December 2003

Evaluation of the BadgerCare Medicaid Demonstration

Final Report

Prepared for

Paul J. Boben, PhD
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244-1850

Prepared by

Norma I. Gavin, PhD
Nathan D. West, MPA
Nancy F. Lenfestey, MHA
RTI International
Health, Social, and Economics Research
3040 Cornwallis Road
Research Triangle Park, NC 27709
and
Jamie Chriqui, PhD
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MayaTech Corporation

*RTI International is a trade name of Research Triangle Institute.

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Executive Summary

The Centers for Medicare and Medicaid Services (CMS) contracted with RTI and its subcontractor, the MayaTech Corporation, to conduct an evaluation of BadgerCare, Wisconsin's innovative health care program for uninsured low-income families. BadgerCare extended Medicaid coverage to children, their parents, and spouses of their parents in families with incomes under 185 percent of the federal poverty level (FPL). Other key features of the program include mandatory enrollment in health maintenance organizations (HMOs), enhanced outreach activities to encourage qualified families to apply, premiums for families with incomes over 150 percent of the FPL, waiting periods to limit crowd-out of private insurance, and a premium assistance program for qualifying employer-sponsored plans. The program is funded by a combination of federal and state matching funds under Title XIX, through a Section 1115 Medicaid demonstration waiver, and Title XXI, the State Children's Health Insurance Program (SCHIP).

Evaluation activities involved the performance of a case study, including site visit interviews, focus groups, and document review; the acquisition and analysis of administrative enrollment data; and the fielding and analysis of surveys of BadgerCare participating, eligible nonparticipating, and disenrolled families. These analyses were used to answer specific questions posed by CMS concerning the key features of the program.

By all accounts, BadgerCare has succeeded in achieving its main objective of bridging the gap between Medicaid and private insurance for the working poor. BadgerCare exceeded enrollment

projections soon after implementation and continues to gain new enrollees each month. The program has been credited with keeping the rate of uninsurance in the State among the lowest in the nation throughout the recent economic downturn.

The program's success is attributed in part to the collaborative program planning process in which program planners sought and received input from all key stakeholders. Success is also attributable to the State's progressive tradition in health care and the determination of a handful of policy makers to develop a workable solution.

Program planners credit BadgerCare's quick start-up and effective operation to the decision to use the existing Medicaid infrastructure (including the eligibility determination and health care delivery systems) and to fine-tune the system later as needed. The collaborations forged during the program's planning phase continue to help to bring about the needed system changes.

Besides the implementation and enrollment successes, other significant findings of the evaluation include the following:

- BadgerCare enjoys wide name recognition in the State, attesting to the success of its outreach efforts. The program is viewed as distinct from Medicaid and thereby has succeeded in reducing welfare stigma typically associated with public programs.
- The ability to enroll the entire family in a single health insurance plan was viewed as desirable by most enrollees but was not the most critical factor driving their enrollment.
- Most enrollees who paid premiums believed that they were reasonable in amount, but premiums for a small number of potential enrollees were a deterrent to enrollment. Furthermore, we found that premiums were not a significant factor affecting the high reenrollment found in the first few years following disenrollment (i.e., churning).
- BadgerCare has also succeeded in improving the continuity of enrollment among low-income publicly insured individuals. Of note is the greater likelihood of continued eligibility and enrollment of women with Medicaid-covered deliveries who would otherwise be uninsured during their infant's first year of life.
- BadgerCare enrollees enjoyed equivalent or better access to medical care as individuals enrolled in employer-sponsored insurance (ESI) plans and much better access than uninsured, low-income families. Problems accessing dental care were common among all insurance coverage groups.

- No significant differences were seen in reported health status between BadgerCare adult or child enrollees and adults and children who were either uninsured or covered by ESI or other insurance.

Despite the many successes of the program, a few challenges remain. In particular, we found the following areas in which improvements could be made to the program:

- Wisconsin's premium assistance plan has not been successful in enrolling a significant number of families. Stringent eligibility rules for families, employers, and health plans and the lack of efforts to promote the programs to the business community were given as reasons for this failure.
- Churning was high among Medicaid and BadgerCare children. As many as 15 to 20 percent of children reenrolled after only 1 month, and 60 to 70 percent had reenrolled within the first 2.5 years after disenrolling.
- Whereas three-fourths of BadgerCare enrollees are enrolled in HMOs, the delay in initial enrollment in a plan following BadgerCare enrollment was sometimes substantial, potentially leading to delays in receiving routine health care.

Despite the program's success in reaching low-income, uninsured individuals, those who remain uninsured in the State experience substantial unmet health care needs and frequently forego routine and preventive health care. Many of these individuals are precluded from enrolling in BadgerCare because of waiting periods or other program eligibility conditions. Furthermore, none of the uninsured adults in eligible nonparticipating families surveyed in our study reported working for employers offering family coverage.

In three out of four disenrolled premium-paying families, family members experienced periods of no insurance following disenrollment. These families also reported relatively higher rates of adults and children in fair to poor health and with greater unmet health care needs.

1 Introduction

Following more than 10 years of experience with welfare reform initiatives, the Wisconsin Department of Health and Family Services (DHFS) implemented an innovative health care program in 1999. The new program, called BadgerCare, complements the State's welfare initiatives by bridging the gap between Medicaid and private insurance for the working poor (Bartels and Boroniec, 1998). The program uses a combination of federal and state matching funds under Title XIX, through a Section 1115 Medicaid demonstration waiver, and Title XXI, the State Children's Health Insurance Program (SCHIP), to cover uninsured low-income children and parents.

Key features of the program include

- family-based coverage,
- expansion of Medicaid coverage to families with incomes up to 185 percent[1] of the federal poverty level (FPL),
- mandatory enrollment in health maintenance organizations (HMOs),
- enhanced outreach activities to encourage qualified families to apply,
- premium payments for families with incomes over 150 percent of the FPL,
- waiting periods to limit crowd-out of private insurance, and
- integration of employer-sponsored insurance (ESI).

[1] Once enrolled, families can remain covered until income exceeds 200 percent of the FPL.

To document Wisconsin's experience with these innovations, the Centers for Medicare and Medicaid Services (CMS) contracted with RTI and its subcontractor, the MayaTech Corporation. Evaluation activities included a case study; analysis of BadgerCare enrollment data; and surveys of BadgerCare participants, eligible nonparticipants, and disenrollees. This report presents findings from the analysis of administrative enrollment and survey data. Findings from the case study were reported in the *Final Case Study Report,* which can be found on the CMS Web site (http://www.cms.hhs.gov/researchers/projects/default.asp).

This report is organized into five major sections. ***Section 1*** provides background information, a summary of the key features of the BadgerCare program, and a description of the evaluation study questions and our approach to addressing them. ***Section 2*** provides the results of the administrative enrollment file analyses, including subsections on enrollment trends, churning and turnover, the impact of premium payments on enrollment patterns, and enrollment in managed care and employer-sponsored health insurance plans. ***Section 3*** provides the results of the analysis of the BadgerCare Family Survey (BCFS), including subsections on the characteristics of participants and eligible nonparticipants, their health status and health service use, factors motivating their participation in BadgerCare, and their knowledge of and experiences with the program. ***Section 4*** provides the results of the BadgerCare Disenrollee Survey (BCDS) analysis of disenrolled premium-paying families, including subsections on the characteristics of these families, their current health insurance coverage, their reasons for leaving BadgerCare, and their experiences and relative satisfaction with BadgerCare and their current coverage. ***Sections 2*** through ***4*** all begin with a methods section and end with key findings. Finally, ***Section 5*** summarizes the findings of the case study and the analyses of administrative and survey data by evaluation study question as posed by CMS.

1.1 BACKGROUND AND KEY FEATURES OF BADGERCARE

As a result of Wisconsin Works (W-2), which is the State's Temporary Assistance for Needy Families (TANF) program, and its predecessor demonstration programs, welfare caseloads in

Wisconsin dropped 87 percent from January 1993 to September 1998—more than any other state in the nation (*New York Times*, January 25, 1999). However, along with this decline in the welfare caseload came a dramatic reduction in Medicaid enrollment. Medicaid enrollment of nonaged, nondisabled cash assistance recipients dropped more than 57 percent and, although Medicaid enrollment in other noncash categories increased, a net decline in total nonaged, nondisabled Medicaid enrollment of almost 26 percent occurred during this time (HCFA, 2000). Such a large drop in the Medicaid caseload alarmed policy makers because families leaving welfare are eligible for transitional Medicaid coverage and many children should remain insured through the poverty-related criteria (Ellwood and Ku, 1998). Furthermore, some growth in noncash Medicaid enrollment would have occurred from the phased-in expansion of poverty-related child coverage.

1.1.1 Eligibility Expansion

TANF legislation "de-linked" Medicaid eligibility from eligibility for cash assistance and established a new family coverage category, Section 1931 of Title XIX (Mann, 1999). Wisconsin's financial eligibility requirements for this category were set at the state's Aid to Families with Dependent Children (AFDC) program standards, for which the income requirement was about 68 percent of the FPL. These standards are less generous than eligibility standards for W-2. Wisconsin's Medicaid program also covers pregnant women and children up to age 6 with incomes at or below 185 percent of the FPL; children born after September 31, 1983, with incomes up to 100 percent of the FPL; and the medically needy. Nevertheless, a large number of families participating in W-2 are no longer eligible for Medicaid.

Health care coverage is an important element of support for families making the transition from welfare to work. Because many of the adults leaving welfare would be working at low-wage jobs with no health benefits, it was feared that the number of low-income uninsured in the state would increase. To prevent or reverse this possibility, Wisconsin implemented BadgerCare which expanded publicly funded coverage in the state to all uninsured children in families with incomes up to 185 percent of the FPL, their parents,

and spouses of parents. Once enrolled, families can remain in the program until income exceeds 200 percent of the FPL.

1.1.2 Family Coverage

Coverage of parents along with the children was a key feature of the BadgerCare program. Policy makers worried about low take-up rates for child-only eligibility categories that were not linked to receipt of cash assistance. Policy makers in Wisconsin believed that family-based coverage would be more effective than child-only coverage in providing health insurance to the uninsured by making it more attractive and less complex for all family members to be enrolled in a single plan (Bartels and Boroniec, 1998).

Subsequent studies suggest that this may be the case. In a study of the Medicaid expansions of the late 1980s and early to mid 1990s, Thorpe and Florence (1998) found Medicaid child-only expansions enrolled about 45 percent of potentially eligible children, whereas family-based expansions brought in 75 percent of potential eligibles. The authors concluded that although funds authorized for SCHIP would be adequate to insure four out of five eligible uninsured children, states would need considerable effort and creativity to reach and enroll them. They argued that allowing parents of these children to enroll would enhance child participation. Using different methods and data sources, other studies have also found higher child enrollment in states that offered family coverage than in those that did not, although the differences were not as large (Ku and Broaddus, 2000; Dubay and Kenney, 2001).

Other studies have also suggested that parents' insurance coverage and use of services are important determinants of children's use of services. In these studies, the authors have found that covered children of insured parents were more likely to receive preventive and other more appropriate levels of health care services than covered children of uninsured parents (Dubay and Kenney, 2001; Hanson, 1998).

1.1.3 Delivery System

Another key feature of the BadgerCare program is the use of the existing Medicaid infrastructure. In particular, the primary health care delivery system used in BadgerCare is Wisconsin's statewide

Medicaid managed care system for the AFDC-related /Healthy Start population.

Wisconsin has a long history of Medicaid managed care, being one of the first states to implement mandatory enrollment in HMOs (Coughlin et al., 1998). Mandatory HMO enrollment was first implemented in 1984 under a 1915(b) waiver in Milwaukee and Dane counties and was gradually expanded to other counties. A statewide implementation of mandatory HMO enrollment began in 1996 and was completed in mid-1997.

HMO enrollment is mandatory for BadgerCare enrollees and for AFDC-related and Healthy Start Medicaid enrollees residing in areas of the state where two or more HMOs are available. Enrollees may choose between HMO programs if more than one serves their area. If only one HMO is available, enrollees have a choice between the HMO and fee-for-service (FFS) coverage. For geographic areas not served by an HMO, enrollees are covered by FFS. Furthermore, during the time it takes to enroll in an HMO, eligible enrollees are covered by FFS.

The state may also buy into ESI coverage for some BadgerCare enrollees through the Health Insurance Premium Payment (HIPP) program. However, as described below, this program has not been successful, serving just a handful of BadgerCare families.

1.1.4 Outreach and Enrollment Simplification

Other efforts are also needed to increase the enrollment of eligible children. In a survey of low-income parents of Medicaid children and eligible nonenrolled children funded by the Kaiser Commission on Medicaid and the Uninsured, researchers found that complex and burdensome enrollment processes, coupled with a general lack of knowledge of Medicaid eligibility rules, posed the greatest barriers to Medicaid enrollment for eligible children (Perry et al., 2000). With the implementation of BadgerCare, Wisconsin increased outreach efforts designed to inform providers, community-based organizations, and public health and social services agency workers about the program and to encourage qualified families to participate.

Wisconsin conducted a variety of statewide outreach activities for the BadgerCare program. These included a public information

campaign with brochures, a toll-free hotline, and televised public service announcements featuring then-governor Tommy Thompson; the training of outreach workers; and placement of outreach workers at health care and community establishments frequented by low-income families (i.e., outstationing). Wisconsin also had two *Covering Kids* pilot sites—one in Milwaukee and the other in a four-county area in north-central Wisconsin—which were subsequently expanded statewide. Activities covered under the initiative include training, capacity building among community agencies, information dissemination, and process improvements.

Targeted outreach activities have also been conducted in Wisconsin. For example, the state facilitated creation of a BadgerCare Coordinating Committee in Milwaukee to provide a forum for sharing information on BadgerCare policy and program changes and to coordinate strategic outreach efforts. The committee is composed of state and local officials, health advocates, and business representatives. Another committee was formed to address school outreach; this group supported BadgerCare outreach as part of Kindergarten Round-Up in several large school districts and has developed proposals for other approaches to increasing enrollment through schools. Managed care companies and providers, including tribal clinics and the Marshfield Clinic, a multisite provider in north-central Wisconsin, also initiated and supported outreach efforts during the first year of program implementation.

In addition to its outreach efforts, Wisconsin has taken other approaches to encourage qualifying families to apply for BadgerCare. In particular, the state created a distinct image for the program so that it would not be associated with welfare and therefore would be more acceptable to low-income working families. The state also adopted several enrollment simplification measures, including the elimination of the Medicaid assets test, implementation of a simplified mail-in and phone-in application, and acceptance of self-declaration of income; instituted training of county workers to help them understand the philosophical differences between Medicaid/BadgerCare, W-2, and food stamps; and streamlined the redetermination process.

1.1.5 Premiums

Families with incomes over 150 percent of the FPL must pay monthly premiums of approximately 3 percent of their income. Premium payments make BadgerCare more like private insurance and therefore may reduce the political and social stigma sometimes associated with public programs. However, premiums are known to reduce participation and can lead to adverse selection. Research on low-income populations has demonstrated that as premiums increase, participation rates decrease (Ku and Coughlin, 1997; Lewin-VHI, Inc., 1994).

Failure to pay a premium by the end of the following month for which it applies could result in some or all family members being dropped from BadgerCare. The dropped family members would not be able to reenroll for 6 months. Thus, premium payments could result in increased enrollment "churning."

Finally, in addition to discouraging participation, premiums also complicate program administration: Payments must be collected and tracked, late payment notices must be sent, and penalties for nonpayment must be imposed.

1.1.6 Crowd-Out Provisions and ESI Integration

Policy makers desired to increase health insurance coverage of the uninsured, but they were also concerned that the program would attract families who were already covered—enticing them to substitute BadgerCare coverage for their costly private coverage. Although this "crowd-out" effect may be minimal at lower income levels, studies have found that more substitution of public program benefits for private insurance coverage occurs as eligibility is extended to the higher income categories (Dubay and Kenney, 1997). Therefore, Wisconsin policy makers incorporated several features in BadgerCare designed to keep crowd-out at a minimum. These features include premium payments for higher-income families and waiting periods. Applicants are not allowed to enroll in BadgerCare for 3 months following any coverage with private health insurance or within 18 months of having access to ESI. Exceptions are made in circumstances where the discontinuation of private insurance is outside the applicant's control.

Another innovative feature of BadgerCare designed to prevent crowd-out is the integration of the program with ESI. Wisconsin has historically had a strong base of ESI; in 1995, nearly 80 percent of Wisconsin's population had health insurance through an employer, whereas nationally only 66 percent of the population had such insurance (Coughlin et al., 1998). This distinction was due to a relatively high percentage of residents employed in manufacturing industries, a strong union presence in the state, and a vibrant state economy throughout the 1990s.

To preserve the ESI base, two additional provisions were implemented in the BadgerCare program: (1) families who could have been covered by an ESI plan in which the employer pays at least 80 percent of the premium during the past 18 months are excluded from BadgerCare eligibility; and (2) the state will buy into an ESI plan for a family if the employer pays between 40 percent and 80 percent of the premium cost of the plan, the family was not covered by an ESI plan in the previous 6 months, and the payment of premiums and wrap-around services for certain noncovered services is deemed to be cost effective relative to coverage under the state Medicaid plan.[2] Services covered by the state Medicaid plan but not by the ESI plan are provided through Medicaid on a FFS basis.

Determination of access to eligible ESI plans and their cost effectiveness relative to the state Medicaid plan adds to the program's administrative burden. However, these provisions are considered important to state policy makers as a means to prevent crowd-out and to strengthen the ties already forged in Wisconsin between welfare and work.

1.1.7 Funding

BadgerCare is funded primarily by federal and state funds; premiums bring in only about 2 percent of program revenues. All BadgerCare children are funded under Title XXI (SCHIP) with a federal matching rate of 71 percent. Until January 2001, parents and their spouses were funded under a Title XIX Section 1115 waiver at a 59 percent federal matching rate. State funding for

[2]Prior to November 1, 2001, the lower limit of the required employer contribution was 60 percent.

BadgerCare is limited to the amounts appropriated for the program. If the program's costs are projected to exceed budgeted levels, the State may implement an enrollment trigger, subject to approval by the Joint Committee on Finance, to reduce the income level at which new families enroll in the program.

Higher than expected growth in enrollment quickly strained the program fiscal viability and put pressure on policymakers to invoke the enrollment trigger. To relieve the financial pressure without resorting to lowering the upper income limit for BadgerCare eligibility, the state requested and in January 2001 was awarded a section 1115 waiver that granted the state use of Title XXI funds with the higher federal reimbursement of 71 percent for parents with income above 100 percent of the FPL. Parents with income at or below 100 percent of the FPL remain funded under the Title XIX waiver with the regular federal matching rate of 59 percent.

Although relieving the financial pressure, the Title XXI waiver essentially locked the state into its current definitions of financial eligibility. If the state were to reduce the upper income limit for financial eligibility, as envisioned under the enrollment trigger provision, the higher match rate would be revoked.

In summary, Wisconsin has implemented several innovative features in its BadgerCare program that are designed to support families in achieving self-sufficiency while maintaining high insurance rates but that have possible negative effects as well. Some of these features, including family coverage and integration with ESI, are being adopted by other states for their Medicaid and SCHIP programs. Wisconsin's experience with these innovations must be documented and assessed to derive lessons learned for future program development in Wisconsin and other states. To do so, CMS[3] contracted with RTI and its subcontractor, the MayaTech Corporation, to evaluate key features of the BadgerCare program. This reports provides the results of the evaluation.

[3]CMS was still known as the Health Care Financing Administration (HCFA) in the early stages of this contract.

1.2 THE BADGERCARE EVALUATION

CMS posed several questions for the BadgerCare evaluation. To address these questions, RTI and the MayaTech Corporation conducted a case study including site visit interviews, focus groups, and document review; analyses of administrative enrollment data; and surveys of participating, eligible nonparticipating, and disenrolled families. The evaluation questions and the approach taken to address each are shown by topic area in ***Table 1-1***.

The case study was conducted to describe and evaluate BadgerCare's development and implementation process, outreach activities, enrollment procedures, health care delivery systems, and major funding streams; assess key stakeholder satisfaction and the program's success in increasing health insurance among the low-income population; and inform both the survey design and the administrative and survey data analyses. We obtained multiple perspectives to create a comprehensive description and review of the demonstration. Site visit interviews were conducted with state and local officials, health plans, providers, small business representatives, and consumer advocates. In addition, we conducted focus groups with program participants and eligible nonparticipants; and obtained and reviewed program reports, documents, and related news stories. The results of the case study have been previously published and can be downloaded from the CMS Web site (http://www.cms.hhs.gov/researchers/projects/default.asp).

We obtained administrative enrollment data on individuals ever enrolled in BadgerCare from the program's start to September 30, 2002, and individuals ever enrolled in a Wisconsin Medicaid AFDC-related or Healthy Start eligibility category from January 1, 1997, through September 30, 2002, from the State's DHFS. With these data, we investigated questions on the numbers and demographic and enrollment characteristics of BadgerCare participants. Comparisons were made between BadgerCare enrollees and AFDC-related and Healthy Start Medicaid enrollees. In addition, separate tabulations were made for Medicaid enrollees in a period prior to BadgerCare implementation and a period post BadgerCare implementation. We looked for evidence that BadgerCare increased health care coverage among Medicaid/SCHIP-eligible children and W-2 cash assistance recipients.

