5
Montana	142,846	16.0

Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program, 2000 (15)

Since the counties with the highest numbers of uninsured may be more heavily populated than rural or frontier counties, it is also informative to look at the data as a percent of the county population. In 2000, more than 20% of the residents in 19 counties were uninsured.(15) Table 11 shows only the five counties with the highest and lowest percentages. Note how less populated counties, such as Petroleum have the lowest number, but the highest percentage of uninsured residents.

Table 11. Counties with the Highest and Lowest Percent of Uninsured, All Ages, 2000

County	Percent Uninsured	Number Uninsured
Petroleum	28.5	141
Glacier	27.4	3,578
Big Horn	26.5	3,404
Roosevelt	26.5	2,797
Meagher	25.3	491
		
Dawson	13.6	1,162
Gallatin	13.5	9,074
Jefferson	12.4	1,246
Lewis & Clark	11.4	6,333
Fallon	10.9	296
Montana	16.0	142,846

Source: U.S. Census Bureau, Small Area Health Insurance Estimates Program, 2000 (15)

Trends in Health Insurance Coverage. Table 12 shows changes in health insurance coverage over the past five years by age group and type. There has been an overall decline in private insurance, which has been mitigated somewhat by increases in public insurance for residents under 18 years (i.e., CHIP). The overall trend is towards decreased coverage with one-in-five Montanans lacking health insurance in 2005.(15) The group hardest hit by the declining levels of private insurance is adults between 19-64 years; one-in-four of these Montanans (24.9%) did not have any form of insurance coverage in the past year. Declining enrollment in employment-based programs is a contributing factor. Montana adults between 19-64 years old were three times more likely to be uninsured than children under 18 years, and for adults between 19-64 years whose incomes were below 100% FPL, the percent of individuals without insurance was 44% in 2004. Both of these statistics parallel national trends.(17-19)

Table 12: Number (Percent) of Health Insurance Coverage by Age in 2001 and 2005 (in 1000s)

	All Residents		Under 18		19-64 Years		65 and older	
	2001	2005	2001	2005	2001	2005	2001	2005
Any Type	771 (86.4)	737 (80.9)	194 (87.8)	182 (84.6)	445 (82.7)	426 (75.1)	132 (100)	130 (100)
Private	630 (70.6)	597 (65.5)	149 (67.3)	128 (59.3)	386 (71.7)	377 (64.5)	96 (72.4)	92 (64.5)
Medicaid*	91 (10.2)	110 (12.1)	35 (16)	63 (29.3)	46 (8.6)	47 (8.3)	10 (7.6)	9 (6.9)
Medicare	148 (16.6)	146 (15)	0	0	19 (3.5)	20 (3.5)	130 (98.1)	125 (96.7)
Military	58 (6.5)	47 (5.2)	9 (4.2)	10 (4.5)	37 (6.9)	28 (4.9)	12 (9.1)	9 (7)
Other Public (2004 data)**	----	20 (2)	----	2.4 (1)	----	27 (5)	----	----
No coverage in past year	121 (13.6)	174 (19.1)	27 (12.2)	33 (15.4)	94 (17.4)	141 (24.9)	0	0

* Sources do not indicate where CHIP data are included.

** Public sources of coverage other than Medicaid, Medicare or Military

Sources: US Census Bureau Table HI05(18), CMS-21(19), and KFF State Health Facts (17)

Children enrolled in the state's CHIP program increased from 8,300 in 2000 to 15,300 in 2004 (months not specified).(19) Like Medicaid, enrollment varies month to month, with December 2004 enrollment listed as 10,929 by another source.(17)

Employer Offered Insurance

The number of employer health plans using tiered co-payment or cost sharing systems for medications increased from 76% to 90% in 2000 and 2005, respectively. The tiers are tied to medication formularies or preferred drug lists, where the lowest cost medications for the patient are generic products (average co-pay is around \$10; average cost sharing is 25%). Medications that are not preferred have even higher patient payments (average non-preferred co-pay is \$35; average cost-sharing is 33%). Each year, more plans are adding a fourth tier that targets very expensive or lifestyle medications – the average co-pay is \$74.(16)

In Montana, 45% of private employers offer health insurance benefits.(17) Availability of benefits varies by size of the business with 36.3% of employers with fewer than 50 employees providing health insurance compared to 94.7% of employers with 50 or more employees.(17)

To contain costs related to pharmaceuticals, many health insurance plans and pharmacy benefit managers have excluded coverage for some high-cost medications through multiple tier systems and/or increased patient cost-sharing fees for any given tier.(16) Since 2000, the percent of individuals with employer-based health insurance whose pharmacy benefits have added third and fourth copayment tiers has almost tripled (27% to 74%). The additional tiers represent added financial burden on the patient. The copayments for each tier have also increased between 50 to 100% since 2000.(20) The average monthly out-of-pocket expenses for employees with 3 or 4 tiers was \$97.60 compared to \$47.40 for two tiers.(21)

See Table 13 for comparisons between 2000 and 2005 benefits. So, even those workers who have health insurance are seeing more out-of-pocket costs for their medications than they did five years ago.(14)

Table 13. Changes in Pharmacy Benefits

	2000	2005
Increased Patient Cost Sharing		
Copay for generic drugs	\$7	\$10
Copay for preferred drugs	\$13	\$22
Copay for Nonpreferred drugs	\$17	\$35
Copay for Fourth tier drug (new category for expensive or lifestyle drugs)	n/a (\$48 in 2004)	\$74

Source: Kaiser Family Foundation/ HRET Employer Health Benefits 2005 Annual Survey(14)

Health Insurance and Employment Status.

Data from 2000 show there is no correlation between unemployment and lack of health insurance. In 2000, the percent of adults in the civilian labor force who were unemployed ranged from a low of 0.5% in Carter County to a high of 15.7% in Roosevelt County. By comparison, the percent of adults who were not insured in those counties were 23.5% and 27%, respectively. The percent of adults who were uninsured ranged from a low of 10.4% in Fallon County up to 8.1% in Glacier County.(15) Another source indicates that 20% of families with at least one person working fulltime were uninsured.(17)

7. Disease Prevalence

The prevalence of chronic diseases and the most frequently used prescription medications will help describe pharmacy service needs for both pharmaceuticals and therapy monitoring services. In 2002-03, the top five categories of medications recommended by physicians across the U.S., which included both prescription and nonprescription products, were non-steroidal pain relievers (or NSAIDs such as ibuprofen), antidepressants, antihistamines for allergies, asthma medications, and other non-narcotic pain relievers.(22)

In Montana, hospital discharge data provide some insight into the prevalence of diseases and illness across the population. The top five most frequent types of medical (not surgical or obstetrical) cases in 2003-04 were psychoses, pneumonia, heart failure, digestive disorders, and chronic obstructive pulmonary disease (COPD).(23) The Montana Department of Public Health and Human Services (DPHHS) has initiated programs for chronic diseases related to cardiovascular health (including stroke, heart attacks, and high lipids/cholesterol), breast and cervical cancer, diabetes, and tobacco cessation.(24) The DPHHS also posts County Health Profiles on its website; these profiles include lists of the three most frequent diagnoses and causes of death for each county. (25)

Table 14: Five Most Prevalent Causes of Death Due to Chronic Disease in Montana and US, 2001**

Chronic Disease	Montana per 100,000	US per 100,000
Heart Disease	197.9	246.8
Cancer (all types)	198.8	195.6
Stroke	57.7	57.7
Chronic Lower Respiratory Disease	59.1	43.6
Diabetes mellitus	23.2	25.2

** These chronic diseases were the cause of two-thirds of all deaths in the US in 2001.

Source: CDC 2004 (26)

As shown in Table 14, heart disease, stroke, cancer, respiratory disease, and diabetes are leading causes of death in the United States.(26) In 2002, there were 36,000 Montana adults diagnosed with Diabetes mellitus; the 45-64 and 65+ age groups each had 15,000 (41%) of the cases. In 2003, the prevalences of deaths due to stroke and heart disease were 55.1 and 190.7, respectively. Stroke occurred evenly across gender and race groups, but heart disease prevalence was much higher in Native American population (231.2/100,000) compared to the White population (189/100,000).(17) These top leading causes of death parallel those found in the Native American population. In 2002, the top five causes of death in Native Americans were heart disease, cancer, unintentional injuries, diabetes, and stroke.(26)

Other conditions and risk behaviors that ultimately affect the health of Montanans include low vaccination rates for 65+ residents for influenza and pneumococcal disease, which were 69.5% and 69.9%, respectively, in 2005. Asthma occurred with equivalent frequency across age groups and averaged at 12.6% of all adults in 2005. In 2004, there were 353 cases of AIDS in Montana. In 2004, one-in-three adult Montanans experienced poor mental health. This was not equally distributed across races with 32% of Whites and 43% of Native Americans reporting mental health difficulties.(17)

Lifestyle risks for developing the chronic diseases that are the major causes of death are tobacco use and obesity; smoking has been linked to cancer and chronic pulmonary conditions while obesity is a known risk factor for developing cardiovascular disease and diabetes. One-in-five Montana residents (19.2%) still used tobacco in 2005 despite over half of these smokers trying to quit the previous year (52.3% attempted to quit in 2004). Tobacco use varies by race with 17.8% of Whites and 39.9% of Native Americans reporting tobacco use. Because Native Americans may be using tobacco for occasional ceremonial purposes, the actual risk associated with its use may not be as high as the statistics would seem to indicate. Montanans are also getting bigger. In 2002, 54.6% of the population was either overweight or obese. Obesity alone was reported for one-in-five Montanans in 2001.(17)

B. Pharmacies

1. Physical Locations and Access Considerations

To evaluate access to pharmacy services, information about the number, location, and type of pharmacies physically located within the state's borders is needed. In addition, access to sources of information and medications from sites external to Montana needs to be considered.

Community-based Retail Stores in Montana:

In Montana, there are currently 233 community-based retail pharmacies in Montana. Three of these had not renewed their licenses and one was on probation when licensure was measured in late July, so the data indicate there are 229 licensed retail pharmacies in the state.(27) These pharmacies physically exist within the borders of the state and are available to any resident. Community-based retail pharmacies may be divided into several types including those that are independently owned, chain stores, grocery-store based, or located in general merchandising stores. The distribution of both retail and institutional pharmacies by county is shown in the Map in Appendix B.

According to the NACDS Chain Pharmacy Industry Profile, there is a community pharmacy within 5 miles of nearly all Americans (28); however, in Montana, the distances are much farther for those community without a local retail store. One estimate of average distance to a pharmacy in another town within the same county is 21.7 miles. When no retail pharmacies are located within the county, the mean travel distance is 74.1 miles. (See page 39 for details about the communities used to calculate these mean distances.)

Hospital and Institutional Pharmacies:

There are an additional 89 licensed institutional (e.g., hospital, prison) based pharmacies in Montana.(27) These pharmacies are not generally open to the public for the purpose of filling prescriptions; rather, they exist to provide medications and care for their own hospitalized or institutionalized patients. These pharmacies may fill prescriptions for patients leaving their facilities or long term residents of their sites. Most of the state's 34 Critical Access Hospitals - small rural institutions that serve local residents - do not have their own on-site, in-house pharmacies and depend on the local community pharmacist or pharmacies in larger hospitals to provide medications and care for their inpatient population.

August 2006 licensing information indicates there now are 10 counties in Montana that do not have a retail pharmacy located within their borders. This is up from eight in 2000.(27) The counties without at least one retail pharmacy within its borders are Carter, Golden Valley, Granite, Judith Basin, McCone, Petroleum, Prairie, Treasure, Wheatland, and Wibaux. Three of these counties (Judith Basin, Treasure, and Wibaux) also lack an institutional pharmacy.(27) Table 15 on the next two pages, shows the number of retail and institutional pharmacies by county in 2000 and 2006.

Table 15. Number of Retail and Institutional Pharmacies in 2000 and 2006 by County

County	Retail Pharmacies		Institutional Pharmacies	
	2000*	2006*	2000*	2006*
Beaverhead	2	2	2	1
Big Horn	1	1	2	1
Blaine	2	1	0	0
Broadwater	1	1	1	1
Carbon	2	1	1	1
Carter	0	0	1	1
Cascade	19	19	3	4
Chouteau	1	1	2	2
Custer	4	3	2	2
Daniels	1	1	1	1
Dawson	3	2	4	4
Deerlodge	3	3	1	2
Fallon	2	2	1	1
Fergus	3	4	2	2
Flathead	19	26	6	5
Gallatin	19	17	3	3
Garfield	1	1	1	1
Glacier	2	2	1	1
Golden Valley	0	0	0	0
Granite	0	0	1	1
Hill	3	4	1	1
Jefferson	1	1	0	1
Judith Basin	0	0	0	0
Lake	7	8	2	2
Lewis & Clark	11	10	3	3
Liberty	2	1	1	1
Lincoln	5	7	1	1
Madison	3	2	2	2
McCone	0	0	1	1
Meagher	1	1	1	1
Mineral	1	1	1	1
Missoula	23	26	6	7
Musselshell	2	1	1	0
Park	4	5	1	1
Petroleum	0	0	0	0
Phillips	2	1	1	1
Pondera	2	2	1	1
Powder	1	1	0	0
Powell	2	2	2	2
Prairie	1	0	1	1
Ravalli	9	12	1	1
Richland	3	4	1	1

Table 13 continued...

Number of Retail and Institutional Pharmacies in 2000 and 2006 by County

County	Retail Pharmacies		Institutional Pharmacies	
	2000*	2006*	2000**	2006**
Roosevelt	3	2	3	3
Rosebud	2	1	1	1
Sanders	2	2	1	1
Sheridan	2	1	1	1
Silver Bow	9	7	3	5
Stillwater	3	1	1	1
Sweet Grass	1	1	1	1
Teton	2	2	1	1
Toole	2	2	2	2
Treasure	0	0	0	0
Valley	4	3	2	1
Wheatland	1	0	1	2
Wibaux	0	0	0	0
Yellowstone	29	31	8	10
Montana (total)	228	229#	88	92
Counties Without Retail Rx Site	8	10	----	----

BOLDED COUNTY NAME indicates a county without any retail pharmacy sites in 2006

* Retail pharmacies include chain, independent, grocery-store based, general merchandiser-based stores.

** Institutional pharmacies include hospital-based pharmacies, inpatient treatment centers, prison, and Warm Springs.

Totals differ slightly from Board of Pharmacy total of 233 due to several sites receiving more than one license to provide different types of services (e.g., retail and mail order)

Source: Montana Board of Pharmacy 2006(23) and 2000 lists of pharmacy licensees(27)

Retail Pharmacies by Town or City

Because counties in Montana are geographically large, it may be easier to understand access to pharmacy services by looking directly at the towns and communities. In general, more communities lost retail pharmacy access (22 lost compared to 14 gained), and 40 communities now have only one retail pharmacy left in their town.(27)

The following 14 communities had an **INCREASE** in the number of retail pharmacies in 2006 as compared to 2000.(27) These communities tend to be in or near large populations or in areas experiencing population growth.