Table 1-1. BadgerCare Evaluation Questions Posed by CMS and Addressed by the Case Study

	Case Study	Administrative Data	Family Survey	Disenrollee Survey
Program Planning and Implementation				
➤ What was the process used by the State to develop and implement the demonstration?	✓			
➤ How was the participation of various interested parties in the planning process secured?	✓			
➤ Are there lessons to be learned in this area that would be beneficial to other states?	✓			
Outreach and Enrollment Simplification				
➤ What steps were taken by the State to publicize the existence of the BadgerCare program and to encourage qualifying families to apply?	✓			
➤ How effective were these efforts?	✓		✓	
Enrollment Analysis				
➤ How many people participate in BadgerCare?		✓		
➤ What are the demographic and enrollment characteristics of the BadgerCare participants?		✓		
➤ Has the demonstration increased the percentage of the W-2 participating population who have health insurance?		✓		
➤ Has the demonstration succeeded in increasing the percentage of the population with incomes below 200 percent of the FPL who have health insurance?	✓			
Profile of BadgerCare Participants and Nonparticipants				
➤ Is there any evidence that persons enrolled in BadgerCare tend to have higher or lower health status than persons who have not enrolled?			✓	
Factors Motivating Participation				
➤ What motivates families to participate or not participate in BadgerCare?	✓		✓	
➤ Is there any evidence that family coverage has increased participation of children in Medicaid/SCHIP?	✓ ✓	✓	✓	
➤ Have premiums deterred families from enrolling in BadgerCare?			✓	
➤ How many persons and/or families are deemed ineligible for BadgerCare coverage due to the anti-crowd-out provisions?			✓	✓

(continued)

Table 1-1. BadgerCare Evaluation Questions Posed by CMS and Addressed by the Case Study (continued)

	Case Study	Administrative Data	Family Survey	Disenrollee Survey
Impact of Failure to Pay Premiums on Churning and Turnover				
➤ Have premiums caused additional churning in the BadgerCare population relative to what would have existed in the absence of premiums?		✓		✓
➤ Are there cases in which entire families drop coverage for failure to pay premiums, including children who are entitled to retain coverage? How frequently does this occur?		✓		✓
Integration with ESI and Medicaid Managed Care				
➤ What percentage of the BadgerCare population receives coverage through Medicaid managed care, through exclusively FFS Medicaid/BadgerCare, and through ESI?	✓	✓		
Stakeholder Satisfaction				
➤ How do the various interested parties view the demonstration now that it has been implemented and is operating?	✓		✓	✓
Revenue and Costs				
➤ What are the funding sources for the BadgerCare program, and what is the relative importance of each?	✓			
➤ How much do premiums contribute to total revenues?	✓			

Note: CMS = Centers for Medicare and Medicaid Services; W-2 = Wisconsin Works; FPL = federal poverty level; SCHIP = State Children's Health Insurance Program; ESI = employer-sponsored insurance; FFS = fee-for-service.

The administrative data were also used to investigate the impact of premiums on churning and turnover in the Medicaid/BadgerCare program; to determine whether and how frequently Medicaid-eligible children were dropped from coverage when their parents were terminated for failure to pay premiums; and to estimate the percentage of BadgerCare participants enrolled in HMOs and the lengths of enrollment delays.

To obtain information on participating families' views and experiences with BadgerCare and comparative information on the characteristics of program participants and eligible nonparticipants, we conducted a telephone survey of families eligible for the program. We administered the BCFS survey to two separate sample

populations: (1) a sample of families from a list of enrolled families provided by the state, and (2) a sample of families from lists of children participating in the National School Lunch Program (NSLP) provided by consenting school districts from around the state. The first sample provided responses for a representative sample of BadgerCare enrolled families, whereas the second allowed us to compare the characteristics of participating and nonparticipating families. In the survey, we collected information on families' awareness and source of program information; their experiences and satisfaction with the program; factors motivating their participation decisions, including the impact of family coverage and premium payments; and families' demographic and socioeconomic characteristics, health status, health care access, and health service use.

Finally, we also conducted a mail survey with telephone follow-up of premium-paying families with one or more members who had disenrolled from BadgerCare in the first half of 2002. The BCDS survey collected information on the demographic, geographic, socioeconomic, and health characteristics of these families; their current health insurance coverage; reasons for disenrollment; satisfaction with BadgerCare and their current coverage; and access to care under BadgerCare and their current coverage. This survey provided further information for evaluating the impact of premiums on churning and turnover in the program and whether entire families, including Medicaid-eligible children, were dropped from coverage when families failed to pay the premiums.

The results of the administrative and survey data analyses are provided in this report. We present the analyses of the administrative data in ***Section 2***, the BCFS data in ***Section 3,*** and the BCDS data in ***Section 4***. Finally, ***Section 5*** addresses each question posed by CMS in turn and summarizes the findings from all components of the study, including the case study.

2 Analysis of Enrollment Data

2.1 METHODS

In this section, we investigate trends in Medicaid and BadgerCare enrollment, answering the questions of how many people participate in BadgerCare and what are the demographic and enrollment characteristics of these participants. Among the enrollment characteristics investigated are rates of disenrollment and reenrollment in Medicaid/BadgerCare. We look at differences in these rates by age group, eligibility category, cash assistance status, and whether the family paid premiums during the enrollment episode. In particular, we attempt to discern the impact of premiums on churning, the process of repeatedly coming in and out of a program. We also answer the questions of whether and how many cases existed in which entire families dropped coverage for failure to pay premiums, including children who are entitled to retain coverage. Finally, we investigate enrollment in managed care plans, answering the question of what percentage of the BadgerCare population receives coverage through Medicaid managed care versus exclusively fee-for-service (FFS) Medicaid. We also investigate the lengths of delay in enrolling in managed care following BadgerCare enrollment.

We used two different sources of administrative data to investigate enrollment trends: (1) monthly counts of current enrollment in family coverage eligibility categories obtained from the State's Web site (http://www.dhfs.state.wi.us/medicaid8/caseload/481-caseload.htm) for January 1997 through August 2003, and (2) enrollment data obtained from DHFS for all individuals who

were enrolled in Medicaid or BadgerCare under a family coverage category in Wisconsin between January1, 1997 and September 30, 2002. Family coverage categories include:

- AFDC-related eligibility (i.e., families meeting the categorical and financial eligibility criteria of the AFDC program that were in effect on July 16, 1996, before the program was dissolved);
- Healthy Start (i.e., the poverty-related expansion categories for pregnant women and children through age 6 with family incomes up to 185 percent of the FPL and older children with family incomes up to 100 percent of the FPL); and
- BadgerCare.

Individuals enrolled in these categories are members of families with children. However, family members from any given family may be enrolled in different eligibility categories—for example, children may be enrolled under Healthy Start and their parents under BadgerCare. Therefore, "family coverage" in this context differs from the concept of family coverage in private insurance plans. Both sets of data span a time period including the tail-end of the decline in Medicaid enrollment resulting from welfare reform and a thriving economy, the early period of BadgerCare implementation and operation, and more recent months in which the economy and private insurance coverage has declined.

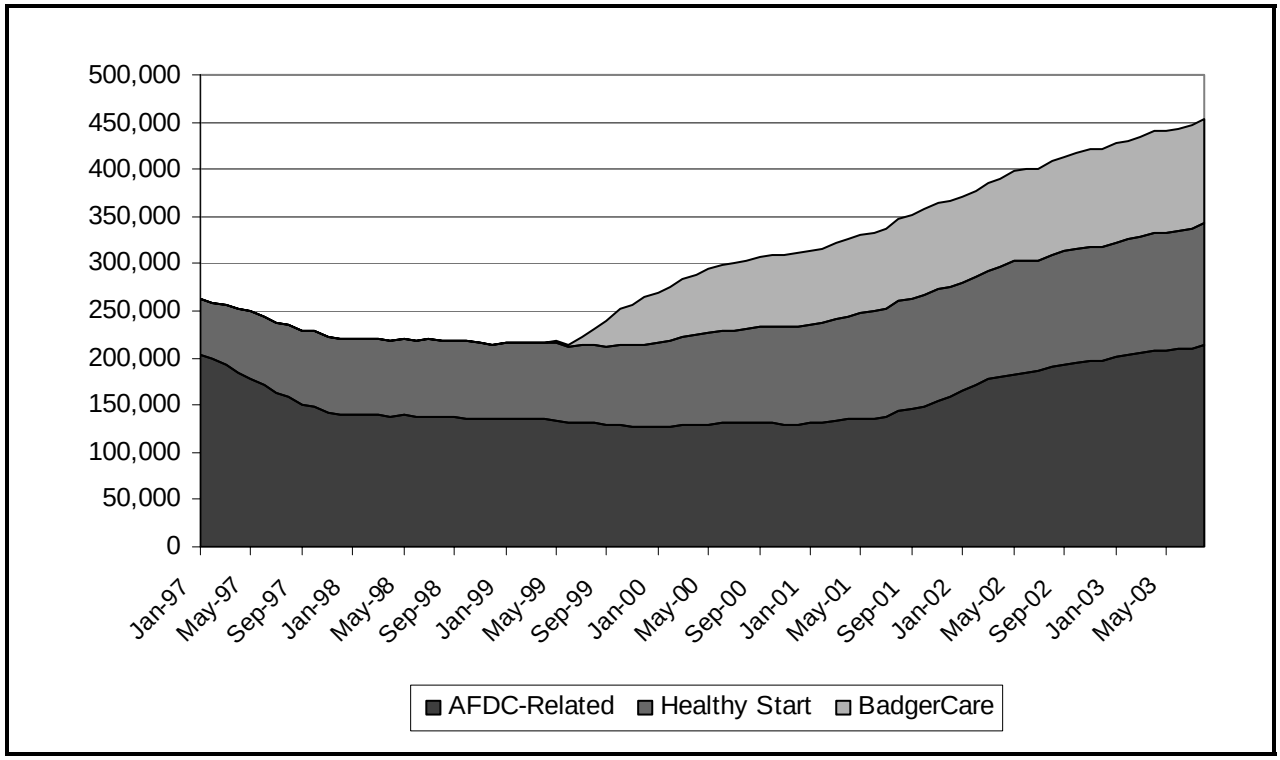
The individual-level enrollment data obtained from the State came from a variety of data systems, including the CARES eligibility,[1] and the Medicaid, BadgerCare, and AFDC/W-2 enrollment systems. Data elements included unique person and case (family) identifiers; the start and end dates of each enrollment segment, a medical status code identifying the eligibility category for the segment, and the HMO the person was enrolled in during the segment; the recipient's date of birth, gender, and race; the start and end dates of cash assistance periods; and the month and year the case failed for BadgerCare due to nonpayment of premium.

The monthly enrollment counts of current enrollees are graphed to show general trends in AFDC-related, Healthy Start, and BadgerCare

[1]Client Assistance for Reemployment and Economic Support (CARES) is a statewide, automated, and integrated eligibility determination and redetermination system which uses information on the family structure, citizenship, and financial status obtained through personal interview or mail application to determine eligibility for Medicaid, BadgerCare, food stamps, childcare, and Wisconsin Works.

enrollment over the study period (***Figure 2-1***). These figures reflect the number of individuals for which the state is liable each month. Because of turnover and churning, the total number of individuals affected by the program each year is much higher. To determine the total number of individuals ever enrolled in AFDC-related, Healthy Start, and BadgerCare programs during the year, we used the individual enrollment records that we obtained from the State. The data were tabled by year; any individual with one or more months of Medicaid or BadgerCare coverage during a year was counted. The individual-level enrollment data were also used to investigate the demographic and enrollment characteristics of enrollees; to determine whether Medicaid eligible children retained coverage after other family members enrolled in BadgerCare were dropped for failure to pay premiums and the impact of premiums on churning; and to examine Medicaid managed care enrollment among BadgerCare enrollees. The methodology used for these investigations are provided in the respective subsections below.

Figure 2-1. Monthly Medicaid Family Coverage Enrollment by Program, January 1997 to August 2003



Source: Bureau of Health Care Eligibility, Division of Health Care Financing, Department of Health and Family Services, State of Wisconsin.

2.2 ENROLLMENT TRENDS

2.2.1 Monthly Enrollment

By the end of 1997, the steep decline in Medicaid enrollment in Wisconsin had leveled off, with much smaller additional losses in the next year and a half (see ***Figure 2-1***). Whereas Medicaid family coverage had fallen by 43,271 enrollees from 263,364 in January 1997 to 220,093 in January 1998, it had fallen by only 5,137 enrollees from January 1998 to June 1999, the month prior to full BadgerCare implementation. Following BadgerCare implementation, enrollment in Medicaid/BadgerCare family coverage began a steady climb to 453,642 enrollees in August 2003.

BadgerCare enrollment exceeds early expectations and continues to climb.

Wisconsin experienced very rapid enrollment of eligible families in BadgerCare during its first year of implementation—far exceeding expectations. The original budget for the program was based on an enrollment of 67,535 individuals by June 2001. This enrollment was reached an entire year earlier; in June 2000, 69,322 individuals were enrolled in the program. BadgerCare enrollment has continued to climb in each of the following 3 years but at a slower pace. In June 2003, enrollment in BadgerCare was at an all-time high of 109,158 individuals and was an even higher 111,261 in August 2003.

Healthy Start enrollment also picked up slightly with the implementation of BadgerCare. However, AFDC-related enrollment continued to decline until January 2000. During the latter 2 years of the series, from August 2001 to August 2003, a weak economy resulted in AFDC-related enrollment being the fastest growing family coverage eligibility category.

2.2.2 Annual Enrollment

Annual totals of persons ever enrolled by program type and age group computed from the individual-level enrollment data are shown in ***Table 2-1***; annual percentage increases by program type and age group are shown in ***Table 2-2***. As stated above, the data include enrollment information for all individuals who were enrolled in Wisconsin's Medicaid program under an AFDC-related, Healthy Start, or BadgerCare eligibility category from January 1, 1997, to September 30, 2002. Besides the three family coverage

Table 2-1. Annual Numbers of Medicaid Family Coverage Enrollees by Program Type and Age Group, 1997–2002

	1997	1998	1999	2000	2001	2002[1]
AFDC-Related						
Total	268,161	216,303	213,010	211,177	238,927	249,663
Adults	86,814	68,657	69,503	70,774	83,724	92,133
Children	181,347	147,646	143,507	140,403	155,203	157,530
0–5 years	70,521	57,576	56,351	56,905	63,918	61,322
6–14 years	84,822	67,809	66,073	63,445	68,585	72,700
15–18 years	26,004	22,261	21,083	20,053	22,700	23,508
Healthy Start						
Total	155,940	158,765	166,371	182,145	203,757	173,983
Pregnant Women	19,805	20,802	20,044	19,945	20,058	14,817
Children	136,135	137,963	146,327	162,200	183,699	159,166
0–5 years	83,608	81,244	83,606	88,409	94,019	74,118
6–14 years	50,300	53,480	55,980	62,222	71,636	65,582
15–18 years	2,227	3,239	6,741	11,569	18,044	19,466
Other Medicaid						
Total	20,752	24,934	28,065	28,674	29,773	28,428
Adults	7,237	8,391	9,184	9,350	9,950	9,630
Children	13,515	16,543	18,881	19,324	19,823	18,798
0–5 years	3,186	4,314	5,228	5,583	5,815	5,119
6–14 years	6,036	7,340	8,497	8,885	9,476	9,685
15–18 years	4,293	4,889	5,156	4,856	4,532	3,994
BadgerCare						
Total	—	—	60,392	131,911	158,169	148,062
Adults	—	—	36,611	82,438	104,262	96,531
Children	—	—	23,781	49,473	53,907	51,531
0–5 years	—	—	1,011	3,634	2,951	2,992
6–14 years	—	—	12,756	31,173	36,569	36,209
15–18 years	—	—	10,014	14,666	14,387	12,330
All Programs						
Total	366,466	337,399	379,770	434,269	487,439	463,523
Adults	104,239	88,687	114,551	147,217	173,114	169,051
Children	262,227	248,712	265,219	287,052	314,325	294,472
0–5 years	121,169	116,734	118,623	123,772	132,104	112,448
6–14 years	110,950	104,465	112,572	123,641	137,255	137,548
15–18 years	30,108	27,513	34,024	39,639	44,966	44,476

Note: AFDC = Aid to Families with Dependent Children.

[1]Data for only 9 months of the year.

Table 2-2. Annual Percentage Increase of Medicaid Family Coverage Enrollees and Annual Percent Increase by Program Type and Age Group, 1997–2002

	1997–1998	1998–1999	1999–2000	2000–2001
AFDC-Related				
Total	–19.3%	–1.5%	–0.9%	13.1%
Adults	–20.9%	1.2%	1.8%	18.3%
Children	–18.6%	–2.8%	–2.2%	10.5%
0–5 years	–18.4%	–2.1%	1.0%	12.3%
6–14 years	–20.1%	–2.6%	–4.0%	8.1%
15–18 years	–14.4%	–5.3%	–4.9%	13.2%
Healthy Start				
Total	1.8%	4.8%	9.5%	11.9%
Pregnant Women	5.0%	–3.6%	–0.5%	0.6%
Children	1.3%	6.1%	10.8%	13.3%
0–5 years	–2.8%	2.9%	5.7%	6.3%
6–14 years	6.3%	4.7%	11.2%	15.1%
15–18 years	45.4%	108.1%	71.6%	56.0%
Other Medicaid				
Total	20.2%	12.6%	2.2%	3.8%
Adults	15.9%	9.5%	1.8%	6.4%
Children	22.4%	14.1%	2.3%	2.6%
0–5 years	35.4%	21.2%	6.8%	4.2%
6–14 years	21.6%	15.8%	4.6%	6.7%
15–18 years	13.9%	5.5%	–5.8%	–6.7%
BadgerCare				
Total	—	—	118.4%	19.9%
Adults	—	—	125.2%	26.5%
Children	—	—	108.0	9.0%
0–5 years	—	—	259.4%	–18.8%
6–14 years	—	—	144.4%	
15–18 years	—	—	46.5%	–1.9%
All Programs				
Total	–7.9%	12.6%	14.4%	12.2%
Adults	–14.9%	29.2%	28.5%	17.6%
Children	–5.2%	6.6%	8.2%	9.5%
0–5 years	–3.7%	1.6%	4.3%	6.7%
6–14 years	–5.8%	7.8%	9.8%	11.0%
15–18 years	–8.6%	23.7%	16.5%	13.4%

Note: AFDC = Aid to Families with Dependent Children.

eligibility categories, we have also included rows in the table for enrollees in other Medicaid coverage categories. These categories include immigrants, migrant workers, children in foster care or subsidized adoption, Supplemental Security Income recipients, and other disabled individuals eligible for Medicaid coverage. All of the individuals shown in this category were enrolled at some time during the analysis period in a Medicaid/BadgerCare family coverage eligibility category, but for the year in question they were enrolled for at least 1 month under one of these other Medicaid eligibility categories. Individuals who were only enrolled in one of the other eligibility categories from January 1, 1997, to September 30, 2002, are not represented in the tables. Age categories are recomputed for each year of data and reflect the individual's age at the end of the respective year (i.e., December 31st).

Because an individual may have been enrolled in more than one eligibility category during the year, the sum of the enrollment figures across eligibility categories is greater than the total number of enrollees over all categories at the end of the tables. These latter figures are unduplicated counts of individuals ever enrolled in at least one of the eligibility categories during the year.

Furthermore, because of updates to the enrollment files, including a reassignment of case or family identifiers, from when the state pulled the first set of enrollment data and when they pulled the second set of enrollment data for our study, the numbers in similar tables in the *Case Study Report* differ slightly from those reported here. However, the differences have no effect on the qualitative findings.

Before BadgerCare

BadgerCare ends the decline in public health insurance coverage of families with children.

In 1997, 366,466 individuals in families with children were covered under Medicaid for at least part of the year; 28 percent of these enrollees were adults (aged 19 years or older), and 72 percent were children (aged 18 years or younger). Total Medicaid enrollment among individuals in families with children declined by 8 percent from this 1997 figure to 337,399 individuals in 1998. The drop in enrollment was seen among both adults and children but was greater for adults (15 percent) than for children (5 percent). Furthermore, the enrollment decline was concentrated in AFDC-related eligibility categories; total enrollment in these categories fell

by 19 percent, with a 21 percent drop among adults and an 19 percent drop among children.

Some enrollees who would have been covered under the AFDC-related categories may have picked up coverage under Healthy Start and other Medicaid categories. The number of pregnant women enrolled under Healthy Start grew by 5 percent from 1997 to 1998, and adult coverage under other Medicaid categories grew by 16 percent. The number of children enrolled in Healthy Start grew by a small 1 percent from 1997 to 1998, but the number of children in other Medicaid categories grew by 22 percent.

Following BadgerCare Implementation

In July 1999, the state began enrolling parents and children in families with incomes below 185 percent of the FPL in BadgerCare. By the end of December 1999, 60,392 individuals had been enrolled in the program. From 1999 to 2000, BadgerCare enrollment more than doubled. Enrollment of adults grew faster than enrollment of children. In 2001, 66 percent of BadgerCare enrollees were adults and 34 percent were children (see ***Table 2-3***). Many of the children of BadgerCare adult enrollees were enrolled in Medicaid/Healthy Start, which covers children under age 6 in families with incomes up to 185 percent of the FPL. Any child eligible for Medicaid coverage is not eligible for BadgerCare. Consequently, BadgerCare children were older than children enrolled in Medicaid. In 2001, only 5 percent of BadgerCare child enrollees were under 6 years of age, whereas 50 percent of Medicaid children were under age 6.