Billings	Lewistown	Sidney
Boulder	Libby	Stevensville
Hamilton	Livingston	Victor
Havre	Missoula	Whitefish
Kalispell	Polson	

The following 22 communities had a **DECREASE** in the number of retail pharmacies in 2006 compared to 2000. Seven of these towns no longer have a local retail pharmacy – they are indicated by ** after their names.(27)

Absaroke**	Glasgow	Poplar**
Arlee**	Glendive	Red Lodge
Bozeman	Harlem	Roundup
Butte	Harlowton**	Sheridan**
Chester	Helena	Terry**
Colstrip**	Malta	West Yellowstone
Columbus	Miles City	
Eureka	Plentywood	

The following 40 communities currently have only **ONE** retail pharmacy, which puts them at risk for losing services if the pharmacies close. Some of these communities are near larger towns or cities with retail pharmacies, but others are quite remote. There are institutional pharmacies in some of the communities, but these tend to provide pharmacy services only for their own clients and are not open to the public.(23)

Big Sky	Ennis	Lolo	Thompson Falls
Big Timber	Eureka	Malta	Three Forks
Bigfork	Fairfield	Plains	Townsend
Broadus	Fairview	Plentywood	Troy
Chester	Florence	Red Lodge	Twin Bridges
Chinook	Forsyth	Roundup	Victor
Choteau	Fort Benton	Saint Ignatius	West Yellowstone
Columbus	Gardiner	Scobey	White Sulphur Springs
Corvallis	Hardin	Seeley Lake	Whitehall
Culbertson	Jordan	Superior	Wolf Point

Federally Supported Sites Located in the State:

IHS Pharmacies:

Native American (NA) residents of the state have access to pharmacy services provided by the Indian Health Service (IHS). The two main types of access are reservation-based pharmacies or clinics and urban clinics or centers. There are 14 care sites located on the seven reservations in Montana. They are open to all members of the tribe who reside on tribal lands and are registered. There are also five urban centers for NA residents who do not reside on a reservation; some of these sites offer clinical services while the rest offer referral services that provide Native Americans with an entrée into the healthcare system. The 2004 Annual Highlights for the Billings area states the office serves over 69,560 users at three hospitals, nine health centers, and six health stations in addition to other health clinics. These numbers include one Wyoming reservation (Wind River), so they overestimate Montana data.(29)

According to a staff member at the Missoula Indian Center (MIC), the urban centers and reservation-based services have service areas that blanket the state and eligibility for care is dependent on being registered with a tribe, not place of residence. For example, the service area for MIC covers registered Native Americans living as far south as the Bitterroot Valley, about half way to Bozeman, to the western border of the state and up to the Flathead Indian Reservation. She has observed that the two biggest barriers the urban and rural patients face are 1) long travel distances required for obtaining certain services and 2) amount of paperwork required to receive a referral for care. The IHS does provide support for travel, including reimbursement and actual transportation, but some services may require a referral to the hospital on the Crow Reservation, which is about 6 hours away. (personal communication, Dana Kingfisher, September 2006)

Services, including pharmacy services, may be referred to local providers or the Community Health Center through contract services, but other services may also require the patient to travel to clinics or the hospital on a reservation. There are some surgical procedures that may require travel over 200 miles away.(personal communication, Dana Kingfisher, September, 2006) The MIC website describes services aimed as preventive care and treatment of conditions that have a high prevalence in the Native American population (e.g., Diabetes).(30)

The Billings Areas IHS website indicates there are direct pharmacy services offered on one reservation, Flathead. All other sites are served through contractual arrangements. Three of the service sites have a hospital (Blackfeet, Crow, Fort Belknap), which are located in Northern and Central Montana. There are five urban programs in Montana (Billings, Butte, Great Falls, Helena, and Missoula). The sites in Billings, Great Falls, and Helena provide primary health care services; the sites in Missoula and Butte provide referrals and transportation services. The IHS programs that focus on the major health areas with potential pharmacy access components include diabetes, chemical dependencies including tobacco, prenatal and infant care, hypertension, and immunization.(31)

VA Pharmacies:

The Veterans Affairs (VA) healthcare service in Montana consists of 11 healthcare clinics for outpatient care; four of these have at least one pharmacist on site to provide clinical services. Medications are provided via a mail order service and, if urgent, through contracted services with a local pharmacy or one-day mail from Fort Harrison. Access to VA services is limited to members of the armed forces and their families. The 2001 National Survey of Veterans, which explored how veterans were using VA health services, found 10% used only the VA system to obtain their prescriptions; 60% used all non-VA sources, and 6.3% used both. Almost one-in-four (23.3%) did not seek their prescriptions from VA or non-VA sources. It is not clear whether they simply did not fill them or if they had an alternative source that was not measured.(10)

About 27% (27,000 in 2000) of the Montana veterans are actually enrolled in the healthcare system, which includes one VA hospital near Helena, a nursing home in Miles City, and 11 outpatient clinics across the state. The most underserved group within this population is the 18,000 homeless veterans (as of 1999 data)(32) who are hesitant or unable to sign up for care at one of the clinic sites.(personal communication, Teresa Bell)

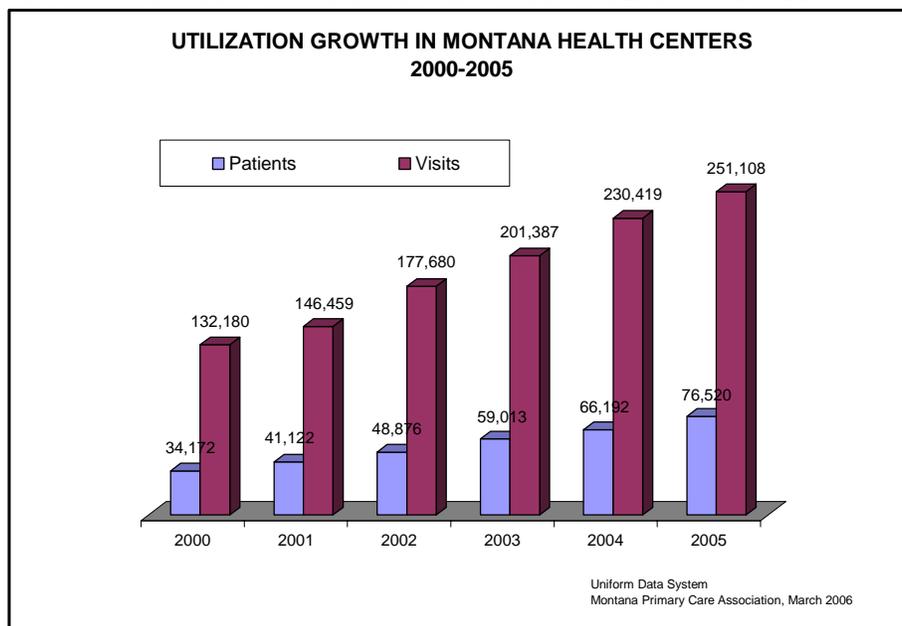
Community Health Centers:

These sites are federally and locally funded to provide programs for the medically indigent – those who are uninsured or underinsured – regardless of race, age, and military service status.

“All Health Center clinics in Montana, work with their patients to provide the most cost efficient prescriptions. They do this by emphasizing preventive health, using generic prescriptions when appropriate, and as their resources allow: using a combination of samples, pharmaceutical assistance programs, health center pharmacy and contracts for lower cost 340 B medications in a community pharmacy.” (Paula Block, MtPCA, personal correspondence)

There are 11 Community Health Centers (CHCs) in Montana plus seven satellite clinics for a total of 18 care sites. In July 2006, pharmacy assistance was offered by all CHCs through either an on-site pharmacy (n=4) or a contract with a local pharmacy (n=7). There are an additional eight migrant care sites (one program site with seven satellites) that provide care. Healthcare for the Homeless programs is also offered by four of the CHCs.(33)

Figure 3. Growth in Number of Encounters and Patients Seen in CHCs



Source: Montana Primary Care Association (33)

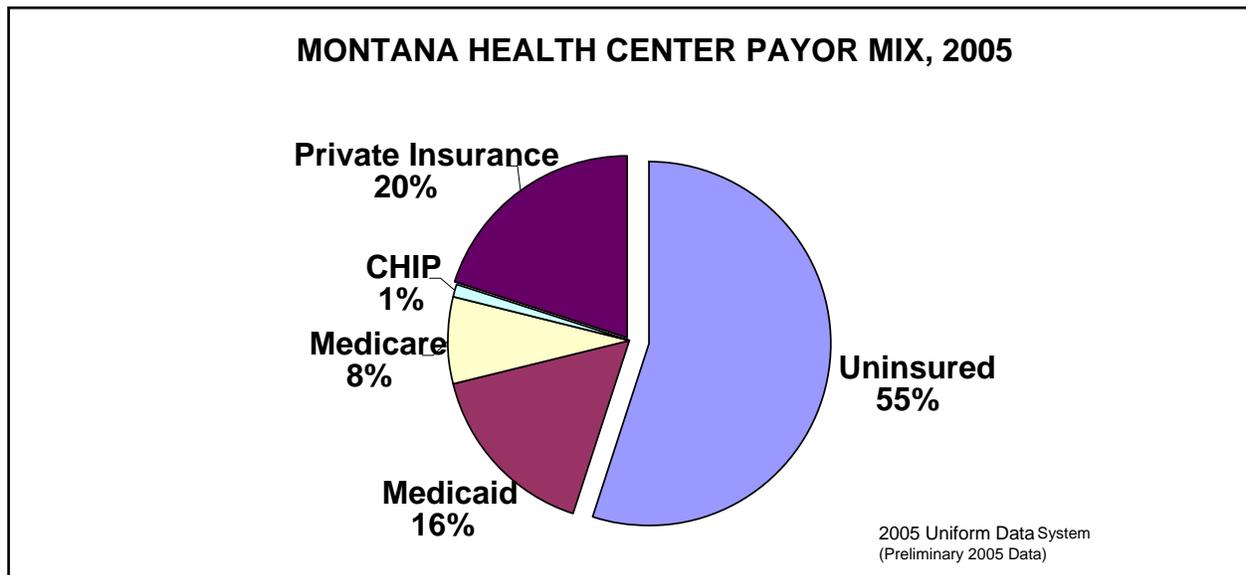
As of July 2006, there were 76,520 CHC clients. The Migrant and Healthcare for the Homeless programs served 6,022 and 4,288 clients, which are included in the CHC count. As Figure 3 shows, the number of patients seen by the CHCs in Montana has been steadily increasing over the past five years.(33) This may be due in part to the increasing number of residents who do not have private or public health insurance.

Table 16. Number (%) of CHC Patients by Age Group, 2005

Age group	Number (%)
< 5 yr	3,826 (5%)
5-19 yr	13,774 (18%)
20-44 yr	34,434 (45%)
45-64 yr	19,130 (25%)
>65 yr	5,356 (7%)
TOTAL	76,520 (100%)

Source: Montana Primary Care Association (33)

Overall, the majority of the patients seen in the CHCs are uninsured (55%), but others may have public insurance (25%) or private insurance (20%). Almost two-thirds (61%) of the patients seen in CHCs have incomes that are below 100% of the Federal Poverty Level.(33) The payor mix does vary from CHC to CHC.(33)



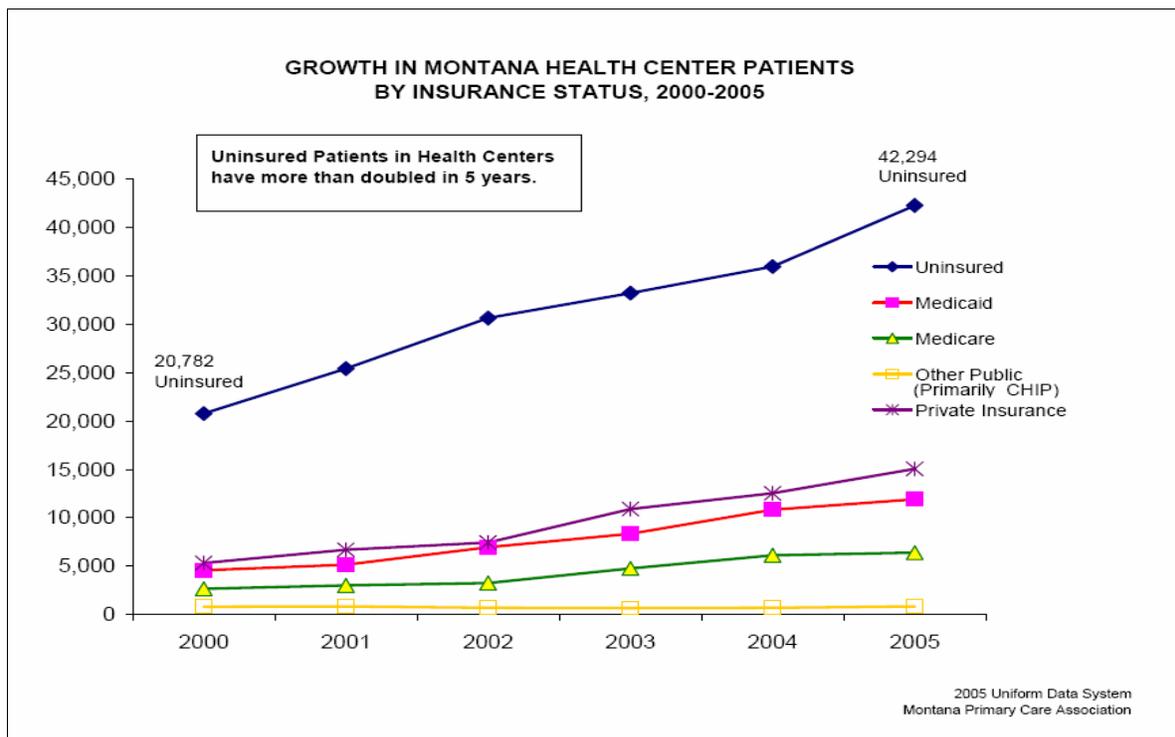
Source: Montana Primary Care Association (33)

Services provided through prescriptions are usually charged according to a sliding fee scale that is based on the patient’s family income and size. Although each CHC sets its own fees and sliding scale criteria for the services it offers, the prescription fees tend to range from several dollars for those patients who are homeless or whose income is below 100% of the Federal Poverty Level (FPL) up to a fee based on cost of the medication plus a dispensing fee, which could be more than \$20 per prescription.(personal communication, Dr. Kendra Keeley, Missoula, August 2006) The pharmacy services that use 340B-priced medication must be “closed shop,” which means only patients who are registered as clients at the Center are allowed to fill their prescriptions or receive pharmacy clinical services. Some CHC pharmacies carry more than one inventory, which allows them to serve others patients as well. The CHCs also use Medication Assistance Programs (MAPs) for their patients – these programs are offered by the manufacturers to provide low-income patients with access to their products. Samples of medications are also used to supplement therapies, but they are often items that are new products

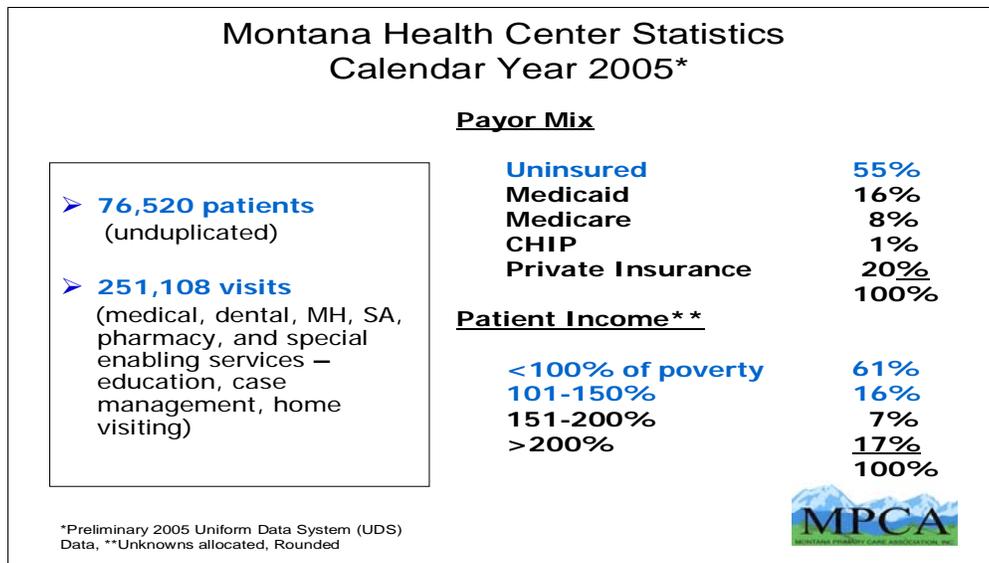
(i.e., no generics are yet available), so a patient who continues using the medication could easily end up paying more for therapy when the samples are gone.