Significant growth occurs in child coverage under Healthy Start following BadgerCare implementation.

Enrollment in AFDC-related categories continued to decline but at a much more modest rate of 2 percent from 1998 to 1999, and 1 percent from 1999 to 2000. Enrollment of Healthy Start pregnant women also declined in both years; in 2000, it was at about the same level as it was in 1997. In contrast, enrollment of Healthy Start children grew at an increasing rate—6 percent from 1998 to 1999, and 11 percent from 1999 to 2000. The greatest growth was among teens aged 15 to 18 years, for which Healthy Start enrollment almost tripled in the 2 years from 1998 to 2000. This latter trend is partly due to the accelerated phase-in of OBRA teens (children aged 15 to 18 years in families with incomes below

Table 2-3. Percentage Distribution of Medicaid Family Coverage Enrollees Over Age Group Categories by Eligibility Category, 2001

	AFDC-Related	Healthy Start	Other Medicaid	BadgerCare	Total
Total Enrollees	238,927	203,757	29,773	158,169	487,439
	100.0%	100.0%	100.0%	100.0%	100.0%
Adults (> 18 years)	35.0%	9.8%	33.4%	65.9%	35.5%
Children	65.0%	90.2%	66.6%	34.1%	64.5%
0–5 years	26.8%	46.1%	19.5%	1.9%	27.1%
6–14 years	28.7%	35.2%	31.8%	23.1%	28.2%
15–18 years	9.5%	8.9%	15.2%	9.1%	9.2%

Note: AFDC = Aid to Families with Dependent Children.

100 percent of the FPL) beginning in April 1999. However, the increase in child Healthy Start enrollment is also attributable to the enhanced outreach, enrollment simplification, and the eligibility of parents following BadgerCare implementation.

The impact of the declining economy can be seen in the rise in AFDC-related Medicaid enrollment beginning in mid-2001. From 2000 to 2001, the AFDC-related Medicaid caseload rose 13 percent. It had risen another 5 percent in the first 9 months of 2002. Other Medicaid enrollment categories also experienced an increase in 2001; BadgerCare grew another 20 percent from 2000 to 2001, and Healthy Start enrollment rose 12 percent from its 2000 level.

Total enrollment in family coverage began climbing in 1999, reaching 487,439 in 2001. From 1998 to 1999, enrollment among individuals ever enrolled in a family coverage category increased at an average annual rate of 13 percent. Adult coverage grew the fastest, with a 29 percent increase from 1998 to 1999, a 29 percent increase from 1999 to 2000, and an 18 percent from 2000 to 2001. During the same 3 years, child coverage grew at an increasing rate—7 percent from 1998 to 1999, 8 percent from 1999 to 2000, and 10 percent from 2000 to 2001, respectively.

2.2.3 Medicaid/BadgerCare Coverage of W-2 Participants

The breaking of the link between cash assistance and Medicaid eligibility resulted in some people being eligible for W-2 but not

Medicaid and vice versa (Coughlin et al., 1998). With the implementation of BadgerCare, W-2 participants are now all "potentially" eligible for Medicaid/BadgerCare coverage, depending on their income level and their access to employer-sponsored coverage. Even though W-2 participation does not qualify an individual for publicly sponsored health care coverage in the same way that AFDC participants used to qualify for Medicaid, as we reported in the *Case Study Report*, virtually all W-2 participants are enrolled in either Medicaid or BadgerCare.

The percentage of Medicaid/BadgerCare enrollees who were cash assistance recipients declined steadily throughout the analysis period but the number increased in 2001, as unemployment rose in the state.

We obtained records of cash assistance spells among individuals ever enrolled in Wisconsin's family coverage categories from January 1, 1997, through September 30, 2002, and linked them to their Medicaid/BadgerCare enrollment episodes. The annual percentages of these individuals who were cash assistance recipients are shown in ***Table 2-4***. In 1997, more than one out of four family coverage enrollees received cash assistance sometime during the year. This percentage steadily declined through the analysis period. In the first 9 months of 2002, only one out of eight family coverage enrollees had received cash assistance that year.

The total number of Medicaid/BadgerCare enrollees who were cash assistance enrollees also declined from 1997 to 2000, but increased in 2001 as unemployment rose. Most of the cash assistance recipients were enrolled in traditional Medicaid eligibility categories; only about 12 percent were enrolled in BadgerCare. Children comprised two-thirds of Medicaid/BadgerCare enrollees who were also cash assistance recipients, whereas they comprised only one-third of BadgerCare enrollees receiving cash payments.

2.2.4 Impact on the Uninsured

Prior to BadgerCare implementation, state estimates indicated that Wisconsin had 90,000 uninsured adults and 54,000 uninsured children in families with incomes under 200 percent of the FPL. In December 2001, 61,832 adults were covered under BadgerCare—more than two-thirds of the state's estimated low-income, uninsured adult population. Furthermore, 29,661 children were covered by BadgerCare and an additional 53,300 children were added to the Medicaid rolls for a total of 82,961 covered children—more than one and a half times the original estimate of uninsured children.

Table 2-4. Annual Numbers of Medicaid Family Coverage Enrollees by Cash Assistance Status and Age Group, 1997-2002

	1997	1998	1999	2000	2001	2002[1]
Medicaid/BadgerCare						
Percent of enrollees who were cash assistance recipients	27.4%	24.4%	17.9%	15.5%	14.8%	11.9%
Number of cash assistance recipients	100,387	82,361	68,105	67,289	72,316	54,998
Adults	31,713	25,910	21,743	21,896	24,263	19,131
	31.6%	31.5%	31.9%	32.5%	33.6%	34.8%
Children	68,674	56,451	46,362	45,393	48,053	35,867
	68.4%	68.5%	68.1%	67.5%	66.4%	65.2%
BadgerCare Only						
Percent who are cash assistance recipients	—	—	4.2%	12.0%	13.5%	10.3%
Number of cash assistance recipients	—	—	2,833	8,047	9,737	5,638
Adults	—	—	1,847	5,430	7,188	4,326
	—	—	65.2%	67.5%	73.8%	76.7%
Children	—	—	986	2.617	2,549	1,312
	—	—	34.8%	32.5%	26.2%	23.3%

[1] Data for only 9 months of the year.

The drop in uninsured accompanies the rise in BadgerCare enrollment. Medicaid/BadgerCare is credited with keeping insurance coverage high in Wisconsin, despite rising unemployment.

On the surface, these numbers suggest that the state enrolled more than the number of eligible children. Explanations for the apparent discrepancy include natural fluctuations in the Medicaid/ BadgerCare population as families gain and lose eligibility, along with the use of sample survey data to estimate a low-income population.

All available data indicate that the uninsurance rate in Wisconsin dropped significantly following BadgerCare implementation. According to data from the Census Bureau's Current Population Survey (CPS), the proportion of residents without health insurance in Wisconsin dropped to 7 percent in 2000, down from 11 percent in the state in 1999 and 13 percent in 1998. Wisconsin's uninsurance rate in 2000 was half the rate for the nation as a whole and the lowest it had been since 1990 (U.S. Census Bureau, 2001). The Wisconsin Family Health Survey (WFHS) indicated that 11 percent of the State residents went without health insurance during part or all of 2000 (DHFS, 2001), whereas 13 percent were uninsured

during part or all of 1999 (DHFS, 2000). The CPS findings differ from figures prepared by DHFS from the WFHS due to different survey methods and different definitions of the uninsured (Frey, 2000). The WFHS figures include people who both had insurance during part of the year and were uninsured part of the year. The CPS includes only those uninsured for the entire year. Both surveys, however, show that the rate of uninsured in Wisconsin declined following BadgerCare implementation.

In addition, despite a growing unemployment rate and worsening economic conditions, insurance coverage has remained high in Wisconsin. In June 1999, the state's seasonally adjusted unemployment rate was 2.9 percent (DWD, 1999). Three years later, in June 2002, it had risen to 4.9 percent and stood at 5.9 percent in August 2003 (DWD, 2002, 2003). Furthermore, a large number of the job losses have occurred in the manufacturing sector, whereas job gains have been concentrated in the service industries, which are not as likely to offer health insurance. Nevertheless, the percentage of Wisconsin's household population without health insurance coverage for all or part of the year remained unchanged from 2000 to 2002 at 11 percent (DHFS, 2002, 2003b), and Wisconsin continues to have uninsurance rates among the lowest in the nation (U.S. Department of Commerce, 2003). DHFS credits Medicaid and BadgerCare with filling the health insurance gap resulting from the tough economic times (DHFS, 2003b).

2.3 CHURNING AND TURNOVER

In addition to how many and what types of individuals participate in BadgerCare, CMS also asked about the enrollment characteristics of BadgerCare participants. These characteristics include lengths of enrollment, disenrollment rates or turnover, and rates of reenrollment or churning. Many individuals who disenroll from Medicaid or SCHIP will later return for a subsequent period of coverage. This process of repeatedly coming into and out of a program is called "churning." Churning can be disruptive to continuity of care, harmful to the health of vulnerable populations, and costly to administer.

In this section, we investigate the probability of disenrolling from Medicaid and BadgerCare at different lengths of enrollment and the probability of reenrolling after spells of different lengths without

coverage to provide information on churning and turnover in the programs. Differences in patterns of disenrollment and reenrollment are investigated for adult and child enrollees by eligibility category, cash assistance status, and over time—pre- and post-BadgerCare. In particular, we investigated the following:

- Whether BadgerCare enrollees had equally long lengths of enrollment than newly enrolled individuals in traditional Medicaid eligibility categories.
- Whether disenrolled BadgerCare enrollees were more likely to reenroll soon after disenrollment than newly disenrolled individuals who were enrolled in traditional Medicaid categories.
- Whether the implementation of BadgerCare had an impact on the lengths of enrollment or the probability of reenrollment among individuals enrolled in traditional Medicaid eligibility categories and those who received cash assistance (i.e., did the enrollment characteristics of these groups change over time from before to after BadgerCare implementation).

To conduct this analysis, we created a record for each episode of enrollment among the Medicaid and BadgerCare enrollees. An episode was defined as any period of continuous enrollment in Medicaid/BadgerCare, regardless of switches between the two programs or between eligibility groups within programs. An episode ended only when a gap in coverage of 1 month or more was found.

We used the episode records first to compare how long beneficiaries remain in Medicaid/BadgerCare. We present Kaplan-Meier survival curves, which show the probability of remaining continuously covered, from 1 to 32 months following enrollment, and compare the accompanying hazard rates, the probability of leaving Medicaid/BadgerCare, at 12, 24, and 32 months of enrollment. The Kaplan-Meier curves and hazard rates were computed with the length of enrollment for all new episodes in (i.e., beginning during) two different time periods: (1) a period preceding BadgerCare implementation or the "pre-period," defined as the 2-year period from January 1, 1997, through December 31, 1998, and (2) a period following BadgerCare implementation or the "post-period," defined as the 2-year period from January 1, 2000, through December 31, 2001. Because the data file contains information on episodes only through September 30, 2001, some episodes

beginning in the post-period and ending after that date were censored.

Separate curves and rates were computed for adults and children by age group (0 to 5 years and 6 to 18 years) in three different enrollment categories *at entry*—AFDC-related, Healthy Start, and BadgerCare. Survival curves and hazard rates are compared among adults and children enrolled in AFDC-related, Healthy Start, and BadgerCare enrollment categories in the post-period and then in the pre- versus the post-period among adults and children enrolled in AFDC-related and Healthy Start categories. Finally, survival curves and hazard rates for Medicaid/BadgerCare enrollees are split out and compared by whether or not anytime during the episode they received cash assistance.

The implementation of BadgerCare substantially increased the lengths of Medicaid enrollment episodes among adults in low-income families. Nevertheless, only half of adult Medicaid and BadgerCare enrollees remained enrolled beyond the first year of enrollment.

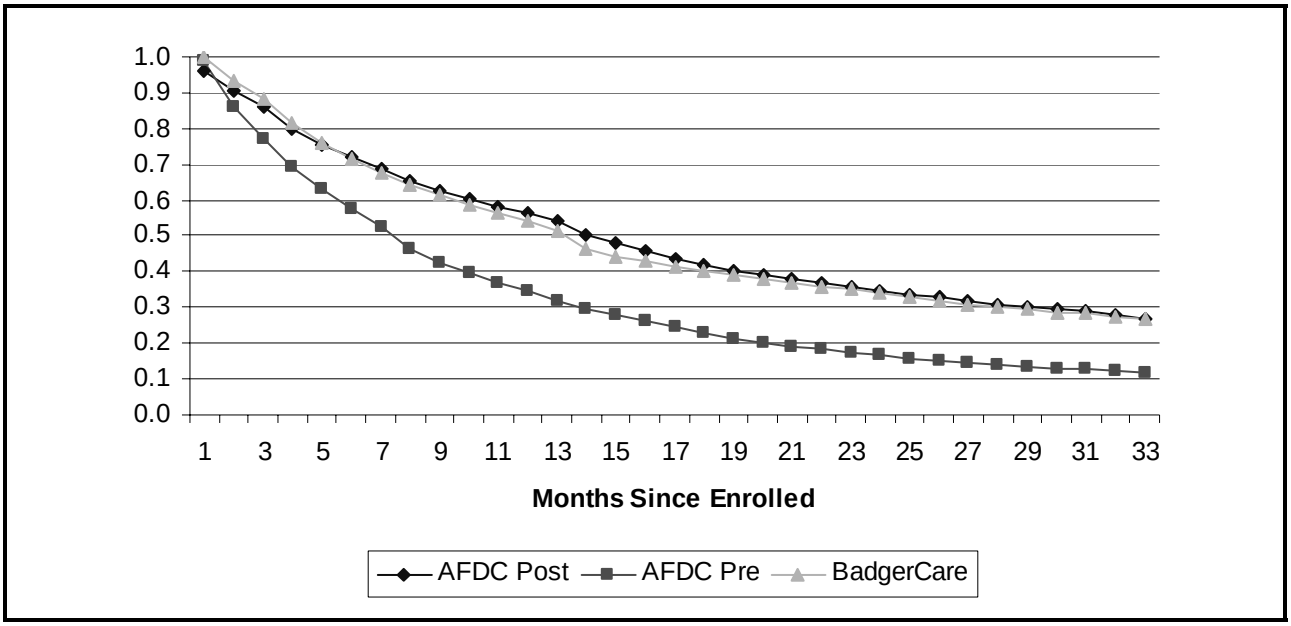
Using similar procedures, we then compare how long beneficiaries remain disenrolled from Medicaid/BadgerCare. The Kaplan-Meier survival curves, computed from the variable for the number of months between episodes, show the probability of remaining continuously disenrolled from 1 to 32 months following disenrollment. The hazard rates from these figures represent the probability of reenrolling. All episodes ending from January 1, 1997, through December 31, 1998, are used to compute the pre-period figures, and all episodes ending from January 1, 2000, through December 31, 2001, are used to compute the post-period figures. Enrollees are grouped by the enrollment category they were in *at disenrollment*. Similar to enrollment episodes, some disenrollment episodes ending in the post-period are censored at October 1, 2002.

2.3.1 Retention of Coverage and Turnover

Adults

The Kaplan-Meier survival curves for adults enrolled in AFDC-related Medicaid categories pre- and post-BadgerCare and in BadgerCare in the post-period are shown in ***Figure 2-2.*** Hazard rates for disenrollment by age and eligibility group are shown in ***Table 2-5***. These data show a steady, steep drop-off of coverage in the first 12 months following enrollment in the post-period. Only half of all these adult participants were still enrolled by the 13th

Figure 2-2. Probability of Remaining Enrolled among Adults Pre- and Post-BadgerCare



month following enrollment. Enrollment continued to drop in the second and third years but at a much slower pace. By 32 months after enrollment, nearly three-quarters of AFDC-related and BadgerCare adults had disenrolled.

Of note is the relatively smooth survival curves found for the Medicaid/BadgerCare enrollees in Wisconsin. Studies of retention and churning in other SCHIP programs have found significant drop-offs of program coverage at redetermination, that is between the 6th and 7th month of coverage or the 12th and 13th month of coverage, depending on whether the redetermination period is 6 or 12 months from enrollment (Dick et al., 2002). For BadgerCare adults, we see only a slight dip in the curve between months 12 and 13.

BadgerCare lengthens episodes of continuous enrollment in public coverage.

The probabilities of remaining enrolled for AFDC-related and BadgerCare adult enrollees at each month of the 32-month analysis period, although significantly different statistically, track each other fairly well (***Figure 2-2***). BadgerCare enrollees are only slightly less likely to have remained enrolled in the program in most months. In contrast, a substantial difference is seen in the lengths of enrollment among AFDC-related enrollees over time. Enrollees who were first enrolled under an AFDC-related category were much more likely to have remained enrolled in Medicaid/BadgerCare at every month in

Table 2-5. Probability of Disenrolling from Medicaid/BadgerCare at 12, 24, and 32 Months of Coverage by Age Group, Eligibility Category, and Time Period

	Number of Episodes	12 Months	24 Months	32 Months
Adults				
AFDC-related				
Pre-period	76,542	68.2	84.1	87.3
Post-period	53,371	46.1	66.3	73.0
Healthy Start[1]				
Pre-period	21,425	87.6	94.9	96.2
Post-period	16,720	60.4	74.2	79.4
BadgerCare	81,086	48.4	66.8	73.0
Children 6 to 18 years				
AFDC-related				
Pre-period	65,613	55.6	74.1	80.0
Post-period	40,809	37.1	59.5	67.3
Healthy Start				
Pre-period	37,746	68.1	82.8	86.6
Post-period	44,810	41.0	61.9	68.6
BadgerCare	32,643	48.2	69.2	76.3
Children 0 to 5 years				
AFDC-related				
Pre-period	43,230	38.3	58.6	65.9
Post-period	35,506	25.5	45.1	52.3
Healthy Start				
Pre-period	81,514	43.4	70.7	77.2
Post-period	78,511	27.1	52.5	60.7
BadgerCare	1,039	45.8	61.4	72.0

Note: The pre-period includes all enrollment episodes starting between January 1, 1997, and December 31, 1998, and the post-period includes all enrollment episodes starting between January 1, 2000, and December 31, 2001. Eligibility categories are those the participants were in at entry.

[1] Pregnant women.

the post-period than in the pre-period. The probability of disenrolling by 12 months for AFDC-related enrollees was 68 percent in the pre-period compared to 46 percent in the post-period; by 32 months, the probabilities of disenrolling for AFDC-related enrollees was 87 percent in the pre-period and 73 percent in the post-period. In the post-period, many enrollees whose income

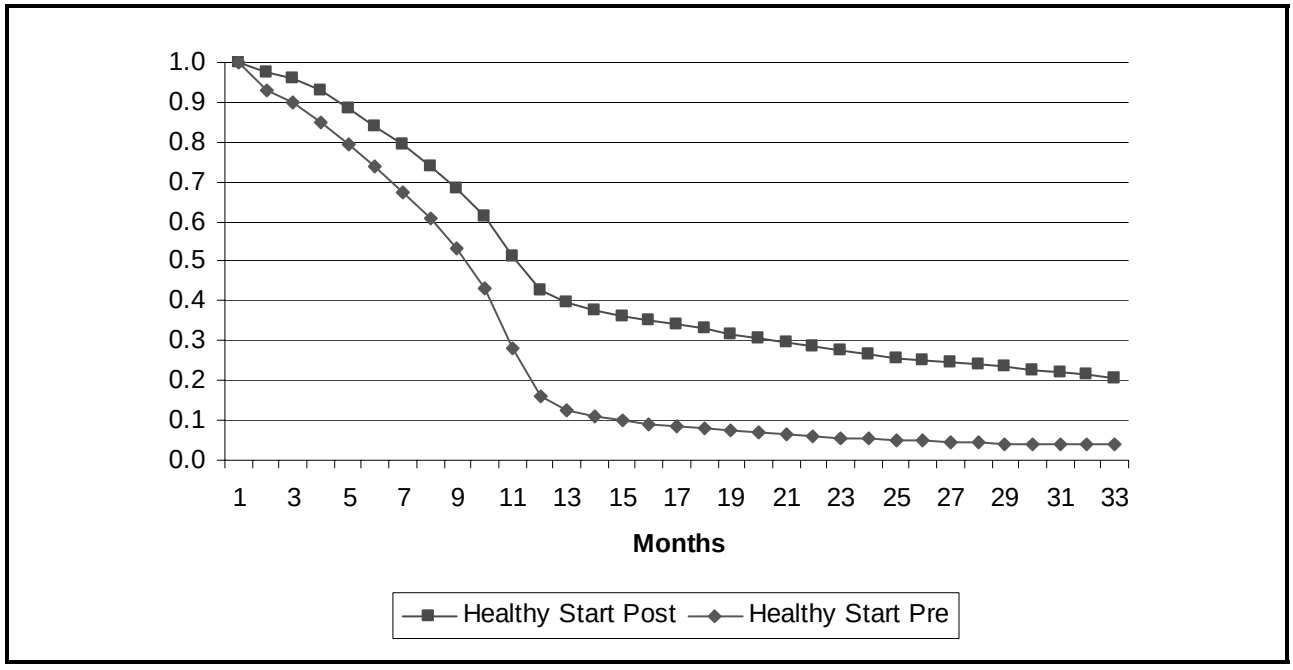
increased beyond the financial eligibility cut-offs for the AFDC-related categories were able to transfer to BadgerCare, where income cut-offs are substantially higher, and thereby retain their coverage.