In addition to dispensing services, pharmacists at the four CHCs with in-house pharmacy services also provide clinical services. The CHC in Butte now provides anticoagulation therapy (Coumadin®) to 80 patients at any given time, which involved 620 encounters since the beginning of the year. This CHC pharmacist has also provided 728 in depth chart reviews to evaluate patient medication needs and progress; completed 64 Formulary Conversion protocol and 40 medication refill protocol interventions, prepared consultations for pharmacotherapy and kinetics; reviewed 10 charts for patients on numerous medications, worked with 23 patients to improve their medication compliance, and made recommendations for therapy and dosage. The Hepatitis C Treatment, Monitoring and Side Effect education program was less active this year due to the loss of the gastroenterologist. (Personal communication, Dr. Tammy Cox, August 2006)

In Billings, the pharmacist is a specialist in treatment of mental health illnesses. Her CHC clinical services are conducted through a collaborative practice agreement she has with the physicians. Through the practice agreement, this pharmacist met with patients 147 times in the last fiscal year. The pharmacist also provides consultative services to clinic providers. (Personal communication, Dr. Carla Cobb, August 2006)



Source: Montana Primary Care Association (33)



Source: Montana Primary Care Association (33)

Federally-supported insurance with services by Montana providers

Medicare:

Medicare provides health insurance for Montanans who are 65 or older, under 65 with certain disabilities, and anyone with end-stage renal disease (ESRD).(34) The Medicare programs pays for healthcare services delivered by Montana providers through a variety of plans. As of June 11, 2006, there were 150,764 enrollees across the state. Approximately 15% of these beneficiaries are under 65 years of age. The number of beneficiaries with an identified prescription drug coverage plan was 110,260 (73.1%), which means 40,504 (26.9%) enrollees did not indicate a drug coverage plan. (35)

There are 41 Prescription Drug Plans (PDPs) offered by 18 total organizations available to Montana Medicare enrollees (17 offer fee-for-service (FFS) plans; one offers the Medicare Advantage plan).(35) The Medicare Advantage (MA) plan uses an HMO (Health Maintenance Organization) or regional PPO (Preferred Provider Organization). There are also retirement plans that include prescription benefits, and federal retiree plans with prescription benefits (e.g., Tricare or FEHB). Enrollees with a drug coverage plan chose the following plans: a stand alone Prescription Drug Plan (PDP) (56,818); MA with prescription drug benefits (6,992); employer plan for retirees (14,923), and Federal retiree plan (15,151). Those beneficiaries who had dual eligibility (i.e., Medicaid and Medicare) were automatically enrolled in PDPs and accounted for 16,376 of the enrollees with prescription coverage.(35)

Medicare prescription plans have three phases of coverage: 1) Partial coverage, which requires enrollees to pay a portion of the medication expenses (e.g., deductible and co-pay) up to total prescription expenditure reaches \$2,250; 2) Benefit Gap (the “doughnut hole”), which requires the enrollee to pay all of the prescription costs until total prescription expenditure reaches \$5,100, and 3) Catastrophic coverage, which provides 100% coverage of subsequent expenses for prescription medications that calendar year.(35) In Montana, 17% of the PDPs offered some coverage for the “doughnut hole.” In addition to co-payments per prescription, enrollees pay a monthly premium to enroll in the pharmacy plans. In Montana, the average for lost-cost

premiums was \$28.81 and \$42.54 for other plans in 2006.(17) The Department recently began a program to help with premium expenses called Big Sky Rx, which is open to residents who are Medicare recipients with a family income that is 200% or less of the Federal Poverty Level (FPL). It was created by the 2005 Legislature and funded by the state's tobacco fund. (36)

In addition to support for prescription products, Medicare Part D also provides support for clinical pharmacy services that are not related to dispensing. During his May 3, 2006 testimony to House Committee of Ways and Means, Dr. Mark McClellan described the importance of using and reimbursing pharmacy services as a way to improve health outcomes and reduce future costs through his introduction of a program at CMS.(37)

“Similar to the Ambulatory Quality Alliance (AQA), the mission of the Pharmacy Quality Alliance is to improve health care quality and patient safety, and to reduce overall healthcare costs....The Alliance highlights the role of the pharmacist as a member of the integrated health care team and recognizes the value the pharmacist can bring to the equation of total patient care. CMS may further support this collaborative process by developing a demonstration project to provide further evidence on the impact of Medication Therapy Management (MTM) and other pharmacist interventions that could help promote high quality patient care and lower costs in both the Medicare and Medicaid programs – a win-win for plans, pharmacists, and most importantly, beneficiaries.

“Individuals with more than one chronic disease often require treatment with several prescription medications, which increases their risk for drug related problems. Additionally, they represent a disproportionate amount of health care expenditures. Each Part D sponsor must have an MTM program for beneficiaries who have multiple chronic diseases and are taking multiple Part D drugs with projected annual costs of at least \$4,000. The quality of care for these individuals can be improved and medical costs can be reduced through MTM, which promotes appropriate medication use, reduces the risk of adverse events, and optimizes therapeutic outcomes.

“MTM programs may be furnished by a pharmacist or other qualified provider and must be developed in cooperation with pharmacists and physicians. This creates opportunities for the pharmacists to play active roles in the MTM services provided. To realize the full potential of MTM, quality metrics for MTM and related pharmacy services must be developed so that more can be done to support high-quality pharmacy care.”

**Dr. Mark B. McClellan, Administrator,
Centers for Medicare and Medicaid Services.
May 3, 2006 (37)**

Data are not yet available to indicate the number of enrollees receiving these enhanced pharmacy services, but the CMS lists 18 PDP plan providers (through 20 PDP plans) who appear to be planning to offer these services in Montana.(38) The Montana Pharmacy Association (MPA) website indicates two of those plans, Humana Corp. and Community Care Rx, are now ready to begin working with community pharmacies in Montana to provide these services. In the case of Humana Corp., the pharmacy does not have to be a participant in their PDP plan; this means any community pharmacy could potentially participate.(39)

By revising its Pharmacy Practice Act (MCA 37-7) in 2001, Montana has positioned itself nicely to allow pharmacists to begin offering these enhanced clinical services. As described later in this report, pharmacists across the state are beginning to develop agreements with prescribers, gain additional training, and implement reimbursable services to residents of the state. The Montana Pharmacy Association and the Skaggs School of Pharmacy have been actively promoting Medication Therapy Management (MTM) and providing educational opportunities to develop a pharmacy workforce that can provide this new level of service.(39)

Medicaid and CHIP:

Montanans whose income is deemed to be 200% of the federal poverty level (FPL) or lower and who meet all other eligibility criteria, may be eligible for the state's Medicaid programs. Depending on the program, the applicant's household's countable income must be equal to or less than 35%, 100%, 133%, 185% or 200 % of FPL. The Medicaid program with a 200% FPL limit is used for treatment for breast and cervical cancer or pre-cancer, which accounts for a relatively small portion of the enrollees. The Family program covers adults who are not blind, disabled, pregnant, or over 64 years old, but have a dependent child within the fifth degree of kinship living with them and an income that does not exceed about 35% FPL adjusted for size of household. This group of enrollees is the largest. The adults eligible for the Family program may also elect to participate in the 12-month Family-Transitional, which has no income limit for the first six months then a 185% FPL limit for the remaining six months.(personal communication, Kathe Quittenton, September 2006) To qualify for the State Children Health Insurance Plan (CHIP), income cannot exceed 150% of FPL and the children must be under 19 years old. The Montana CHIP program is known as Montana's Children's Health Insurance Plan.(17)

In 2003, there were 110,400 (12%) Montanans enrolled in the Medicaid program. Over half (59,100 or 53.5%) were children under 18, adults accounted for 23,100 (20.9%) of the enrollees, followed by elderly at 10,900 (9.9%) and the blind or disabled at 17,300 (15.7%).(17)

Access to Medications from Sources Outside of Montana

In addition to local pharmacy dispensing services, some Montanans obtain their prescription medications from sources located outside of the state. Some of these external sources are tied to local providers (e.g., local VA clinics with mail order medication service) or health plans and the enrollees have a combination of local providers and distance dispensing services. Other sources, such as online pharmacies are not tied to any local services or regulation, which has raised concerns over patient safety and care. Economically, plans that send dispensing business out of state to mail-order pharmacies further undermine the ability of the small independent retail pharmacies that serve rural and frontier populations to remain open.(40)

Mail-Order Pharmacies Licensed in Montana:

There are currently more mail order pharmacies licensed in Montana than retail pharmacies that are physically located within the state (301 mail order compared to 229 retail).(27) Most of the mail-order pharmacies are located outside of Montana. Access to mail order pharmacy dispensing services is generally restricted to residents who are enrolled in health plans with this service. There are five mail order pharmacies that are major providers of mail order prescriptions. Four of them are located outside of Montana (Eckerd Health Services, Express

Scripts, inc., Medco Health Solutions, and Caremark Prescription Services (CPS); one is located in Montana in the Ravalli County (Ridgeway Pharmacy).(personal communication, Nancy Dunagan, August 2006) Mail order pharmacy services are generally focused on dispensing services that include access to a hotline phone number or a website to answer questions or provide written information about medications. More in depth clinical pharmacy services are not usually provided unless the health plan includes local pharmacists.