After BadgerCare implementation, Healthy Start pregnant women were much more likely to retain Medicaid/ BadgerCare coverage beyond the first 2 months postpartum.

The difference in the survival curves for remaining enrolled was even more divergent between the pre- and post-BadgerCare periods among adult Healthy Start pregnant women. Healthy Start adults, all of whom are pregnant women, are shown separately in ***Figure 2-3*** because of the different eligibility criteria for these women and the impact of the criteria on their lengths of enrollment. Healthy Start women become eligible only after becoming pregnant and maintain their Healthy Start enrollment for only 60 days postpartum. Income eligibility for Healthy Start pregnant women in Wisconsin is 185 percent of the FPL, the same as for BadgerCare.

Prior to BadgerCare, most adult Healthy Start women lost their eligibility for Medicaid 60 days after delivering their infant; only 12 percent of these women were still enrolled 12 months after enrolling in the pre-period. With the implementation of BadgerCare, new mothers whose deliveries were paid by Medicaid and who did not have access to other health insurance coverage

Figure 2-3. Probability of Remaining Enrolled Among Adult Healthy Start Pregnant Women Pre- and Post-BadgerCare



were able to transfer to BadgerCare and thereby retain their coverage. Post BadgerCare, 40 percent of these women were still in the program at 12 months following enrollment.

Children

Medicaid children generally remained enrolled longer than Medicaid adults, whereas BadgerCare children were only slightly more likely than BadgerCare adults to remain enrolled beyond the first year of enrollment.

The probability of disenrolling (e.g., the hazard rates) were lower for children than for adults and lower for children aged 0 to 5 than for children aged 6 to 18 (***Table 2-5***). This was particularly true for AFDC-related and Healthy Start enrollees; smaller differences were evident among BadgerCare adults and children, reflecting that they most often disenrolled as a family unit.

Similar to our findings for adults, only a small dip in enrollment is seen at the 12-month redetermination date for children aged 6 to 18 and children aged 0 to 5 (***Figures 2-4*** and ***2-5***, respectively). We also see the same leveling off of the survival curves for children after 2 years of enrollment. For both age groups, BadgerCare children were less likely to have remained enrolled than children enrolled under the AFDC-related and Healthy Start eligibility categories, and Healthy Start children were slightly less likely than AFDC-related children to have remained enrolled at each month.

The implementation of BadgerCare significantly lengthened enrollment episodes for children in AFDC-related and Healthy Start eligibility categories.

Wisconsin does not offer 12 months of continuous coverage to child enrollees as many other states do. As a result, only 44 percent of AFDC-related and 32 percent of Healthy Start child enrollees aged 6 to 18 were still enrolled at 12 months following entry in the pre-period. After BadgerCare implementation, lengths of enrollment for children were considerably longer than in the pre-period (***Figures 2-6*** and ***2-7***). After 12 months of coverage, 63 percent of AFDC-related and 59 percent of Healthy Start child enrollees aged 6 to 18 were still enrolled in the post-period. At the same time, 52 percent of BadgerCare child enrollees aged 6 to 18 retained coverage for at least 12 months. Retention of coverage for 12 months among Medicaid-covered children aged 0 to 5 also improved significantly from before to after BadgerCare implementation—from 62 percent to 75 percent for AFDC-related children and from 57 percent to 73 percent for Healthy Start children. Fifty-four percent of BadgerCare children aged 0 to 5 were still enrolled in the 12th month following enrollment.

Figure 2-4. Probability of Remaining Enrolled among Children Aged 6 to 18 Following BadgerCare Implementation

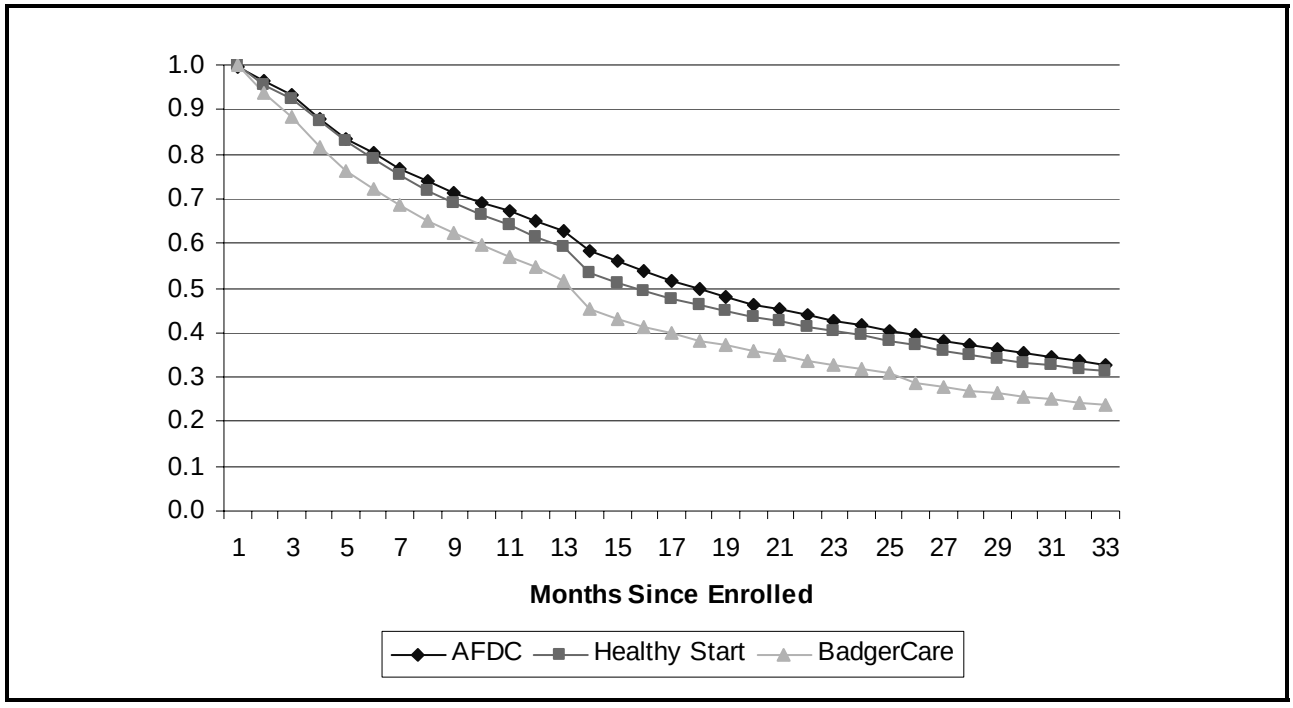


Figure 2-5. Probability of Remaining Enrolled among Children Aged 0 to 5 Following BadgerCare Implementation

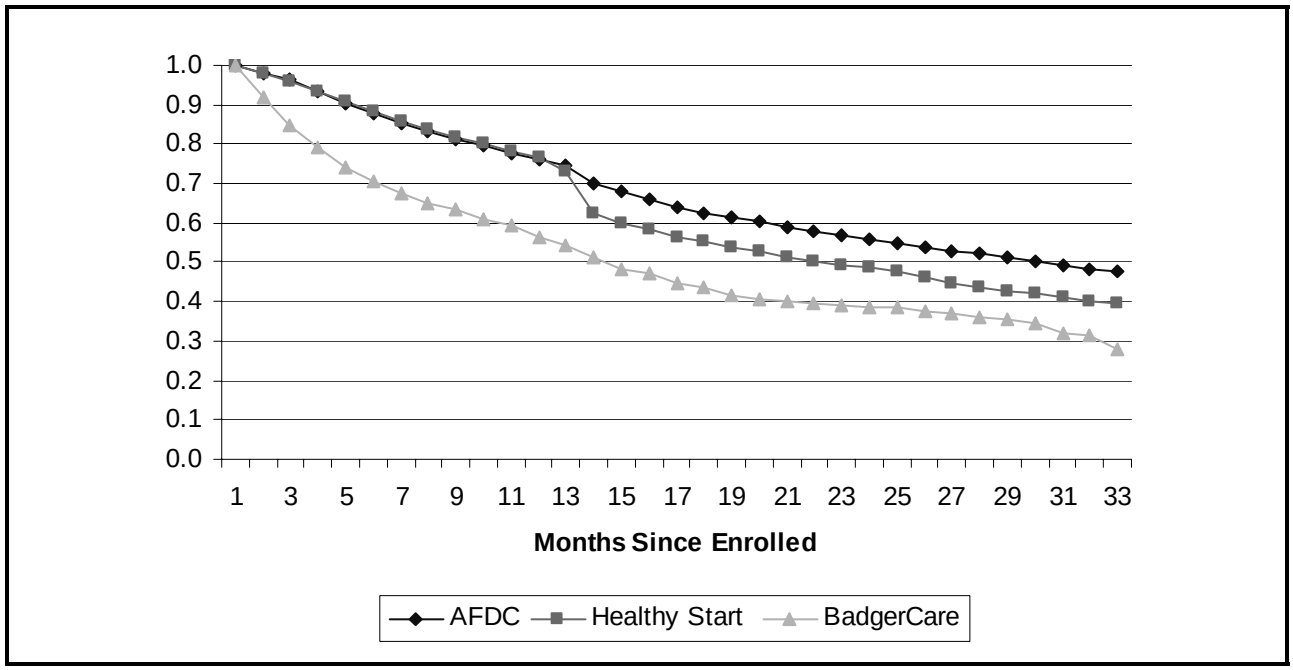


Figure 2-6. Probability of Remaining Enrolled among Children Aged 6 to 18 Pre- and Post-BadgerCare

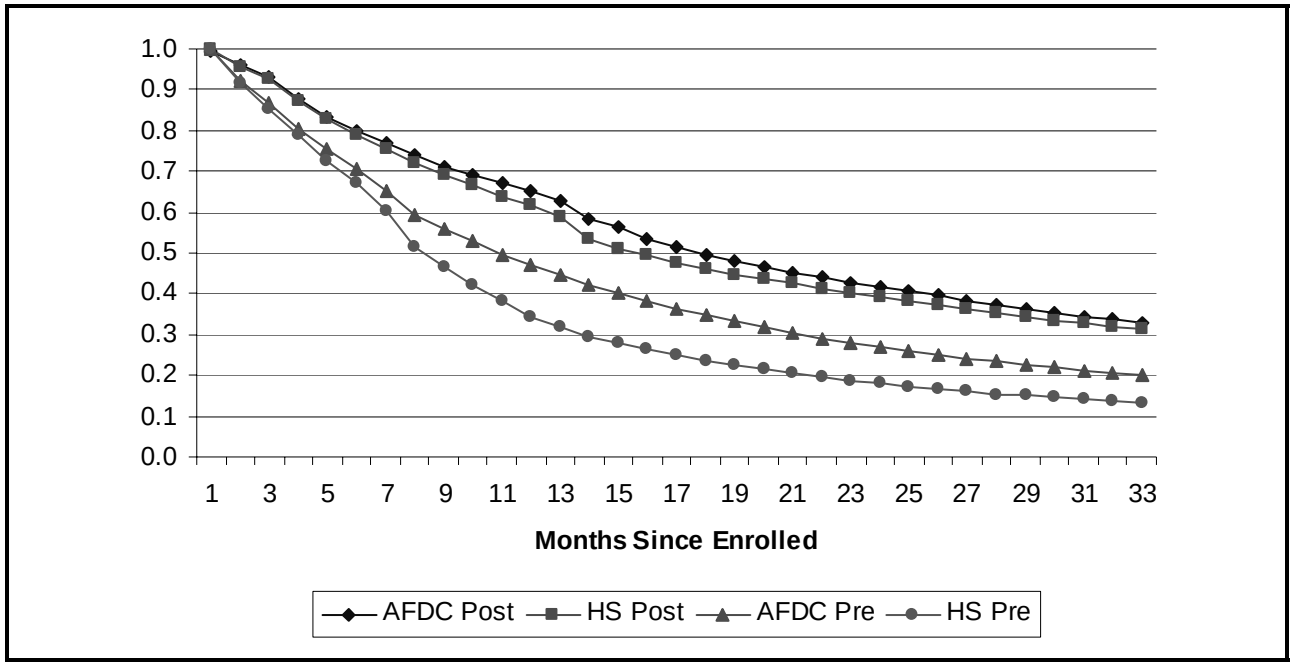
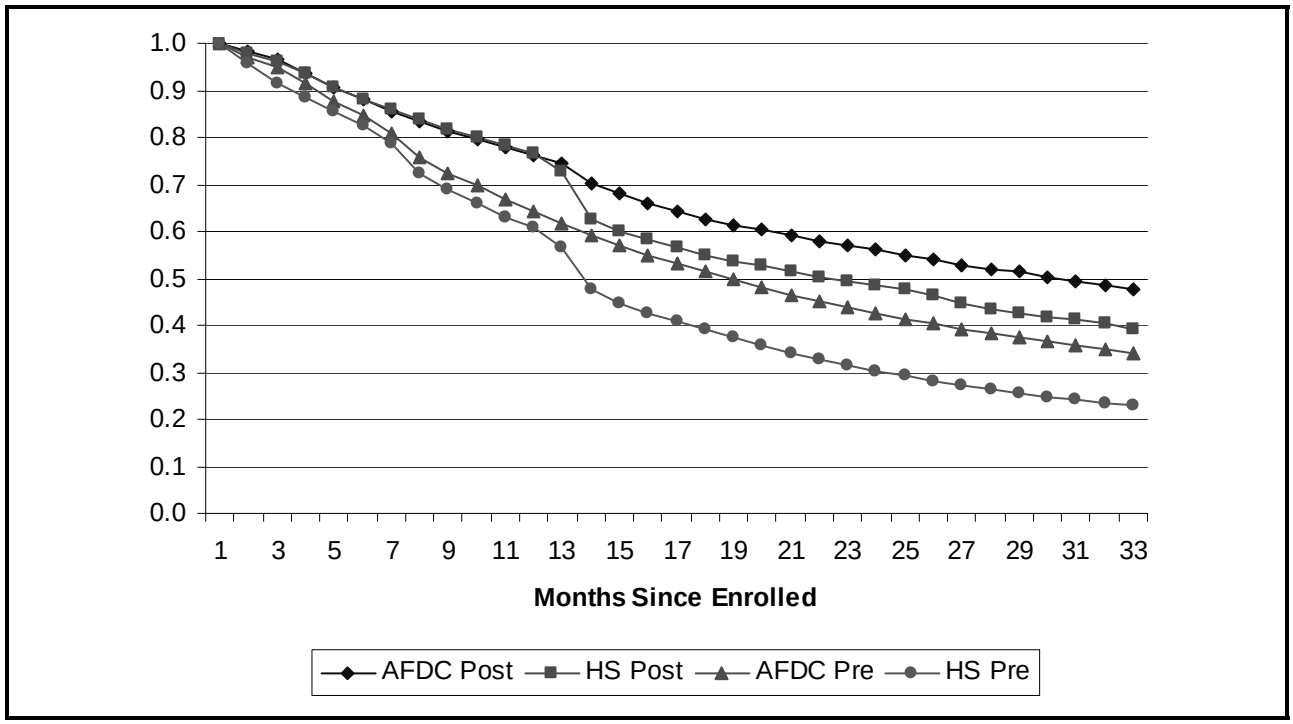


Figure 2-7. Probability of Remaining Enrolled among Children Aged 0 to 5 Pre- and Post-BadgerCare



BadgerCare had no impact on length of enrollment for short-term enrollees receiving cash assistance, but increased the probability of longer enrollment episodes for long-term enrollees receiving cash assistance.

Cash Assistance Recipients

One of the principal reasons for creating the BadgerCare program was to provide an affordable health insurance option to families leaving welfare who would otherwise be uninsured. Health insurance is key for these families in successfully achieving self-sufficiency. However, many of them obtain low-wage jobs that offer no health benefits, and they cannot afford individual coverage. In addition, the significant drop in Medicaid coverage following welfare reform suggested that welfare leavers were dropping Medicaid benefits for which they remained eligible. Therefore, we prepared Kaplan-Meier survival curves for the length of enrollment and estimated rates of disenrollment for enrollees with any months of cash assistance during an enrollment episode and enrollees with no months of cash assistance. Kaplan-Meier curves for enrollment duration are shown in ***Figures 2-8*** and ***2-9*** for adults and children, respectively, and the estimated probabilities of disenrolling at 12, 24, and 32 months are shown in ***Table 2-6***.

In the period just before BadgerCare implementation (i.e., January 1, 1997, to December 31, 1998), cash assistance recipients were much less likely at every month from 1 through 32 months following enrollment to have disenrolled from Medicaid compared to enrollees who had not received cash assistance. By 12 months following enrollment, 29 percent of cash assistance adults and 16 percent of cash assistance children had disenrolled from the program compared to 81 percent of noncash assistance adults and 57 percent of noncash assistance children.

Following BadgerCare implementation, the rate of disenrollment among cash assistance recipients in the first 12 months following enrollment changed little from the earlier time period. However, after the first 12 months, the rates of disenrollment began to diverge, with fewer cash assistance adults and children disenrolling at every month in the post-period. For enrollees not receiving cash assistance, large disparities in the pre-period and post-period disenrollment rates are evident throughout the 32-month period.

Figure 2-8. Probability of Remaining Enrolled Among Adult Cash Assistance Recipients and Other Adult Enrollees Pre- and Post-BadgerCare

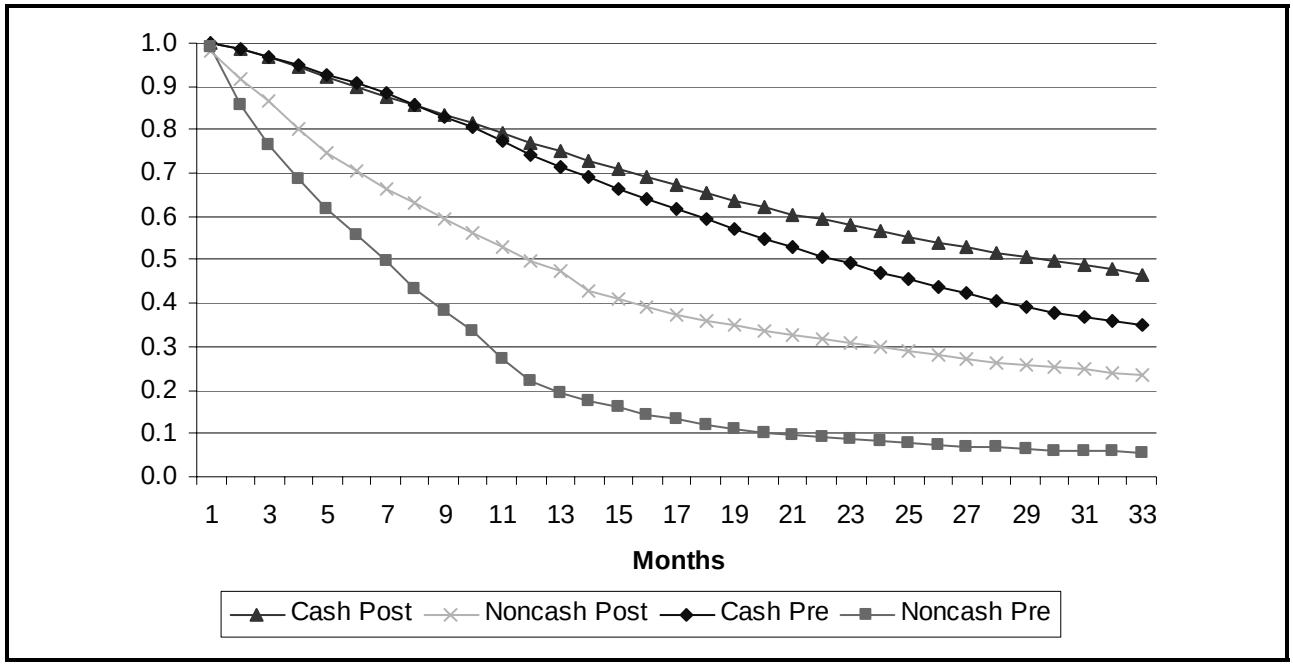


Figure 2-9. Probability of Remaining Enrolled Among Child Cash Assistance Recipients and Other Child Enrollees Pre- and Post-BadgerCare

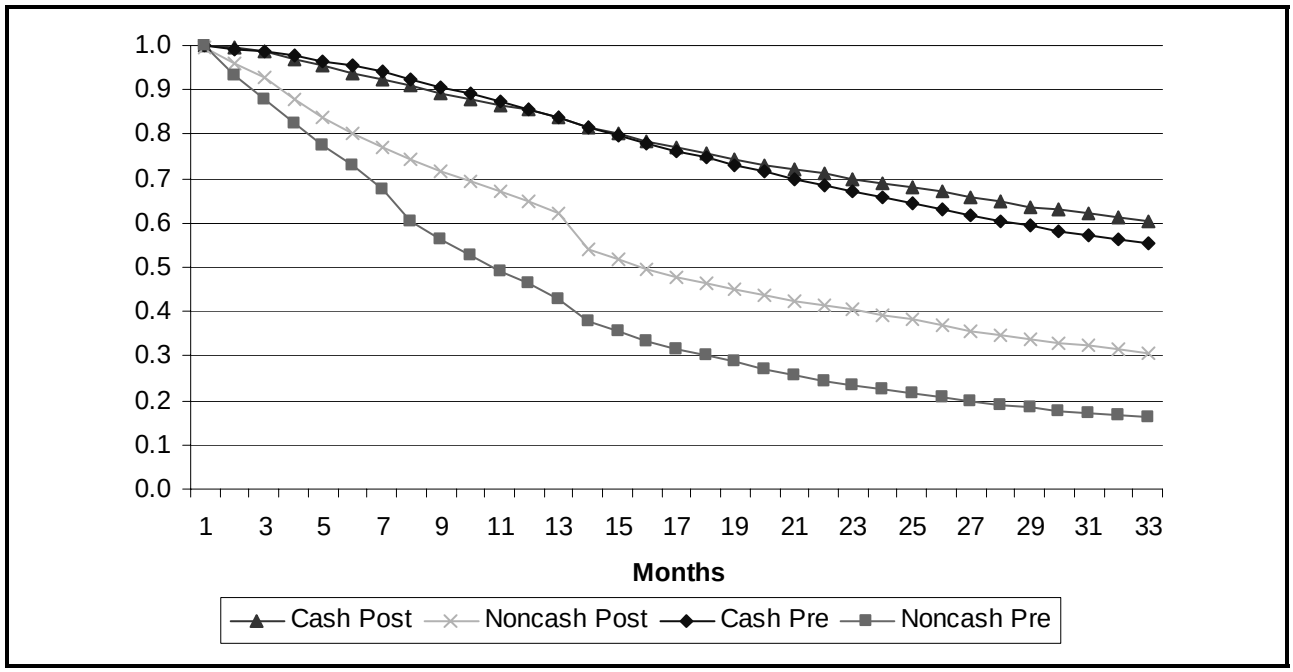


Table 2-6. Probability of Disenrolling from Medicaid/BadgerCare at 12, 24, and 32 Months of Coverage by Age Group, Cash Assistance Status, and Time Period

	Number of Episodes	12 Months	24 Months	32 Months
Adults				
Cash assistance				
Pre-period	17,268	28.5	54.6	64.9
Post-period	20,781	24.9	44.7	53.2
Noncash assistance				
Pre-period	88,297	80.9	92.3	94.3
Post-period	135,769	52.6	70.8	76.6
Children				
Cash assistance				
Pre-period	39,116	16.2	35.8	44.8
Post-period	38,146	16.1	32.2	39.8
Noncash assistance				
Pre-period	195,257	57.0	78.5	84.0
Post-period	199,494	38.1	61.7	69.4

Note: The pre-period includes all enrollment episodes starting between January 1, 1997, and December 31, 1998, and the post-period includes all enrollment episodes starting between January 1, 2000, and December 31, 2001. Eligibility categories are those the participants were in at entry.