Online Pharmacies:

Online pharmacies, such as Drugstore.com, are the least regulated and understood source of medications. Unlike mail order pharmacies, these sites are not required to obtain licenses from the Board of Pharmacy.(personal communication, Nancy Dunagan, August 2006) Apparently some online sites do not require a prescription, which has grave safety implications for the consumer.(41) Although these sites offer information about medications, they do not provide individualized, tailored care.(41) Access to online pharmacies is limited to those with access to the Web and a credit card.

A 2004 survey by the Pew Internet and American Life Project found 4% of Americans have purchased medications online – these patients were more likely to come from higher income households (\$50,000+ annually) and to have six or more years of online experience.(41) Three-quarters of the online purchases were for medications used to treat a chronic disease condition such as arthritis or high blood pressure; one-quarter of the purchases were for weight loss or sexual performance medications.(41) In general, Montanans using online pharmacies should expect to be treated as a consumer rather than a patient, and those with chronic diseases should seek clinical care from local practitioners.

Pharmacies in Neighboring States or Countries:

Some residents may cross state or national borders to fill prescriptions. Residents living close to the Idaho, Wyoming, and Dakotas borders may find pharmacies located in those state geographically easier to access. There are no exact counts to determine this, but the number is probably quite small compared to the rest of the state. These physical pharmacies do have the capability of offering a full range of pharmacy services to those Montanans living near the borders.

There is limited information about the number of US residents purchasing medications from pharmacies in other countries. In 2003, an estimated 12 million prescription were sold by pharmacies in Canada to US residents. This amount was less than one percent (0.3%) of the total prescription sales to US residents that year.(42) There are no recent data to indicate whether this trend is changing.

2. Pharmacy Personnel

Information about the number and type of pharmacy personnel by county is presented in MAP 2 in Appendix B. As of August 2006, there are 992 pharmacists with current Montana licenses; not all of these licensed pharmacists are working in Montana; some are retired and others work in other states.(27) Federal sites, such as the VA and IHS pharmacies, allow their pharmacists to be licensed in any state, so the numbers do not reflect those pharmacists who are licensed in

other states but working in Montana. Table 17 shows total numbers for the state. Appendix A contains a table with county level numbers.

Table 17. Number and Type of Pharmacy Personnel Licensed by Board of Pharmacy to Practice in Montana (2006)**

Type	Number Licensed
Registered Pharmacist	992
Pharmacy Intern	190
Certified Pharmacy Technician	701
Technician in Training	164

** Does not include VA and IHS pharmacists, interns, and technicians who are licensed or certified in other states.

Source: Montana Board of Pharmacy (27)

3. Prescribers

Because prescriptions drive dispensing needs, the number, type and location of prescribers was also reviewed. Table 18 shows state totals for 2006. Like pharmacies and pharmacy personnel, the distribution of prescribers across the state is uneven, but tends to follow population distribution. See the map in Appendix B for county-level distribution data.

Table 18. Number and Type of Prescribers in Montana (2006)

Type	2006
Medical (allopathic) Doctor	2,210
Osteopathic Doctor	116
Nurse Practitioner/Prescriptive Authority	393
Physicians Assistant	287
Naturopathic Doctor	37
Dentists	518

Source: Montana Board of Pharmacy (27)

C. Pharmacy Services

Services provided by pharmacists can be divided into two major categories: prescription medications and clinical services. It is important to consider access to both of these types of pharmacy service because ensuring safe use of medications and optimal health outcomes requires both medication and close monitoring. To explore access to pharmacy services in Montana, this report looked at both types of service.

1. Prescription Services

This area of pharmacy access is often the major focus of debates and concern because it involves an out-of-pocket expense for virtually everyone. It is one of the most immediately felt costs associated with healthcare. The actual cost experienced by any one patient will depend on their healthcare insurance and pharmacy benefits. The costs experienced by providers or payers for

those prescription medications will be quite different, but could ultimately impact access to medications if formularies created to contain costs limit what is available or if the tiered co-payments become prohibitively high.

2. Volume and Costs

Prescription Volumes:

Data vary by source, so several sources were consulted to make the estimates at the state level. In 2004, there were about 3.27 billion prescriptions filled by U.S. community retail pharmacies including mail order businesses. Mail order pharmacy alone filled about 244 million (7.2%) of all US prescriptions in 2005.(17) Importation of prescription medications from other countries was estimated at 0.3% of total prescription sales (in dollars not prescriptions) in 2004.(42)

The Kaiser Family Foundation report estimated US pharmacies filled an average of 12.3 prescriptions per capita in 2005.(43) In 2005 in Montana, there were over nine million (9,073,366) prescriptions filled by retail pharmacies (this estimate does not include mail order pharmacies).(17) Based on the number of retail pharmacies in the state, the per capita number of prescriptions filled at retail stores was 9.7 in 2005 compared to the national rate of 10.8 prescriptions per capita.(17)

NCPA-Pfizer Digest 2005 report for independent pharmacies – averaged 190 prescriptions per day in 2005. In 2004, independent pharmacies across the country performed blood pressure monitoring and diabetes training as the top two DSMs offered (no numbers given).(44)

There are unequal distributions among the population with regards to who is filling prescriptions. In 2005, the per capita filled prescriptions at retail pharmacies for males and females were 7.4 and 12.3, respectively.(17) The distribution for filled prescriptions also varies by age group, with the per capita amount increasing with older age. Residents under 18 years filled 4 per capita; between 19-64 filled 9, and 65 or older filled 22.5 prescription per person per year. These numbers include both new and refilled prescriptions, so the 22.5 fills could easily represent two medications that are filled each month for 12 months. The data source did not specify whether the prescription numbers represented a one-month (30-day) fill or more.(17)

Prescription costs:

According to the Kaiser Family Foundation, there are three main factors affecting prescription medication expenditures: 1) increased number of prescriptions filled; 2) increased prices, and 3) availability of newer, more expensive medications.(43)

NACDS 2005 report for chain pharmacies (by state) doesn't give prescription volumes, but does give an average sale price per prescription by state. In Montana in 2004, the average sale price for a prescription was \$56.30 compared to the national average of \$62.46. The averaged Montana sales prices per prescription were broken down into three main types: \$41.35 for cash (i.e., not covered by insurer) sales; \$60.43 for third-party payers, and \$64.43 per Medicaid prescription. The differences in averaged prices are due in part to some groups electing to use more generics.(28) It is also likely that the mix of medications with different sales prices used by the various groups may differ. For patients with third-party or Medicaid insurance, the costs

were most likely shared with the patient paying a co-pay and the insurer paying the difference. The patients who felt the full impact of the price are those who had cash (i.e., out-of-pocket) prescription costs.

With regard to the business viability of the retail pharmacies, especially the small independent stores serving rural Montanans, it is also important to look at the costs of filling a prescription and the reimbursement rates received. Pharmacy reimbursement is a combination of the dispensing fee and the cost of the medication. A dispensing fee is designed to cover the costs a pharmacy incurs to dispense a medication, which includes personnel costs, containers, labels, licenses, computers, and overhead. The medication portion of the reimbursement varies by payer. For the cash paying customer the price is established by the pharmacy, which is also called the “Usual and Customary” fee. The average dispensing fees paid by insurers such as Medicaid (\$3.50-\$4.70) and Third-party insurers (\$2.87) cover a portion of the cost to fill a prescription, while the contracted medication reimbursement rate (e.g. Average Wholesale Price (AWP) minus 15%) is designed to cover the cost of the drug plus a margin. A 2002 survey found that the small independent stores in Montana operated on very tight net margins (3.4%), with the average cost to fill a prescription at \$10.27.(40) Considering the dispensing fees received and the cost of dispensing a prescription, pharmacies are faced with cutting their margin even further to cover this gap.

The survey of independent pharmacies in Montana found 25% of the populations served by these stores were enrolled in Medicaid and 42% had pharmacy benefits through a third-party insurer. The survey did not collect data on Medicare and private pay patients. Pharmacists responding to survey said low reimbursement rates and competition from mail order pharmacies were the greatest threats to their ongoing survival.(40)

Over the past 15 years, there has been a trend towards increased use of generic medications. In 1990, 30% of prescriptions were filled with generic medications; in 2004, this increased to almost half (47.8%) of all prescriptions filled. The average sale price for generic medications has been consistently less than the average sale price for brand name products by about one-third (e.g., \$28.71 compared to \$95.54 in 2004).(28)

Costs as Percent of Healthcare Costs:

Although prescription medications comprise only one-tenth of the all healthcare spending, they are one of the most apparent expenses to the patient. Just over half (54%) of all out-of-pocket healthcare expenses are related to prescriptions.(43) Even insured patients will likely have expenses in the form of co-payments and deductibles for their prescription medications. There is a national trend showing a decrease in the percentage of prescriptions that are paid for completely out-of-pocket: rates decreased from 56% in 1990 to 25% in 2004. This is due primarily to the increased share of prescription payment by private health insurance.(45) In fiscal year 2004, prescriptions accounted for 9.1% of personal health expenditures in Montana compared to 12.1% nationally; these expenses represent public and private healthcare funds and are not necessarily what was paid directly by the patient.(17) Table 19 shows expenditures by category of healthcare cost.

Table 19. Health Care Expenditures by Category, FY 2004

Type of Service	Dollars Spent (millions)	Percent of Total Expenditures
Hospitalization	1,865	40.8
Physician / professional care	1,310	28.7
Prescriptions	417	9.1
Nursing Homes	323	7.1
Dental Care	236	5.2
Durable medical equipment	160	3.5
Home Health Care	89	1.9
Other	172	3.8
Total	4,572	100

Source: Kaiser Family Foundation, *State Health Facts (17)*

Prescriptions per capita:

The Slone Survey found 81% of adults had used at least one medication (e.g., prescription, OTC, vitamin or herbal) within the past week. It did not investigate the prescription use separately, but over-the-counter (OTC) medications such as acetaminophen and ibuprofen were the two most frequently used medicines.(46) The Kaiser Family Foundation's State Health Facts provided the information in Table 20 about medication sales for specific subgroups in Montana in 2005.

Table 20. Per Capita Prescriptions Filled for Montana and US, 2005

Per Capita Prescriptions Filled:**	Montana	US
Male	7.4	8.4
Female	12.3	13.3
0 -18 years	4.0	4.3
19-64 years	9.0	10.5
65 or older	22.5	26.5
Total prescriptions filled per capita	9.7	10.8
Total number of prescriptions filled	9,073,366	3,192,641,028

**Data for retail pharmacies only; mail order pharmacy data are not included.

Source: Kaiser Family Foundation, *State Health Facts (17)*

There are two ways to think about these per capita numbers: 1) Montanans are healthier than other populations so they need fewer medications or 2) Montanans do not have as much access to pharmaceuticals as other US citizens. The data do not consider potential discrepancies between the Caucasian and American Indian populations. To get at this information other sources were used.

3. Specific Medications or Drug Classes

Table 21 shows how medication needs vary by age group; there is no reason to suspect that this general trend does not apply to Montanans. The trend shows high antibiotic use in the younger population and a shift towards multiple medications for heart and blood vessels in the over 65 age group.

Table 21. Most Frequently Recommended Medications by Physicians by Age Group Across US, 2002-03 (Includes both prescription and nonprescription products)

< 18 years	18-44 years	45-64 years	65 or older
Penicillins	Antidepressants	Antidepressants	Hypertension
Asthma medications	NSAIDs	NSAIDs	Hyperlipidemia
Antihistamine	Antihistamines	Hyperlipidemia	Nonnarcotic pain relievers
Erythromycin antibiotic	Narcotic analgesics	Hypertension	Diuretics
NSAID	Asthma medications	Diabetes	ACE inhibitors
Cephalosporin antibiotics	Dietary supplements (e.g., vitamins)	Acid/peptic disorders	Diabetes medications
Nonnarcotic pain relievers	Acid/peptic disorders	ACE inhibitors	Beta blockers
Cough suppressants	Penicillins	Asthma medications	NSAIDs
Nasal spray corticosteroids	Nasal spray corticosteroids	Antihistamines	Acid/peptic disorders
Anorexiant (ADHD)	Erythromycin antibiotics	Nonnarcotic pain relievers	Calcium channel blockers
Per Capita Number of Medications by Age Group			
3.29	4.32	8.94	17.03

Adapted from Source: Health 2005 table 92 page 1(22)

D. Clinical Pharmacy Services

The other pharmacy service made possible by the passage of Pharmacy Practice Act (MCA 37-7) in 2001 is an expanded role for pharmacists to assist with patient care via contractual agreements with physicians. This is a new area for pharmacy service that has the potential to further expand the healthcare safety net in Montana. These services require the pharmacist to be physically in the state where they can see the patient in a face-to-face consultation.

1. Certificates

Pharmacists who wish to participate in immunization programs must receive training in immunization through an approved certificate program. The Board of Pharmacy reviews and approves these programs. As of August 1, 2006, there were 75 pharmacists in Montana who provided the Board with copies of their certificates. The Board adds the phrase “immunization” to their licenses. These pharmacists are eligible to enter into collaborative practice agreements with physicians to provide vaccines to adults (age 18 or older). In 2000, there were no certified pharmacists in the state.(27)

Pharmacists in Montana are also seeking advanced training in other clinical service areas including anticoagulation and emergency contraception. The Board is not currently tracking

these various certificates but plans to do so in the near future.(personal communication, Nancy Dunagan, August 2006)

2. Collaborative Practice Agreements

Collaborative practice agreements (CPAs) are contractual arrangements between physicians and pharmacists that clearly outline how a pharmacist will provide monitoring and adjust therapy for a given disease state or group of patients. These formal agreements are used for programs such as immunization, anticoagulation therapy, and other Medication Therapy Monitoring (MTM) services. The concept is similar to the standing orders used in hospitals. There are currently five CPAs that have been submitted to the Board of Pharmacy; two of the CPAs are from chain retail establishments (KMart stores for anticoagulation and Safeway stores for immunizations).(27) The Safeway stores have scheduled 28 pharmacist-run immunization clinics in 10 stores across the state for fall 2006. (personal communication, Lori Morin, September 2006)

3. DEA / Provider numbers

A more recent development has been the ability of individual pharmacists to obtain provider numbers, which allows them to bill for their services. This will help promote the growth of clinical pharmacy services available to Montana residents. It is starting slowly with three pharmacists in two western counties currently registered with DEA provider numbers.(personal communication, Nancy Dunagan, August 2006) In addition, Medicare and Medicaid will require providers, including pharmacists to have a unique National Provider Identification (NPI) by July 1, 2007 if they want to bill for services.(47)

4. Retail Pharmacists who Assist Local Institutions

It is not uncommon to see the local retail pharmacist in rural areas also serve as the pharmacist for local or nearby institutional pharmacies, such as nursing homes or hospitals. The demands of the institutional pharmacy are often not fulltime and it is more efficient to use a local practitioner. The list below shows the 19 towns where a retail Pharmacist-in-Charge is also the Pharmacist-in-Charge (PIC) for a local institutional (i.e., hospital or nursing home) pharmacy. Note that two-thirds of the towns (13/19) have only one retail pharmacy left in the community.(27)

Baker	Ennis*	Malta*
Big Timber*	Fort Benton*	Plentywood*
Chester*	Glasgow	Polson
Columbus*	Glendive	Scobey*
Conrad	Hardin*	Townsend*
Culbertson*	Jordan*	White Sulphur Springs*
Deer Lodge		

*Towns with one retail pharmacy remaining.