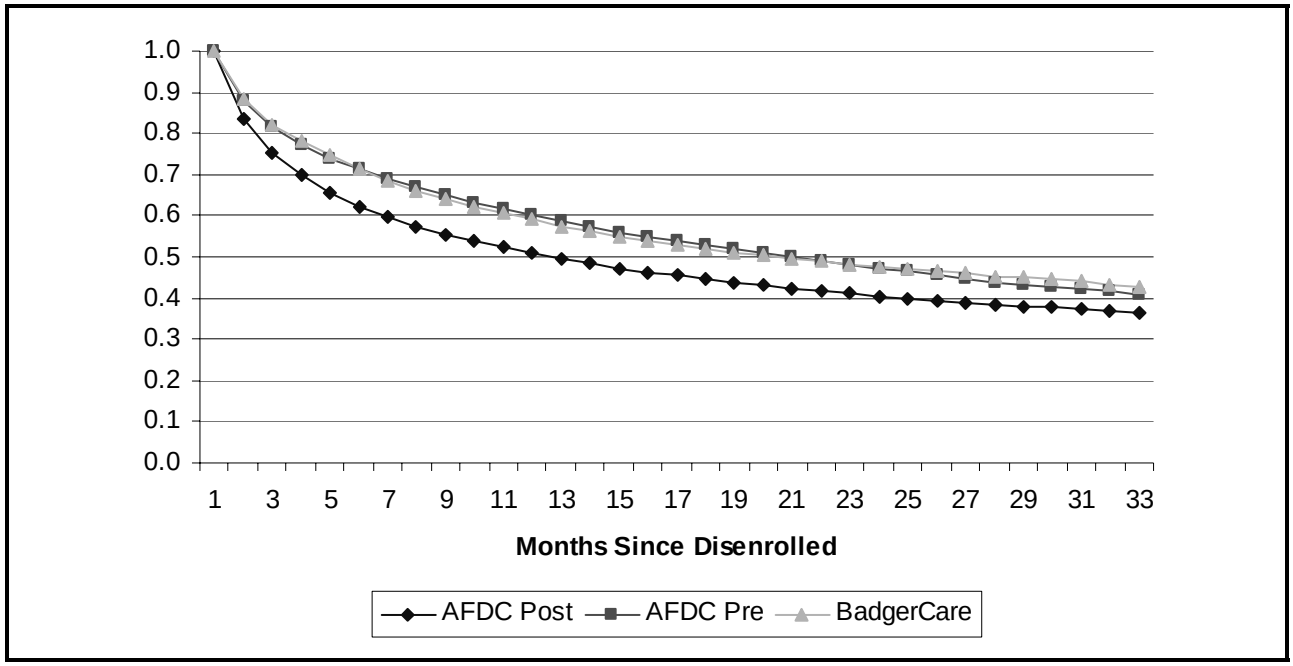
2.3.2 Churning

Short periods of disenrollment between two enrollment periods was common among all adult and child enrollees, and were even more prevalent following BadgerCare implementation.

Adults

The Kaplan-Meier curves for adults disenrolled from AFDC-related Medicaid categories in the pre- and post-periods and from BadgerCare in the post-period are shown in ***Figure 2-10***. Hazard rates for reenrollment by age and eligibility group are given in ***Table 2-7.*** These data show that reenrollment among adult AFDC-related and BadgerCare disenrollees was high in the first 12 months following disenrollment. Fifteen percent of AFDC-related and 12 percent of BadgerCare disenrollees reenrolled after 1 month in the post-period. At 12 months following disenrollment, 51 percent of AFDC-related disenrollees and 43 percent of BadgerCare disenrollees had reenrolled. Reenrollment continued in the second year but at a slower rate and leveled off in the third year following disenrollment. At 32 months, 64 percent of AFDC-related disenrollees and 57 percent of BadgerCare disenrollees had reenrolled.

Figure 2-10. Probability of Remaining Disenrolled among Adults Pre- and Post-BadgerCare



The discrepancy between the two eligibility groups was largest at 6 to 7 months following disenrollment. This may be a reflection of the mandatory 6-month waiting period following disenrollment for premium-paying BadgerCare families who leave for reasons other than "good cause." Good cause includes administrative error or a change in family composition but does not include inability to pay premiums.

Adults enrolled in traditional Medicaid eligibility categories reenrolled earlier following BadgerCare implementation than in the period just before implementation. Whereas 51 percent of AFDC-related disenrollees reenrolled within the first year following disenrollment in the post-period, 42 percent did so in the pre-period. The difference between the hazard rates before and after BadgerCare implementation for AFDC-related disenrollees narrowed over time from 9 percentage points at 12 months to 4.4 percentage points at 32 months, suggesting that in the long run the same percentage of adults may reenroll, but in the post-BadgerCare period they were reenrolling earlier.

Table 2-7. Probability of Reenrolling from Medicaid/BadgerCare at 12, 24, and 32 Months of Coverage by Age Group, Eligibility Category, and Time Period

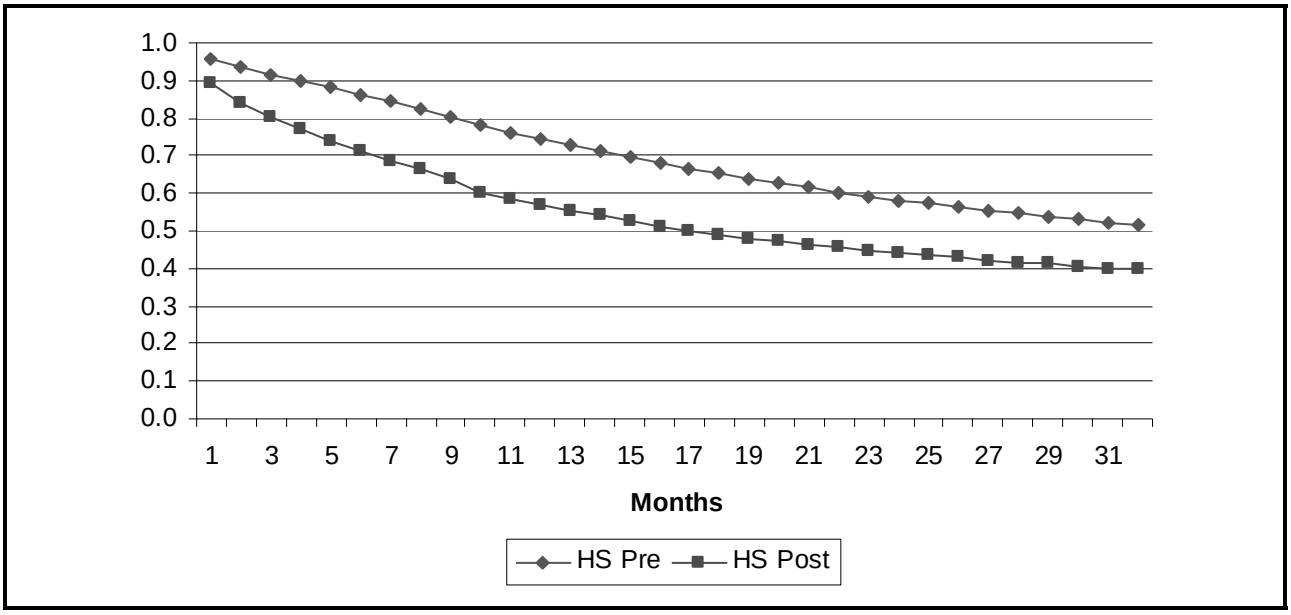
	Number of Episodes	12 Months	24 Months	32 Months
Adults				
AFDC-related				
Pre-period	89,686	41.5	53.6	59.2
Post-period	48,147	50.5	60.0	63.6
Healthy Start				
Pre-period	21,563	25.5	41.8	48.5
Post-period	13,031	43.1	55.9	60.2
BadgerCare	56,031	42.6	53.0	57.1
Children 6 to 18 years				
AFDC-related				
Pre-period	77,453	44.6	55.0	59.2
Post-period	40,667	53.4	62.3	66.0
Healthy Start				
Pre-period	37,286	42.1	54.0	58.6
Post-period	36,821	51.7	62.7	65.8
BadgerCare	21,203	44.0	53.8	56.9
Children 0 to 5 years				
AFDC-related				
Pre-period	34,227	50.4	60.4	61.6
Post-period	18,771	58.8	67.6	71.1
Healthy Start				
Pre-period	50,397	39.0	48.4	52.3
Post-period	47,323	45.8	55.5	59.0
BadgerCare	605	52.0	62.8	—

Note: The pre-period includes all enrollment episodes ending between January 1, 1997, and December 31, 1998, and the post-period includes all enrollment episodes ending between January 1, 2000, and December 31, 2001. Eligibility categories are those the participants were in at disenrollment.

Pregnant women had the greatest increase in reenrollment rates from before to after BadgerCare implementation.

This trend of higher reenrollment rates in each month during the post-period was most pronounced among adult Healthy Start women (***Figure 2-11***). Before BadgerCare, 26 percent of these women had reenrolled within the first year after losing eligibility, whereas after BadgerCare 43 percent had reenrolled in public coverage. At 32 months, the reenrollment rate for these women was roughly equivalent to that of other adult eligibility groups.

Figure 2-11. Probability of Remaining Disenrolled among Adult Healthy Start Pregnant Women Pre- and Post-BadgerCare



Children

General patterns of reenrollment were similar for children and adults—a high rate of reenrollment in the first year following disenrollment, with continued reenrollment at a lower rate in the second year and a leveling off in the first half of the third year (***Figures 2-12*** and ***2-13***). Reenrollment was particularly high for children in the first month following disenrollment. Among children aged 0 to 5 in the post-period, 1-month reenrollment rates were 20 percent for children disenrolled from AFDC-related eligibility categories and 15 percent for children disenrolled from Healthy Start and BadgerCare. Among children aged 6 to 18, the rates were only slightly lower: 18 percent for children disenrolled from AFDC-related eligibility categories, 15 percent for children disenrolled from Healthy Start, and 12 percent for children disenrolled from BadgerCare. The 1-month reenrollment rates for children in AFDC-related and Healthy Start eligibility categories were also high in the pre-period but had increased slightly following BadgerCare implementation (***Figures 2-14*** and ***2-15***).

Figure 2-12. Probability of Remaining Disenrolled among Children Aged 6 to 18

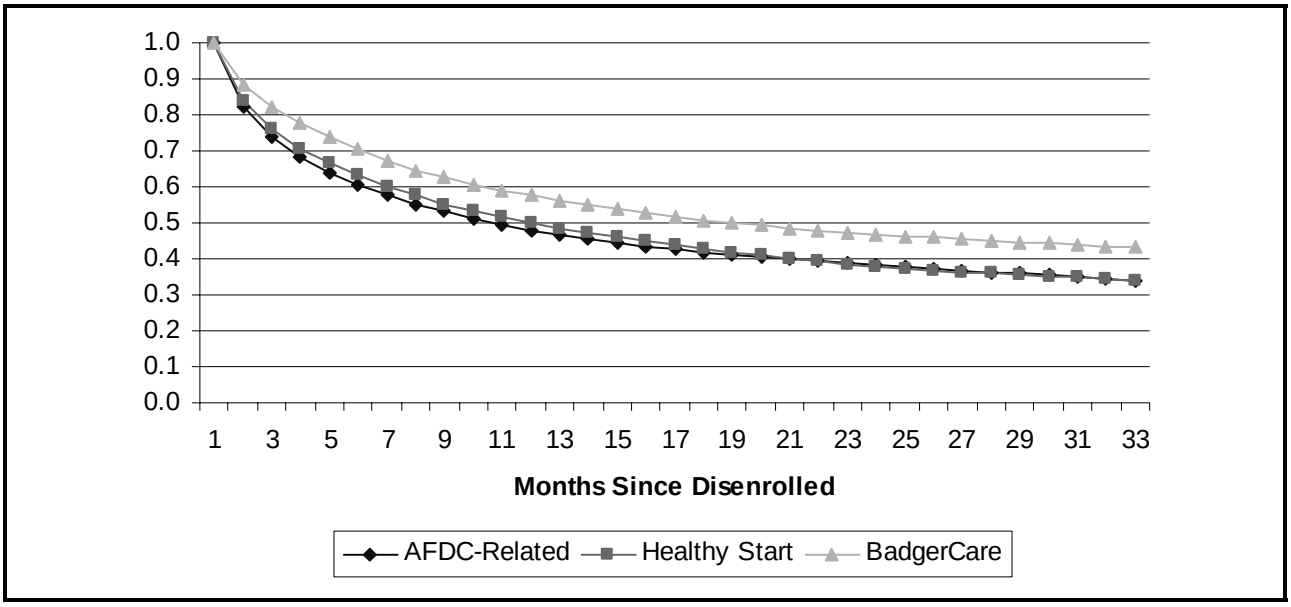


Figure 2-13. Probability of Remaining Disenrolled among Children Aged 0 to 5

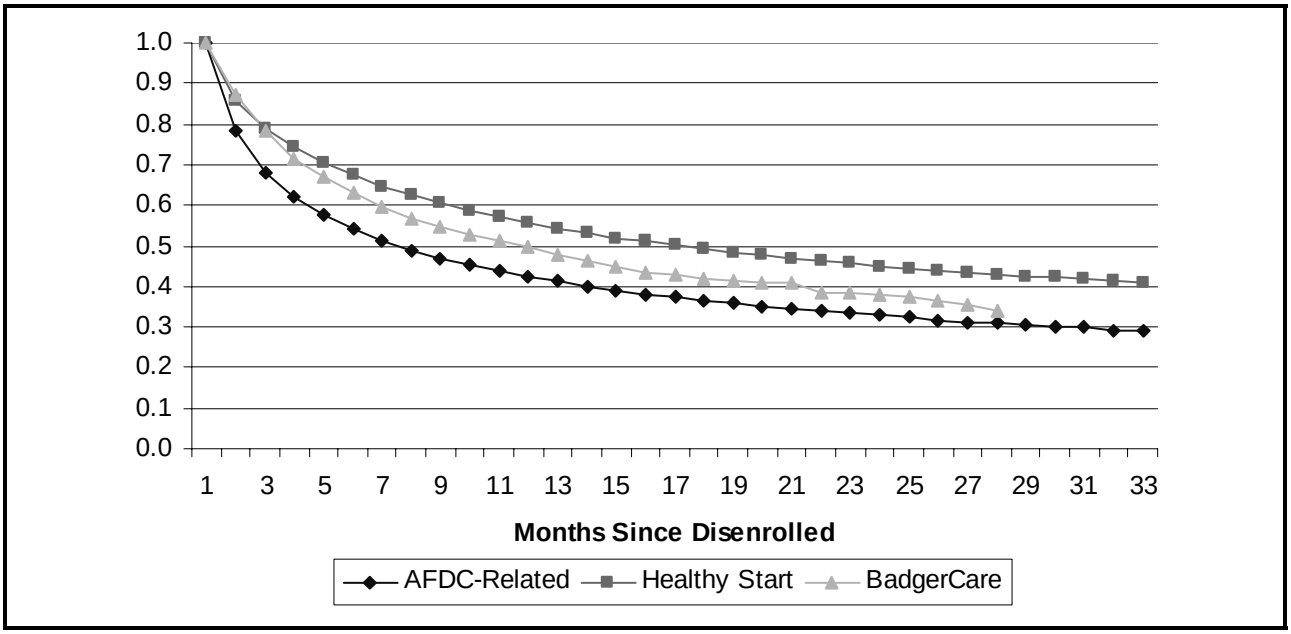


Figure 2-14. Probability of Remaining Disenrolled among Children Aged 6 to 18 Pre- and Post-BadgerCare

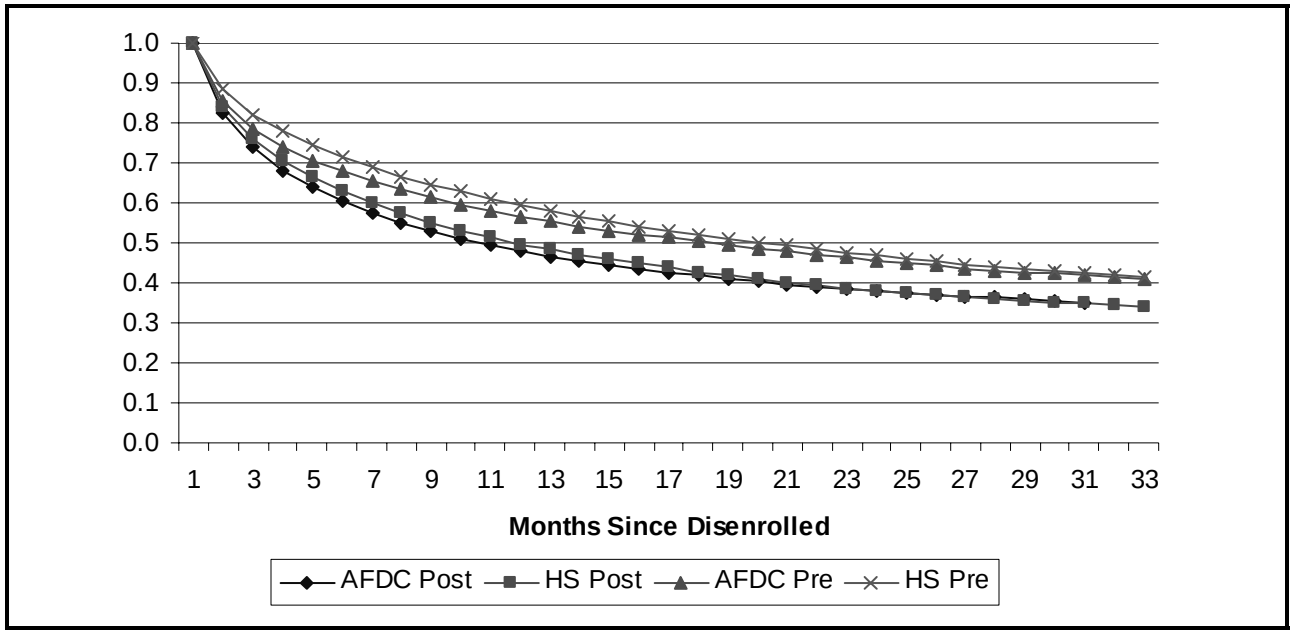
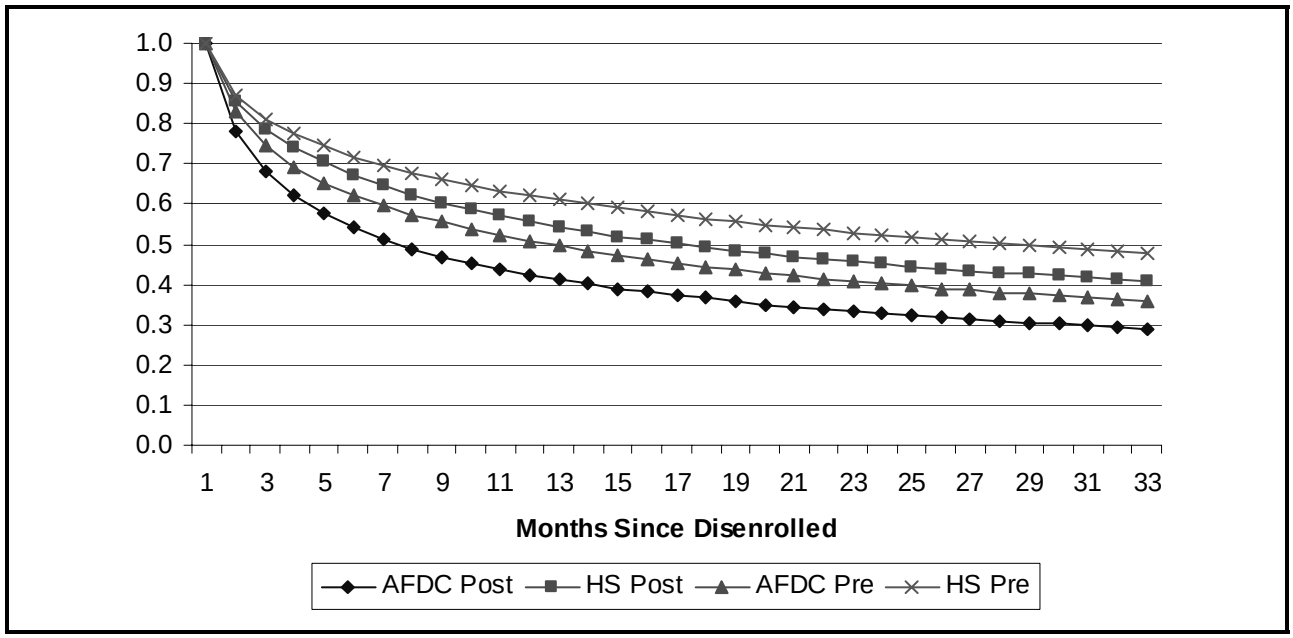


Figure 2-15. Probability of Remaining Disenrolled among Children Aged 0 to 5 Pre- and Post-BadgerCare



Some differences in the relative patterns of reenrollment across age groups within eligibility groups were evident. Children disenrolled from AFDC-related eligibility groups had higher reenrollment rates than adults disenrolled from AFDC-related eligibility groups and AFDC-related children aged 0 to 5 had higher rates than AFDC-related children aged 6 to 18. On the other hand, children aged 6 to 18 disenrolled from Healthy Start had higher reenrollment rates than either Healthy Start pregnant women or Healthy Start children aged 0 to 5. Furthermore, children aged 6 to 18 disenrolled from BadgerCare had similar reenrollment rates compared to BadgerCare adults, but lower rates than younger BadgerCare children.

Churning was high among Medicaid and BadgerCare children. As many as 15 to 20 percent of children reenrolled after only 1 month, and 60 to 70 percent had reenrolled within the first 2.5 years after disenrolling.

In the post-period, by the 32nd month following disenrollment, 66 percent of AFDC-related and Healthy Start children aged 6 to 18 had reenrolled in public coverage, as had 59 percent of younger Healthy Start children and 71 percent of younger AFDC-related children. These reenrollment rates were higher for these eligibility groups than they had been in the pre-period. BadgerCare children aged 6 to 18 were somewhat less likely than both AFDC-related and Healthy Start children to have reenrolled by the end of the study period (57 percent v. 66 percent). Younger BadgerCare children were more likely (at least 63 percent) than the younger Healthy Start children (59 percent) but less likely than the younger AFDC-related children (71 percent) to have reenrolled at the end of the study period.

Cash Assistance Recipients

Medicaid/BadgerCare enrollees with some months of cash assistance were more likely than enrollees with no cash assistance months to reenroll in the program at every month of the 32-month study period. Kaplan-Meier survival curves for remaining disenrolled among cash assistance and noncash assistance enrollees are shown in ***Figures 2-16*** and ***2-17*** for adults and children, respectively. Hazard rates for reenrolling among these enrollment groups are shown in ***Table 2-8***. In the post-period, at 12 months following disenrollment, cash assistance adults and children were somewhat more likely to reenroll in Medicaid/BadgerCare than they were in the pre-period, but they were nearly equally likely in the two periods by the 32nd month of enrollment.

Figure 2-16. Probability of Remaining Disenrolled among Adult Cash Assistance Recipients and Other Adult Enrollees Pre- and Post-BadgerCare

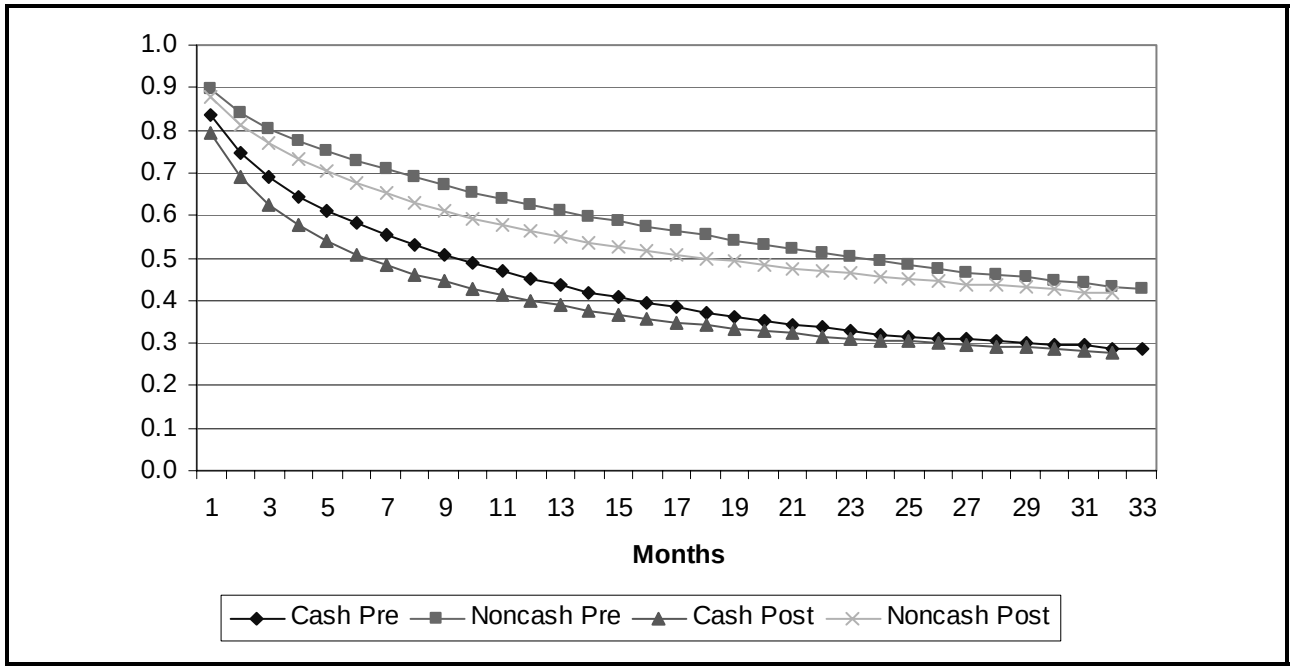


Figure 2-17. Probability of Remaining Disenrolled among Child Cash Assistance Recipients and Other Child Enrollees Pre- and Post-BadgerCare

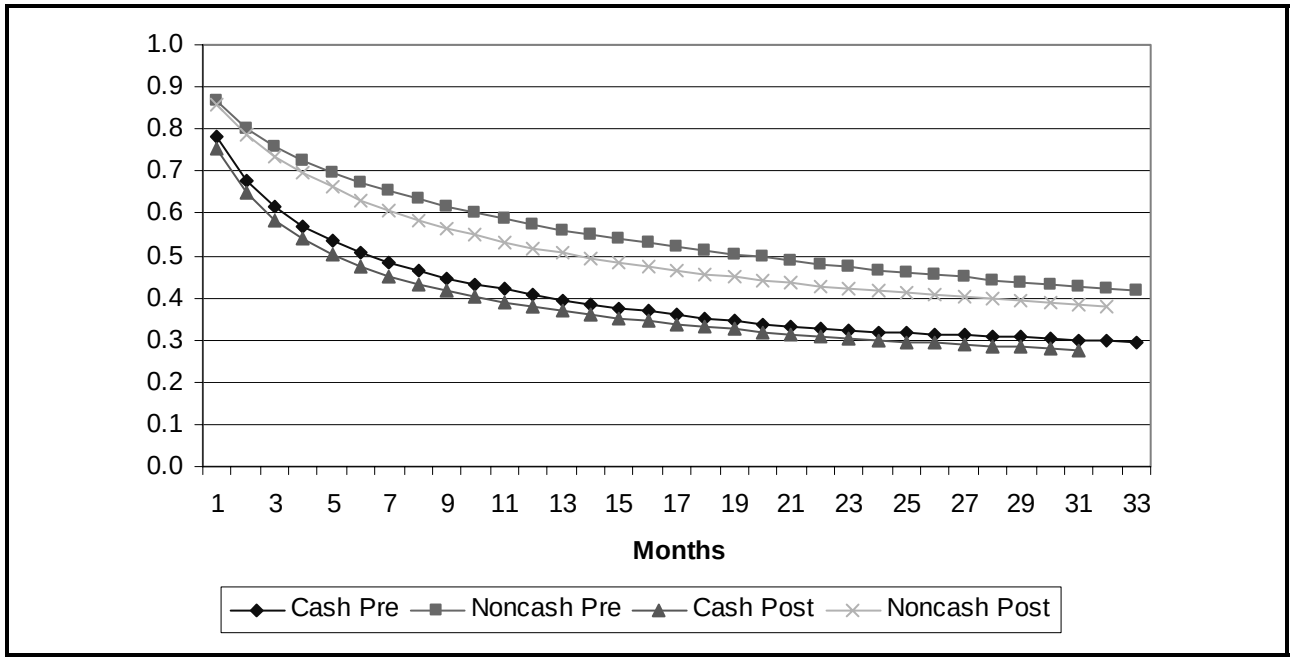


Table 2-8. Probability of Reenrolling from Medicaid/BadgerCare at 12, 24, and 32 Months of Coverage by Age Group, Cash Assistance Status, and Time Period

	Number of Episodes	12 Months	24 Months	32 Months
Adults				
Cash assistance				
Pre-period	8,918	54.9	67.9	71.1
Post-period	16,962	60.1	69.3	72.1
Noncash assistance				
Pre-period	106,578	37.6	50.7	56.7
Post-period	107,685	43.7	54.3	58.4
Children				
Cash assistance				
Pre-period	11,684	59.3	68.1	70.4
Post-period	24,435	62.0	70.0	72.3
Noncash assistance				
Pre-period	193,269	42.6	53.3	57.7
Post-period	145,724	48.1	58.3	61.9

Note: The pre-period includes all enrollment episodes ending between January 1, 1997, and December 31, 1998, and the post-period includes all enrollment episodes ending between January 1, 2000, and December 31, 2001. Eligibility categories are those the participants were in at disenrollment.

2.4 IMPACT OF PREMIUMS

Failure to pay a premium by the end of the following month for which they apply could result in some or all family members being dropped from BadgerCare. The eligibility of family members enrolled under a Medicaid eligibility category is not affected; these individuals should retain their Medicaid coverage without interruption. Once terminated, the dropped family members would not be able to reenroll for 6 months. CMS asked us to investigate two questions related to the failure to pay premiums:

- Are there cases in which entire families drop coverage for failure to pay premiums, including children who were entitled to retain coverage? How frequently does this occur?
- Have premiums caused additional churning in the BadgerCare population relative to what would have existed in the absence of premiums?

The analyses presented in this section were designed to answer these questions. To address the first question, we identified all episodes of enrollment active from October 1, 1999, through

September 30, 2002, which included at least 1 month of BadgerCare enrollment. We then grouped the episodes into premium-paying and nonpremium-paying categories. If an individual was enrolled in a BadgerCare eligibility category indicating that the family paid premiums (i.e., medical status codes B2, B3, B5 and B6) during any month of the episode, the episode was classified as "premium-paying." Episodes in which individuals were enrolled only in other BadgerCare categories (i.e., medical status codes B1 and B4) were considered "nonpremium-paying."

For premium-paying episodes, we compared the episode end dates of a case (i.e., family) with dates supplied by DHFS that the case failed for nonpayment of BadgerCare premiums. We flagged any episode for which these two dates were identical. We then computed and tabulated the percentage of premium-paying BadgerCare *episodes* which were terminated for failure to pay premiums by age group and eligibility category (BadgerCare vs. Medicaid) at disenrollment or the end of the study period, whichever came first. We also computed and tabulated the percentages of families who disenrolled for failure to pay premiums by whether the dropped family members were adults or children enrolled in BadgerCare or Medicaid.

To determine the impact of premiums on churning, we computed Kaplan-Meier survival curves and hazard rates from the length of enrollment variable for all new premium-paying and nonpremium-paying BadgerCare episodes from January 1, 2000, through December 31, 2001. Similarly, we computed Kaplan-Meier survival curves and hazard rates from the variable for the number of months between episodes for all premium-paying and nonpremium-paying episodes ending during this time interval.

In addition, we ran Cox proportional hazard models on the number of months enrolled and the number of months between episodes to determine the impact of premiums on these two variables after controlling for age group, gender, race/ethnicity, eligibility group, and cash assistance status.

2.4.1 Retention of Medicaid Coverage

Only 1 to 2% of Medicaid children in premium-paying families were disenrolled with family members enrolled in BadgerCare after failing to make premium payments.

Reflecting the characteristics of BadgerCare enrollees, nearly 58 percent of the 73,901 premium-paying episodes for individuals were for adults, 37 percent were for children aged 6 to 18, and only 5 percent were for children under 6 years of age (***Table 2-9***). Furthermore, for more than 12 percent of the individual episodes, the enrollees had switched from BadgerCare to Medicaid before the end of the enrollment period. Eleven percent of the premium-paying episodes among enrollees who had remained enrolled in BadgerCare were terminated due to failure to pay premiums, with little variation across age groups. Only 1 percent to 2 percent of episodes among those who had switched to Medicaid were terminated with the family for failure to pay premiums. This rate was slightly higher for children aged 0 to 5 than for children aged 6 to 18 or for adults.

Grouping the individuals with premium-paying episodes by family, we found that they comprised 28,971 families who had paid premiums for BadgerCare coverage sometime between October 1, 1999, and September 30, 2002 (***Table 2-10***). Two-thirds of these families (19,348) had always paid their premiums on time. About 20 percent (5,657) had failed to pay their premiums at least once, but no family members lost Medicaid/BadgerCare coverage because of failed premium payments. The remaining 14 percent (3,966) failed to pay their premiums for at least one episode and some or all family members were dropped from coverage. Thus, in only 41 percent of families (3,966 out of 9,623) who failed to pay premiums were any family members dropped from BadgerCare coverage. Among the families with some or all individuals terminated for failure to pay premiums, only adults lost coverage in 44 percent of the families (1,761 of 3,966), adults and BadgerCare-enrolled children lost coverage in another 37 percent of these families (1,452 of 3,966), and only BadgerCare-enrolled children lost coverage in 7 percent of these families (268 of 3,966). In 12 percent of these families (i.e., 485 families), Medicaid-enrolled children were also dropped from coverage; but as shown in Table 2-9, these children comprised only 1 to 2 percent of Medicaid-covered children in families paying BadgerCare premiums.

Table 2-9. Distribution of Episodes with BadgerCare Premium Payments, by Eligibility Category[1] and Age Group and Percentage of Episodes Terminated for Failure to Pay Premiums

	Episodes with Premium Payments		Percent of Episodes with Premium Payments Terminated for Failure to Pay
	Number	Percent	
BadgerCare			
Adults (aged 19+)	39,423	53.3	11.2
Children aged 6–18	23,368	31.6	10.7
Children aged 0–5	2,063	2.8	11.8
All ages	64,854	87.8	11.0
Medicaid			
Adults (aged 19+)	3,203	4.3	1.2
Children aged 6–18	4,303	5.8	1.2
Children aged 0–5	1,541	2.1	2.4
All ages	9,047	12.2	1.4
All			
Adults (aged 19+)	42,626	57.7	10.4
Children aged 6–18	27,671	37.4	9.2
Children aged 0–5	3,604	4.9	7.8
All ages	73,901	100.0	9.8

[1]Episodes with multiple eligibility categories are classified by the category at disenrollment or the end of the study period, September 30, 2002, whichever comes first.

Table 2-10. Premium Payment Results for BadgerCare Families October 1999, to September 2002

	Number	Percent
Families who had paid premiums	28,971	100.0%
who always paid premiums on time	19,348	66.8%
who failed to pay premiums but no members were disenrolled	5,657	19.5%
who failed to pay premiums and all or some family members were disenrolled	3,966	13.7%
Adults only	1,761	6.1%
Adults and BadgerCare children only	1,452	5.0%
Adults and at least some Medicaid children	223	0.8%
BadgerCare children only	268	0.9%
Children only, at least some Medicaid children	262	0.9%

Whether the families had dropped coverage of their Medicaid children because they had obtained other health insurance coverage for their families or because of other reasons cannot be determined from the administrative data. In ***Section 4***, we investigate reasons for disenrollment and insurance coverage following disenrollment among premium-paying families in our analysis of data from the BCDS.

2.4.2 Impact of Premiums on Churning

No evidence that premium payments increased churning was found.

As shown in ***Figure 2-18***, the probability of remaining enrolled in BadgerCare is slightly lower for premium-paying enrollees than for other BadgerCare enrollees in every month of the first 32 months of enrollment. Thus, premium-paying families were more likely to disenroll from BadgerCare. However, this may be largely due to their greater likelihood of income increases that make them ineligible for public coverage. Because premium-paying families are those at the higher income eligible levels, smaller increases in income would make them financially ineligible for BadgerCare coverage compared to lower income, nonpremium-paying families. Consequently, we would expect a higher disenrollment rate and a lower reenrollment rate among premium-paying BadgerCare families than among nonpremium-paying BadgerCare families without an additional effect of premiums. After the first 12 months of coverage, 45 percent of premium-paying enrollees had disenrolled from BadgerCare, compared to 40 percent of nonpremium-paying enrollees (***Table 2-11***). By 32 months of coverage, 73 percent of premium-paying enrollees had disenrolled, compared to 67 percent of other BadgerCare enrollees. This trend is consistent across the different age groups.

Individuals in families who had paid premiums are also less likely to reenroll in Medicaid/BadgerCare in the first 6 months following disenrollment than individuals in families who had not paid premiums (***Figure 2-19***). The difference in reenrollment rates begins to narrow after the mandatory 6-month waiting period, however. By the end of the analysis period, the probability of reenrolling in BadgerCare is similar for all former enrollees regardless of premium payment status. Thus, premiums may have delayed reenrollment for some individuals due to the mandatory waiting period but appear to have little effect in the long run.