Source: Board of Pharmacy (27)

This raises the question of what happens to the institutions if the retail pharmacies close. The answer appears to be a shift in service from the local communities where there is no retail pharmacist to pharmacists at larger institutions in the region. Of the seven communities that lost their last retail pharmacy in the past five years, four have institutional pharmacies. The institutions in Harlowton and Poplar now have a Pharmacist-in-Charge located at St Vincent Hospital in Billings, Sheridan's PIC is at St James Hospital in Butte, and Terry's PIC is located in Glendive.(27) The data from the Board of Pharmacy do not indicate whether local pharmacists continue to work with the institutions or if pharmacists commute to the community in person or via telehealth technology.

E. Other Access Factors

1. Geographic Barriers

Geographic barriers in this large state in the distance between communities and the need to travel on roads in dangerous weather conditions. There are 10 counties that do not have any retail pharmacies, so the residents must seek pharmaceuticals and pharmacy services elsewhere. A sample of towns across the state were used to estimate the average distance to a nearby community retail pharmacy, which was 74.1 miles. This is easily six-times the estimated 12.4 miles patients were said to travel to a retail pharmacy in a national survey.(28) See Table 22.

Table 22. Actual (Mean) Distances to Nearest Retail Pharmacies

Town	County	Retail Pharmacy in Same County (miles)	Average Miles within the County	Nearby Retail Pharmacies in Other Counties (miles)	Average Miles to Nearby Community
Absaroke	Stillwater	Columbus (13)	13	Billings (46)	46
Arlee	Lake	St Ignatius (15)	15	Missoula (30)	30
Colstrip	Rosebud	Forsyth (33)	33	Miles City (80) Billings (126)	103
Harlowton	Wheatland	-----none-----	-----	Lewistown (58) Roundup (69) Billings (126)	84.3
Poplar	Roosevelt	Culbertson (33) Wolf Point (15)	24	Glasgow (65) Sidney (72) Glendive (109)	82
Sheridan	Madison	Ennis (34) Twin Bridges (9)	21.5	Butte (56)* Bozeman (120)	88
Terry	Prairie	-----none-----	-----	Miles City (40) Glendive (40)	40
Average Number of Miles to a Retail Pharmacy:		152 miles/7 towns = 21.7 miles		1037 miles/14 towns = 74.1 miles	

* Must cross Continental Divide

**These seven communities lost their last retail pharmacy within the past five years

Source: Montana Board of Pharmacy (27) and Road Atlas 1998(48)

A 2001 national survey of patients found the most frequently cited reason for using a particular pharmacy was convenience (i.e., location) at 44% followed by price (17%) and service (13%). (49) A similar study in 2005 found 67% of patients selected their pharmacy based on convenience (i.e., location), price (31%), insurance coverage purposes (16%), customer service (7%), Familiarity with employees (7%), and trust (7%)(28)

V. Assessment of Pharmacy Needs and Access

A. Needs

Lack of Health Insurance.

Currently, 19% of the population does not have any health insurance, which implies they also do not have pharmacy benefits that will help with out-of-pocket expenses for medications or clinical pharmacy services. Prescription costs remain one of the highest out-of-pocket expenses for patients, even though they constitute just one-tenth of overall health costs. The number of uninsured in the state is trending in the same direction as national rates. The primary cause of this is the decreasing rate of employment-based health insurance (with pharmacy benefits). Public insurance is mitigating this effect to some extent for children and residents over 65 years of age. The group that is most likely to be uninsured is adults, with or without children, regardless of employment status, who do not qualify for public insurance.

Chronic Diseases that Require Medications.

Older Montanans are most likely to suffer chronic diseases that are leading causes of death. These diseases (e.g., heart disease, cancer, stroke, respiratory conditions, and diabetes) require medications and close monitoring. Although the implementation of Medicare Part D has increased access to medications, it has not yet noticeably increased access to clinical pharmacy services that could monitor progress and improve health outcomes. The needs in this group include help with Medicare Part D plan premiums and doughnut hole expenses as well as access to pharmacy services that can provide additional monitoring to ensure medications are used appropriately and effectively.

Some data indicate that these chronic diseases start appearing in the adult population in the 45-64 year age group. This is the same group that is facing reduced access via decreases in employer health benefits. Sadly, early screening and treatment as well as lifestyle changes to reduce risks should be provided for these adults. As public insurance programs cover the needs of the older and needier populations, this group begins to emerge as most in need of access to pharmacy services.

B. Access

For those Montanans who meet federal poverty level criteria, are young or old, former military, or Native American living on tribal lands, there are public sources of health care that assist with access to pharmacy services including both pharmaceuticals and clinical pharmacy services.

Montanans under 18 years of age now have reduced unmet needs compared to their older counterparts. The implementation of the CHIP program appears to have reduced the gap between private and no insurance in this group.

There is a subset of veterans who are homeless and not easily found or enrolled for VA health benefits. It is not known if these individuals are seeking care through other public insurance programs, such as Healthcare for the Homeless. Further information about these individuals is needed.

Native Americans who reside in Montana have access to the Indian Health Service healthcare facilities including pharmacies and pharmaceuticals as long as they are registered as a tribal member. There is a subset of this population that lives in our urban areas whose access may be hampered by geographical barriers when they are required to seek care on a reservation. The IHS provides transportation services to care within a day's drive, but the time and distance involved for may discourage these patients from seeking care in a timely manner. Most pharmacy services are provided directly through an IHS facility or through contracted services with local providers or Community Health Centers.

Montanans who do not qualify for public or military healthcare programs such as the VA, IHS, and Community Health Centers, have not historically had access to clinical pharmacy services. These are the in depth services that are used to ensure medication therapies are achieving the results desired. These services are relatively new in the state and are just now being developed and implemented for all residents. At least two Medicare Part D MTM providers are beginning to seek Montana pharmacists to offer such care.

VI. Recommendations

Recommendation 1: Expand employer-based health insurance coverage of working adults.

Efforts to increase health insurance coverage of working adults are needed because health insurance is almost always linked with pharmacy benefits. The state is currently working through its "Insure Montana" program to increase the number of employers with 2-9 employees who offer health benefits.(50)

Recommendation 2: Evaluate the feasibility of changing Medicaid eligibility FPL criterion.

Explore the budget impact and feasibility of increasing the current 35% Federal Poverty Level (FPL) program rate for adults with children seeking health insurance through Medicaid.

Recommendation 3: Support Montana pharmacies that serve rural and frontier populations.

Determine the reason for the loss of local retail pharmacies in rural and frontier counties and propose measures to prevent future losses. Many smaller communities and less populated counties are at risk of losing their last local retail pharmacy. Because these pharmacies provide critical access to pharmacy services, the causes of these losses and ideas for preserving these local access points should be explored and actions taken to ensure the survival of local pharmacy services in rural and frontier counties.

Recommendation 4: Expand clinical pharmacy services in areas where dispensing services are already available.

Currently, public insurance programs are providing access to pharmacy dispensing services and some clinical pharmacy services. Efforts to continue increasing clinical services for chronic disease states and complex medication therapies should be pursued. Reimbursement for pharmacists providing these intensive services will be needed.

The PharmAssist component of SB324 is beginning to address this issue by developing a system for providing clinical services. The initial program will be designed to allow expansion and specialization of services in the future. Additional work will be needed to ensure that all patients whose insurance or pharmacy benefit manager provides medications via mail order have access (i.e., covered benefit or co-pay) to clinical pharmacy services provided by local pharmacists when they need the additional service.

Recommendation 5: Further explore barriers and possible solutions for these access to pharmacy services issues.

Further study is needed to elucidate more specific information and potentially suggest future action for these issues: 1) prescription benefit coverage among working and non-working adults with and without children; 2) seasonal and geographical barriers to pharmacy services, including miles traveled to pharmacies and clinics for appointments with prescribers, and 3) information about homeless veterans and where they are seeking care.

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VIII. Appendices

A. County-Level Data Tables

1. County Populations by Age Group and Native American Status, 2000 and 2005
2. Number (Percent) Adults Employed and Unemployed by County, 2000 and 2005
3. Number (Percent) Montanans and Health Insurance Status by County (2000)
4. Number (Percent) Montanans Living in Poverty by County (2003)
5. Number of Practitioners and Pharmacies by County, August 2006

B. County-level Data Maps

1. Distribution of Community and Institutional Pharmacies by County, August 2006
2. Distribution of Prescribers by County, August 2006