Figure 2-18. Probability of Remaining Enrolled among Premium-Paying and Other BadgerCare Enrollees

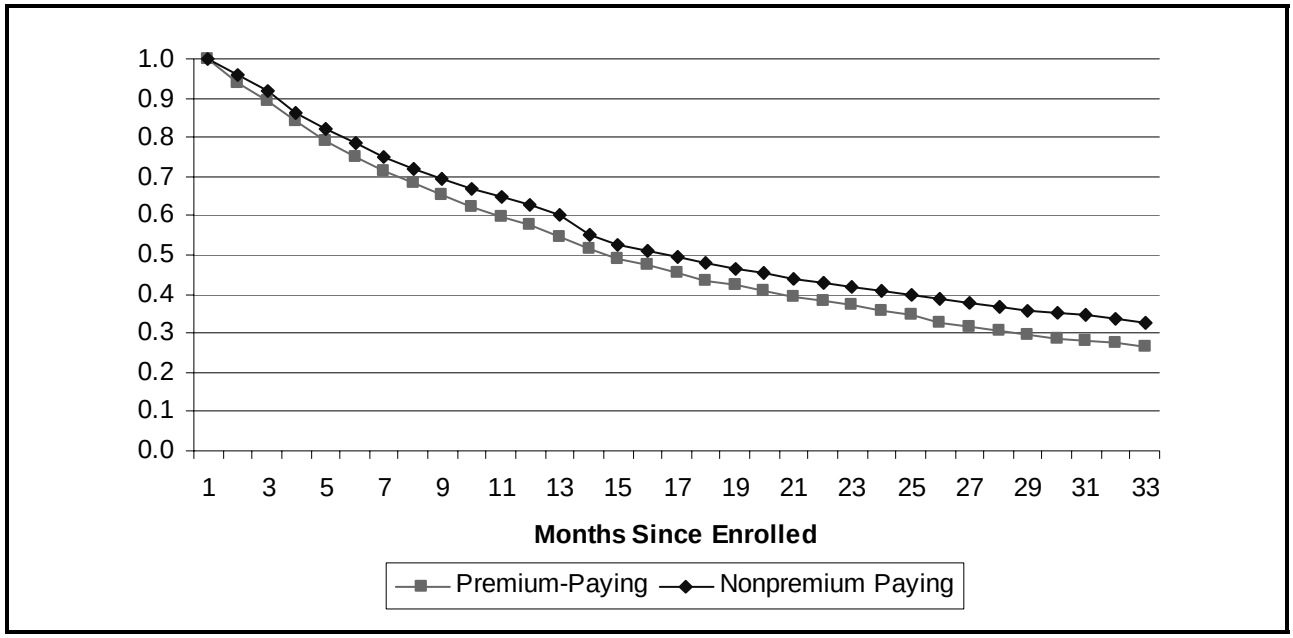


Figure 2-19. Probability of Remaining Disenrolled among Premium-Paying and Other BadgerCare Enrollees

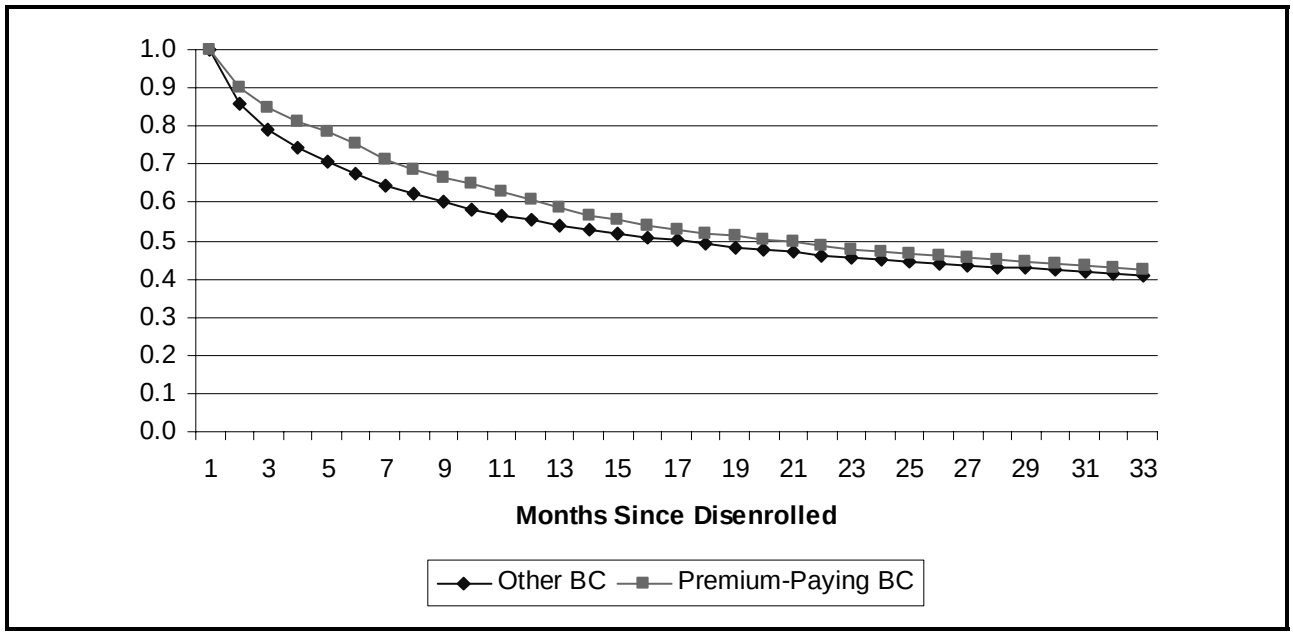


Table 2-11. Probability of Disenrolling and Reenrolling from BadgerCare at 12, 24, and 32 Months of Coverage by Premium Payment Status

	Number of Episodes	12 Months	24 Months	32 Months
Probability of Disenrollment[1]				
All BadgerCare enrollees				
Premium-paying	41,175	45.3	65.4	73.4
Nonpremium-paying	117,804	39.9	60.0	67.2
Adults				
Premium-paying	13,990	48.1	67.5	75.1
Nonpremium-paying	35,784	42.1	61.3	67.9
Children aged 6 to 18				
Premium-paying	24,106	44.8	65.8	73.8
Nonpremium-paying	77,277	38.8	60.8	68.7
Children aged 0 to 5				
Premium-paying	3,079	25.3	47.9	59.4
Nonpremium-paying	4,742	13.8	34.1	45.2
Probability of Reenrollment[2]				
All BadgerCare enrollees				
Premium-paying	27,619	41.5	53.4	57.5
Non-premium-paying	79,873	46.0	55.4	58.9
Adults				
Premium-paying	9,686	40.5	52.7	57.2
Nonpremium-paying	25,164	44.7	54.5	58.3
Children aged 6 to 18				
Premium-paying	16,762	42.2	53.9	57.5
Nonpremium-paying	53,214	47.9	56.7	59.4
Children aged 0 to 5				
Premium-paying	1,171	50.8	60.3	—
Nonpremium-paying	1,495	58.8	67.9	—

[1]For episodes beginning from October 1, 1999, through September 30, 2002, with one or more months during which the person was enrolled in BadgerCare.

[2]For episodes ending from October 1, 1999, through September 30, 2002, with one or more months during which the person was enrolled in BadgerCare.

Unfortunately, we were not able to obtain family income for completed episodes and therefore are not able to determine the effect of premiums controlling for income. However, we were able to run a Cox proportional hazard model on the months enrolled and the months to next episode to determine the effect of premiums controlling for age, gender, race/ethnicity, eligibility category, and cash assistance status. The models were first run on all episodes newly beginning and ending in the pre- and post-periods defined in ***Section 2-3*** above, regardless of eligibility category, and then on only those episodes in the post-period with at least 1 month of BadgerCare enrollment.

The multivariate results for the months enrolled equation, shown in ***Table 2-12***, confirm the results found from the Kaplan Meier survival curve analysis with respect to age, time period, and cash assistance status. Children were less likely than adults and younger children were less likely than older children to disenroll; new enrollees in the post-period were less likely to disenroll than new enrollees in the pre-period; and cash assistance recipients were less likely to disenroll than enrollees not receiving cash assistance. In addition, females were less likely than males to disenroll, and Hispanics were more likely to disenroll than white non-Hispanics. BadgerCare enrollees were equally likely as AFDC-related enrollees to disenroll.

In the equation run on all new episodes within the pre- and post-periods, we found that enrollees in families who paid premiums were less likely to disenroll than enrollees in other eligibility categories. The Cox proportional hazard rate for disenrolling among premium-paying families was 0.773 ($p < 0.001$). However, restricting the observations entered into the equation to those with at least one month of BadgerCare enrollment, we found that premium-paying BadgerCare enrollees were somewhat more likely than non-premium-paying BadgerCare families to disenroll—the hazard rate for disenrolling was 1.077 ($p < 0.001$).

Table 2-12. Cox Proportional Hazard Models for Months Enrolled and Months to Next Episode

	Months Enrolled				Months to Next Episode			
	All Episodes		BadgerCare Episodes Only		All Episodes		BadgerCare Episodes Only	
	Coefficient (standard error)	Hazard Rate	Coefficient (standard error)	Hazard Rate	Coefficient (standard error)	Hazard Rate	Coefficient (standard error)	Hazard Rate
Age *(19+ omitted)*								
0 to 5	–0.646**	0.524	–0.310**	0.734	0.126**	1.134	0.248**	1.281
	(0.004)		(0.021)		(0.005)		(0.027)	
6 to 18	–0.269**	0.764	-0.001	0.999	0.139**	1.149	0.060**	1.062
	(0.004)		(0.008)		(0.004)		(0.010)	
Female *(male omitted)*	–0.042**	0.959	–0.172**	0.842	0.143**	1.154	0.226**	1.254
	(0.003)		(0.007)		(0.004)		(0.009)	
Race/ethnicity *(white non-Hispanic omitted)*								
Black non-Hispanic	-0.013*	0.987	0.171**	1.187	0.290**	1.336	0.270**	1.309
	(0.004)		(0.010)		(0.005)		(0.012)	
Hispanic	0.106**	1.112	0.228**	1.256	0.081**	1.084	0.184**	1.202
	(0.005)		(0.013)		(0.007)		(0.017)	
Other race	0.013	1.013	0.195**	1.216	0.030**	1.031	0.049*	1.050
	(0.006)		(0.015)		(0.007)		(0.019)	
Unknown race	0.033**	1.033	0.084**	1.087	-0.096**	0.908	0.019	1.020
	(0.004)		(0.009)		(0.004)		(0.012)	
Time period post-BadgerCare *(pre-BadgerCare omitted)*	-0.564**	0.569	---	---	0.224**	1.252	---	---
	(0.003)				(0.004)			
Eligibility category[1] *(AFDC-related omitted)*								
BadgerCare	0.000	1.000	0.512**	1.668	-0.125**	0.882	-0.260**	0.771
	(0.005)		(0.011)		(0.007)		(0.016)	
Healthy Start	0.012**	1.012	-0.194**	0.824	-0.071**	0.931	0.083**	1.086
	(0.003)		(0.016)		(0.004)		(0.024)	
Other	–0.115**	0.891	–0.217**	0.805	0.415**	1.514	–0.091	0.913
	(0.008)		(0.046)		(0.009)		(0.075)	
Cash assistance recipient *(not a recipient omitted)*	–0.802**	0.448	–0.808**	0.446	0.158**	1.171	–0.143**	1.154
	(0.004)		(0.016)		(0.004)		(0.016)	
Premiums paid *(no premiums paid omitted)*	–0.258**	0.773	0.074**	1.077	–0.062**	0.940	–0.080**	0.923
	(0.007)		(0.008)		(0.010)		(0.010)	

Note: The models were run on episodes overlapping the period from October 1999 through September 2002.

[1]For the months enrolled equation, the eligibility category at enrollment is used whereas for the months to next episode equation, the eligibility category at disenrollment is used.

** $p \leq 0.001$; * $p \leq 0.01$.

A few other coefficients also changed in the equation with only BadgerCare episodes. Children aged 6 to 18 were equally likely as adults to disenroll, and racial disparities widened—minorities were more likely than white non-Hispanics to disenroll.

The multivariate results for the equations of months to next episode were also consistent with the results of the Kaplan-Meier analysis. We found children to be more likely to reenroll than adults, newly disenrolled individuals in the post-period to be more likely to reenroll than newly disenrolled individuals in the pre-period, individuals disenrolled from BadgerCare to be less likely to reenroll than individuals disenrolled from AFDC-related categories, and cash assistance recipients to be more likely to reenroll than individuals not receiving cash assistance. In addition, females were more likely than males and minorities were more likely than white non-Hispanics to reenroll.

The estimated effect of premiums on the propensity to reenroll in the Cox proportional hazard and Kaplan Meier analyses were consistent—individuals in families who paid premiums were less likely to reenroll than those in families who did not. The hazard rate was 0.940 ($p < 0.001$) in the equation with all episodes and 0.923 ($p < 0.001$) in the equation with BadgerCare episodes only. Thus, the estimated effect of premiums on churning, defined as disenrolling and reenrolling in BadgerCare or Medicaid is small and negative. Measured differences compared to nonpremium-paying families could be entirely due to small changes in income that make premium-paying families ineligible for coverage.

2.5 HMO AND HIPP ENROLLMENT

Wisconsin's Medicaid managed care delivery system for the AFDC-related/Healthy Start population is the primary health care delivery system under BadgerCare. However, if an eligible family has access to a qualifying ESI plan and the plan is determined to be cost-effective compared with enrollment in a Medicaid HMO, the State buys into the ESI plan for the family through the HIPP program. In addition, for geographic areas not served by two or more HMOs, enrollees may enroll in FFS coverage. Enrollees may also be covered by FFS in the initial months of an enrollment episode while they choose and enroll in an HMO plan.

Wisconsin made a decision to allow the maximum amount of time for an enrollee to select an HMO before beginning the lock-in period. This decision had the support of recipients, advocates, and HMOs who all believed it was in the best interest of the recipient to have ample time to choose their HMO. Typically, an enrollee has 2 to 3 months to make the initial decision and another 90 days to change his/her mind and select a different HMO. An enrollee who does not make a decision will be auto-assigned to an HMO within 3 months of eligibility determination, and has 90 days after that to change to another HMO.

Further delay may be caused if an enrollee reports other medical insurance to the economic support worker. When the other insurance information is submitted to the eligibility system, the family is determined eligible for BadgerCare pending verification of the insurance. During the time it takes to verify coverage, the enrollee is exempt from HMO enrollment and remains in the FFS system. This prevents an unnecessary administrative burden to the HMO should the recipient be determined ineligible for BadgerCare once the insurance information is verified.

Another evaluation questions posed by CMS was, "What percentage of the BadgerCare population receives coverage through Medicaid managed care, through exclusively FFS Medicaid/BadgerCare, and through employer-sponsored insurance?" These questions were addressed in the *Case Study Report* (Gibbs et al., 2002). We take a second look below.

2.5.1 HIPP Enrollment

Enrollment remains minimal in Wisconsin's premium assistance program for BadgerCare eligibles.

In the *Case Study Report*, we reported that Wisconsin's HIPP program had failed to enroll more than a handful of families in the first 2.5 years of operation. The main reason cited for low enrollment was stringent eligibility rules for families, employers, and health plans. The state also did not promote the program among its business community through outreach or advertising, and a general opposition to expanded government involvement in health care among Wisconsin employers and their representatives hampered enrollment.

As of September 30, 2003, the program was still experiencing low enrollment; only 79 families were enrolled in HIPP that month, including 124 adults and 202 children (conversation with Don

Schneider, DHFS, 10/2/03). Measures taken in the prior year to improve HIPP enrollment, including lowering the required employer contribution limit and allowing self-funded employer plans to be considered as HIPP-qualifying plans, did not increase enrollment. Beginning October 1, 2003, BadgerCare enrollment is a qualifying event for ESI enrollment. How many families this would affect is unknown, but the state does not expect a large increase in enrollment due to this policy change.

2.5.2 HMO Enrollment

In the *Case Study Report*, we used the administrative enrollment data to determine the percentage of enrollees with exclusively HMO, exclusively FFS, and a combination of HMO and FFS coverage during calendar year 2000. We found that three-fourths of BadgerCare enrollees were enrolled in an HMO plan for at least part of the year and one-quarter were enrolled exclusively in FFS. Somewhat more BadgerCare enrollees were enrolled in FFS exclusively, compared with AFDC-related Medicaid enrollees. This was attributed to the wider geographic dispersion of the BadgerCare enrolled population compared to the Medicaid population—that is, BadgerCare enrollees were more likely to live in areas not served by two or more Medicaid HMOs and therefore have the option or the need to enroll in FFS. An updated map of Medicaid/BadgerCare HMO participation is provided in ***Figure 2-20***.

Enrollment episodes that are covered exclusively under fee-for-service increase after BadgerCare implementation.

The calendar year used to investigate the percentage of enrollees with HMO versus FFS coverage in the Case Study Report includes the ending months of some enrollment episodes and the beginning months of other episodes. Therefore, although this information may be useful for budgeting purposes, it does not focus on the enrollment episode, the correct unit of observation for making policy changes that would impact the percentage of enrollees with HMO coverage in any given month or year. Consequently, we took a further look at this question to determine the percentage of enrollment *episodes* with HMO coverage exclusively, FFS coverage exclusively, and a combination of HMO and FFS coverage.

The resulting percentages of episodes by health care delivery system are shown in ***Table 2-13***. These results are similar to those found for calendar year 2000. Three-fourths of BadgerCare enrollees were

Figure 2-20. Medicaid and BadgerCare HMO Participation for Contract Period 2002–2003

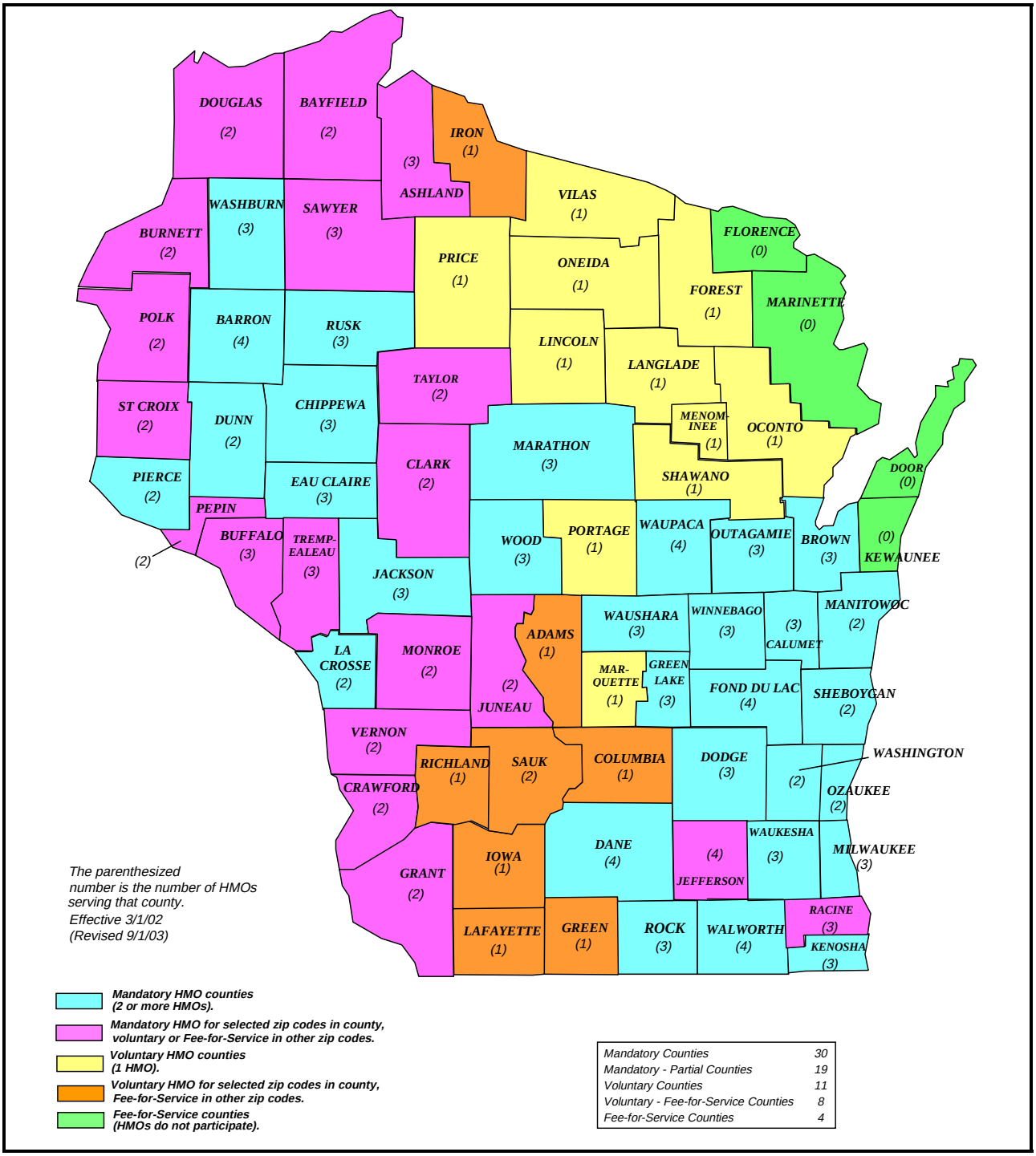


Table 2-13. Percentage of Enrollment Episodes by Health Care Delivery System and Eligibility Category, Pre- and Post-BadgerCare Implementation

	Pre-Period Medicaid	Post-Period		
		All	Medicaid	BadgerCare
HMO exclusively	18.0	8.4	7.7	9.9
HMO and FFS	63.3	67.9	69.5	64.2
FFS exclusively	18.7	23.7	22.8	25.9

enrolled in an HMO plan for at least part of the episode and one-quarter was enrolled exclusively in FFS during the episode. A slightly higher percentage of BadgerCare enrollees was enrolled in FFS exclusively, compared with traditional Medicaid enrollees, and the percentage of traditional Medicaid enrollees with FFS exclusively increased from 19 percent prior to BadgerCare implementation to 23 percent in the post-BadgerCare period. This latter result may be due to the concurrent enrollment of Medicaid eligible children with their BadgerCare eligible parents in geographic areas not served by more than one HMO. At the same time, the percentage of enrollment episodes with HMO coverage exclusively among traditional Medicaid enrollees was more than halved from the pre- to the post-BadgerCare periods—from 18 percent to 8 percent.

2.5.3 Delays in HMO Enrollment

We also looked at the number of months' delay that occurred before Wisconsin Medicaid/BadgerCare enrollees were enrolled in HMOs. We computed these figures for new enrollment episodes among traditional Medicaid enrollees in a pre- and post-BadgerCare period and among BadgerCare enrollees in the post-period. As previously, we defined the pre-period as January 1, 1997, through December 31, 1998. However, to allow a follow-up period of at least 12 months for all episodes, we defined the post-period as October 1, 1999, through September 30, 2001. Episodes that had not ended by September 30, 2002, and had no months of HMO coverage were categorized as FFS exclusively.

We broke out the enrollment episodes by whether they were FFS only, FFS then HMO, and all other configurations. The latter category includes episodes with only HMO coverage, as well as

episodes with multiple spells of FFS coverage. Multiple FFS spells occur when there is a disruption in HMO coverage—for example, if an HMO withdraws from participation in the Medicaid program. To measure delay, we looked only at episodes where there were some months of initial FFS coverage and thereafter continuous HMO coverage. Some FFS-only episodes were of short duration and may have ended before managed care enrollment could be finalized. However, we were not able to distinguish these episodes from those in counties with no participating HMOs because the data file did not include a county-of-residence variable.

Wisconsin routinely backdates eligibility for Medicaid and Healthy Start for up to 3 months from the date of application. For BadgerCare cases, eligibility is backdated to the first of the month of application. Unfortunately, we had only the dates eligibility began and not the dates of application. Thus, we were not able to determine the exact length of delay in managed care enrollment. However, delays longer than 6 months are worrisome because of the possible impact on initiation of prenatal care and the timely receipt of well-child visits.

As shown in ***Table 2-14***, the percentage of episodes among traditional Medicaid enrollees that had a single initial spell of FFS coverage followed by continuous HMO enrollment increased from 35 percent in the pre-period to 47 percent in the post-period. BadgerCare enrollees experienced about the same frequency of these type episodes as traditional Medicaid enrollees post-BadgerCare implementation.

Furthermore, as mentioned above, there were more FFS-only episodes in the post-period compared to the pre-period but fewer of these episodes were under 6 months duration. One-quarter of traditional Medicaid and BadgerCare enrollees had FFS episodes of 2 months or less duration in the post-period compared to 41 percent of traditional Medicaid enrollees in the pre-period. Finally, a smaller percentage of BadgerCare enrollees had multiple episodes of HMO enrollment compared to traditional Medicaid enrollees (13 percent among BadgerCare enrollees in the post-period vs. 16 percent among Medicaid enrollees in both the pre- and post-periods).

Table 2-14. Months of Fee-for-Service Coverage by Health Care Delivery System and Eligibility Category, Pre- and Post-BadgerCare Implementation

	FFS Only	FFS then HMO	Other	Total
Pre-Period Traditional Medicaid Enrollees				
Number of episodes	63,582	118,729	157,644	339,955
Percent	18.7%	34.9%	46.4%	100.0%
Months of FFS enrollment				
None	—	—	38.9%	18.5%
≤ 1 month	25.8%	18.8%	10.4	15.8
2 months	15.1	25.7	6.7	14.9
3 months	13.4	23.4	6.8	13.8
4–6 months	18.6	26.3	17.0	20.5
> 6 months	27.1	5.8	20.3	16.5
Post-Period Traditional Medicaid Enrollees				
Number of episodes	63,815	131,741	84,104	279,660
Percent	22.8%	47.1%	30.1%	100.0%
Months of FFS enrollment				
None	—	—	25.6%	9.0%
≤ 1 month	16.4%	13.4%	11.9	12.3
2 months	9.0	25.2	5.8	15.7
3 months	11.7	24.8	8.0	16.8
4–6 months	16.1	28.5	23.0	24.1
> 6 months	46.8	8.1	25.6	22.2
Post-Period BadgerCare Enrollees				
Number of episodes	31,078	55,565	33,365	120,008
Percent	25.9%	46.3%	14.0%	100.0%
Months of FFS enrollment				
None	—	—	356%	9.9%
≤ 1 month	14.7%	17.1%	6.1	13.4
2 months	11.0	32.4	5.6	19.4
3 months	14.3	24.2	10.0	17.7
4–6 months	16.9	19.3	24.1	20.0
> 6 months	43.1	7.0	18.7	19.6

For about a third of traditional Medicaid enrollees, it took more than 3 months to enroll in a managed care plan after enrolling in Medicaid/BadgerCare. The delay was longer for traditional Medicaid enrollees in the post-period than in the pre-period; 32 percent of traditional Medicaid enrollees took more than 3 months to enroll in managed care during the pre-period, compared to 37 percent in the post-period. BadgerCare enrollees entered managed

care somewhat quicker than traditional Medicaid enrollees—26 percent of BadgerCare enrollees took more than 3 months to enroll in an HMO.

Much of these delays could be a result of Wisconsin's retroactive eligibility policy. Of concern, however, are the 8 percent of traditional enrollee and 7 percent of BadgerCare enrollees for whom it took more than 6 months to enroll in an HMO. These delays could be disruptive for the receipt of timely well-child visits and immunizations as well as prenatal care visits.

The State has made efforts to reduce this delay for women qualifying for Medicaid due to pregnancy. Because Wisconsin views prenatal care as a priority, they have directed their enrollment broker, Automated Health Systems (AHS) to outreach to pregnant women as soon as their eligibility is determined. The State provides AHS a list of newly eligible pregnant women on a weekly basis. AHS attempts to contact each woman on the list to assist them in choosing an HMO and getting enrolled as quickly as possible.

Staff in the Bureau of Managed Health Care Programs recently studied the length of time it takes for pregnant women to enroll in an HMO. In the sample they examined, 81 percent of the women were either enrolled or determined to be exempt from enrollment within 4 weeks of the eligibility determination. At 5 weeks, 87 percent were enrolled or determined to be exempt from enrollment. Only 5 percent were auto-assigned. All sampled cases had backdated eligibility—ranging from 1 to 4 months from the date of the eligibility determination. Thus, the vast majority of pregnant women were enrolled within one month of their eligibility determination although their eligibility effective date was up to 4 months before the determination.

In summary, only one-quarter of BadgerCare enrollees remained in FFS coverage throughout their enrollment episodes; the majority of Wisconsin's BadgerCare enrollees in families with children were enrolled exclusively in HMO coverage after an initial enrollment in FFS. However, the initial delay in HMO enrollment was substantial in a subset of these episodes, potentially leading to delays in receipt of routine health care. Very few BadgerCare families were enrolled in employer-sponsored plans.

BadgerCare implementation also appeared to have an impact on HMO enrollment of enrollees in traditional Medicaid eligibility categories. Proportionally more were enrolled in FFS coverage exclusively and fewer in HMO coverage exclusively. In addition, post BadgerCare, proportionally more Medicaid enrollees had delays in initiating HMO enrollment of more than 3 months.

2.6 KEY FINDINGS

In this section, we used administrative enrollment data to investigate enrollment trends, the demographic and enrollment characteristics of Medicaid/BadgerCare enrollees, the retention of Medicaid eligible children after their families fail to pay BadgerCare premiums, the impact of premiums on churning, and enrollment in HMOs. Our key findings are provided below.

2.6.1 Enrollment and Impact on Uninsurance Rates

From the start, BadgerCare enrollment has exceeded expectations. More families were enrolled earlier than planners and policy makers predicted, reversing the downward trend in Medicaid family coverage resulting from the declining welfare rolls. Enrollment has continued to grow each year since the program was implemented. By August 2003, BadgerCare was providing health care coverage to over 111,000 people. Furthermore, BadgerCare has increased enrollment of children in Medicaid. The State estimates that since the implementation of BadgerCare, an additional 81,900 children have enrolled in Medicaid (DHFS, 2003a). However, many of these new Medicaid child enrollees have been enrolled in the two most recent years, and therefore, are attributable to the declining economy which has increased the number of children eligible for Medicaid.

All available data indicate that the uninsurance rate in Wisconsin dropped significantly following BadgerCare implementation (U.S. Census Bureau, 2001; DHFS, 2000, 2001). The Wisconsin Family Health Survey indicated that 11 percent of the State's residents went without health insurance during part of all of 2000, whereas 13 percent were uninsured during part or all of 1999. In addition, despite a growing unemployment rate and worsening economic conditions, insurance coverage has remained high in Wisconsin. The percentage of Wisconsin's household population without health

insurance coverage for all or part of the year remained unchanged from 2000 to 2002 (DHFS, 2002, 2003b), and the State continues to have uninsurance rates among the lowest in the nation (U.S. Department of Commerce, 2003). This success can be attributed at least in part to the safety net insurance coverage provided by the BadgerCare program.

2.6.2 Demographic and Enrollment Characteristics

In contrast to the AFDC-related and Healthy Start eligibility categories, BadgerCare enrolled more adults than children. About two out of three BadgerCare enrollees were parents or spouses of parents. Many of the children of BadgerCare adult enrollees were enrolled in Medicaid/Healthy Start, which covers children under age 6 in families with incomes up to 185 percent of the FPL and children aged 6 to 18 in families with incomes up to 100 percent of the FPL. Any child eligible for Medicaid coverage is not eligible for BadgerCare. As a result, BadgerCare children were older than children enrolled in Medicaid. In 2001, only 5 percent of BadgerCare child enrollees were under 6 years of age, whereas 50 percent of Medicaid children were under age 6.

Besides increasing the number of publicly insured low-income adults and children in Wisconsin, BadgerCare also increased the lengths of Medicaid enrollment. Nevertheless, many enrollees continued to have enrollment periods of short duration; only about half of adult AFDC-related and BadgerCare enrollees remained enrolled beyond the first year of enrollment. AFDC-related children generally remained enrolled longer than AFDC-related adults (63 percent of children aged 6 to 18 and 75 percent of children aged 0 to 5 remained enrolled for 12 months or longer). In contrast, BadgerCare children were about as likely as BadgerCare adults to remain enrolled beyond the first year of enrollment (52 percent of children aged 6 to 18 and 53 percent of children aged 0 to 5).

Short periods of disenrollment between two enrollment periods were also common among Medicaid/BadgerCare enrollees and were more prevalent among Medicaid enrollees following BadgerCare implementation compared to the pre-period. Churning was particularly high among Medicaid and BadgerCare children. As many as 15 to 20 percent of children reenrolled after only 1 month,

and 60 to 70 percent had reenrolled within the first 2.5 years after disenrolling.

2.6.3 Pregnant Women

Lengths of enrollment and disenrollment for adult pregnant women enrolled in Healthy Start were the most affected among the traditional Medicaid eligibility groups with the implementation of BadgerCare. Prior to BadgerCare, most adult Healthy Start women lost their eligibility for Medicaid 60 days after delivering their infant. With the implementation of BadgerCare, new mothers whose deliveries were paid by Medicaid and who did not have access to other health insurance coverage were able to transfer to BadgerCare and thereby retain their coverage. Prior to BadgerCare, only 12 percent of Healthy Start pregnant women were still enrolled 12 months after enrolling, whereas post BadgerCare, 40 percent of these women were still in the program at 12 months following enrollment. In addition, before BadgerCare, 26 percent of these women had reenrolled within the first year after losing eligibility, whereas after BadgerCare, 43 percent reenrolled in public coverage in that time.

2.6.4 Cash Assistance Recipients

Based on numbers that we received from Wisconsin's DWD for 2000, virtually all W-2 cash assistance recipients were covered by Medicaid or BadgerCare. The total number of Medicaid/BadgerCare enrollees who were cash assistance enrollees declined from 1997 to 2000, but increased in 2001 as unemployment rose. Most of the cash assistance recipients were enrolled in traditional Medicaid eligibility categories; only about 12 percent were enrolled in BadgerCare. BadgerCare had no impact on length of enrollment for short-term enrollees receiving cash assistance, but increased the probability of longer enrollment episodes for long-term enrollees receiving cash assistance. Medicaid/BadgerCare enrollees with some months of cash assistance were also more likely than enrollees with no cash assistance months to reenroll in the public health care coverage at every month of the 32-month study period.

2.6.5 Premium-Paying Families

We found no evidence that premiums increased churning. In fact, because of the mandatory waiting period of 6 months for premium-paying families following disenrollment for reasons other than

"good cause," families who had paid premiums were more likely to delay reenrollment compared to nonpremium-paying families in the short term. However, they exhibited similar disenrollment and reenrollment patterns as nonpremium-paying in the long term.

We also found that most (two-thirds) of families who paid premiums always paid their premiums on time. Furthermore, in more than half of the families who missed a premium payment, no family members were disenrolled for failure to pay premiums. In only a small number of families (< 2 percent of premium-paying families) were Medicaid eligible children disenrolled with other family members after failing to make premium payments.

2.6.6 HMO Enrollment

We found that three-fourths of BadgerCare enrollees were enrolled in an HMO plan for at least part of their enrollment episodes and one-quarter were enrolled exclusively in FFS during their episodes. Because BadgerCare enrollees are more geographically dispersed and more likely to live in areas not served by two or more Medicaid HMOs compared with AFDC-related Medicaid eligibles, a slightly higher percentage of BadgerCare enrollees were enrolled in FFS exclusively, compared with traditional Medicaid enrollees. Furthermore, the percentage of traditional Medicaid enrollees with FFS exclusively increased from 19 percent prior to BadgerCare implementation to 23 percent post-BadgerCare. This latter result may be due to the concurrent enrollment of Medicaid eligible children with their BadgerCare eligible parents in geographic areas not served by more than one HMO.

The initial delay in HMO enrollment was substantial for 7 to 8 percent of enrollees (i.e., greater than 6 months). Some of this delay was due to the State backdating eligibility from the date of application.

The delays are of concern because of the potential for causing delays in the receipt of prenatal and well-child care. However, the state has implemented measures to ensure that pregnant women are enrolled in HMOs as quickly as possible. Internal studies suggest that the majority of pregnant women are enrolled within 1 month of their eligibility determination.

3 Family Survey Analysis

CMS posed evaluation questions for Wisconsin's BadgerCare program that required information on participating families' views and experiences with the program, as well as comparative information on the views, experiences, and characteristics of program participants and eligible nonparticipants. To collect this information, we conducted a telephone survey of families eligible for the program. We administered the survey to two separate sample populations: (1) a sample of families from a list of enrolled families provided by the State, and (2) a sample of families from a list of children participating in the National School Lunch Program (NSLP) provided by consenting school districts from around the State. The first sample provided responses for a representative sample of BadgerCare enrolled families, whereas the second allowed us to compare the characteristics of participating and nonparticipating families. In the survey, we collected information on

- families' awareness and source of program information;
- their experiences and satisfaction with the program;
- factors motivating their decisions to participate or not participate, including the impact of family coverage and premium payments; and
- families' demographic, socioeconomic, health status, health care access, and health service use.

In this chapter, we briefly describe our survey methods and present an analysis of the survey responses.

3.1 METHODS

We provide brief descriptions of the sampling design, survey instrument, and data collection procedures and results below. More detailed information on the BadgerCare Family Survey (BCFS) can be found in our *BadgerCare Family Survey Data Collection Report*, available from the RTI Project Director.

3.1.1 Sampling Design

To conduct the family survey analysis, we needed comparable information from a group of families participating in BadgerCare and families eligible for but not participating in the program. Because a random digit-dial survey would have been prohibitively expensive, we looked for a list or other method to identify uninsured families with children who may be eligible but not enrolled in BadgerCare, as well as enrolled families. The NSLP and BadgerCare income cut-offs are identical at 185 percent of the FPL. Furthermore, a 1999 Urban Institute study found that among participants of a variety of government programs, the NSLP had the highest percentage of uninsured children and hence BadgerCare eligibles (Kenney, Haley, and Ullman, 1999). Therefore, we used lists of children participating in the NSLP in Wisconsin to obtain comparable samples of BadgerCare participating and eligible nonparticipating families.

However, the NSLP participant lists include few, if any, families with only children under age 6 or families with only teenagers, who typically do not enroll in the NSLP even when eligible. Therefore, the NSLP sample does not represent the overall BadgerCare-enrolled population. Consequently, we drew a second representative sample of BadgerCare participating families from a list of all families enrolled in BadgerCare as of May 1, 2002, provided by Wisconsin's DHFS.

NSLP Sample

Because lists of Wisconsin's NSLP participants are maintained at the school district level, we had to first select individual school districts for recruitment into the study. Then, from the school districts that agreed to work with us, we obtained lists of children enrolled in the NSLP during the 2001–2002 school year. We drew the sample of families with children participating in the NSLP from these lists.

We determined that a sample of 400 BadgerCare participating families and 400 eligible nonparticipating families was an adequate

sample size for sufficient power to detect a 10 percent difference in most of our study measures at the 5 percent significance level. However, because of design effects from the intracorrelation of children belonging to the same school districts, we decided that target sample sizes of 500 BadgerCare participating and 500 eligible nonparticipating families were more appropriate. Under our original assumptions of a 60 percent response rate, a 30/70 split between participants and nonparticipants in the NSLP sample, and a 40 percent rate of other insurance coverage among the nonparticipating families, we determined that we would need 7,214 families.

We determined target numbers of families for each of six stratifications based on the distribution of children in the NSLP. The stratifications were six urban/rural county designations, collapsed from the 10-category U.S. Department of Agriculture's urban/rural continuum code. The strata were as follows:

1. Central city counties of metropolitan areas with populations $\geq$1 million
2. Fringe counties of metropolitan areas with populations $\geq$1 million
3. Counties in other metropolitan areas with populations <1 million
4. Nonmetropolitan areas, adjacent to a metropolitan area with population $\geq$2,500
5. Small cities, i.e., non-metropolitan areas, not adjacent to a metropolitan area with population $\geq$2,500
6. Rural areas, either adjacent to or not adjacent to a metropolitan area with population <2,500

To choose school districts and recruit them for the study, we categorized the 405 Wisconsin school districts participating in the NSLP by the urban/rural stratification and then ranked them by BadgerCare enrollment as a percent of expected enrollment in the county, the percent of residents with health care coverage in the county, and several other county-level indicators of health insurance coverage. To ensure that an adequate sample of families with eligible nonenrolled members was included, we selected counties with the lowest rates of BadgerCare enrollment ranking high on the other measures and school districts within these counties with the greatest number of participants in the NSLP program. We did not include districts with fewer than 70 NSLP participants unless it was

necessary to meet an acceptable minimum number of NSLP participants for a particular urban/rural category.

We contacted a total of 136 school districts, and 69, or 50.7 percent, were willing and able to participate in the study. Many school districts were unable or unwilling to devote the time and resources required for participation in the study. Some districts simply did not respond, despite our repeated attempts to contact them. Other districts had completed their school lunch application and award process by the time we contacted them, leaving direct mailing to the parents as the only available means for obtaining consent, an option we considered to be too costly given project resources. Still other school districts declined to participate, stating that they were already involved in too many studies or were concerned about potential parent reaction to the chances for breach of confidentiality.

After the 7,214 names were drawn for the sample, we checked the data file for duplicates, which occurred when two or more children from the same family were drawn. We dropped a total of 175 names as a result of this check. We then sent the list of names for telephone number verification to Telematch, a company that provides inexpensive, fast-turnaround address-telephone matching using directory assistance databases. Telematch verified information for 6,401 of the selected families. Because we expected to reach our goal of 500 BadgerCare participating families before our goal of 500 eligible nonparticipating families, we released the sample in two waves.

Enrollee-List Sample

We obtained a file of all BadgerCare enrollees as of May 1, 2002, from Wisconsin's DHFS. The file included family contact information, the number of persons in the household (family size), and household income. Upon receiving the file, we checked it for duplicates within the sample and against the NSLP sample and for missing contact information, and eliminated duplicates and records with inadequate contact information.

To enable subanalyses of prior welfare-eligible and premium-paying families, we stratified the sample by income level as a percent of the FPL. The family income stratifications were as follows:

1. ≤68 percent of the FPL (i.e., families with incomes up to the pre-welfare reform Aid to Families with Dependent Children [AFDC] income cut-off)
2. 68 percent to 150 percent of the FPL
3. 150 percent to 200 percent of the FPL

We determined that a sample of 400 BadgerCare participating families from each of the income levels was adequate for sufficient power to detect a 10 percent difference in most of our study measures at a 5 percent significance level. Assuming that 60 percent of the families selected would complete the survey, we selected a simple random sample of 1,998 families, including 666 families from each stratum. After approximately 75 percent of the cases had been finalized, we determined that we would need to release a second sample wave to achieve the necessary number of completed interviews in each income stratum because of low response rates from the lower income strata. We selected an additional 660 families: 370 from income stratum 1; 250 from income stratum 2; and 39 from income stratum 3.

3.1.2 Survey Instrument

We modeled the BCFS questionnaire after the Urban Institute's National Survey of America's Families (NSAF). We also drew some questions from the State and Local Area Integrated Telephone Survey (SLAITS) Module on Children with Special Health Care Needs of the National Center for Health Statistics. The items from these instruments included questions on demographic and socioeconomic characteristics, employment, health status, and health service use.

In addition, we developed new questions or modified existing questions to address topics specific to the BadgerCare evaluation. These included questions about sources of BadgerCare program information, respondents' views and understanding of BadgerCare-specific eligibility rules and enrollment processes, and the impact of BadgerCare family coverage on enrollment decisions. Findings from focus groups held among participating and eligible nonparticipating family members and a review of program-related documents provided a basis for these questions (see Gibbs et al., 2002).

We added a set of screening questions to the beginning of the survey to screen out ineligible sample members and to select up to four target family members about whom the remainder of questions

would be asked. To be eligible to complete the BCFS, a sampled family had to meet the BadgerCare income criteria and have at least one family member enrolled in BadgerCare or, for the NSLP sample, have at least one uninsured family member. We asked questions about the following four family members:

1. one child between the ages of 6 and 17, if any in the family;
2. one child under the age of 6, if any in the family;
3. the parent, step-parent, or guardian of either child; and
4. the spouse of the parent, step-parent, or guardian, if any.

For all families, we asked questions about at least one child and one adult.

After drafting the BCFS instrument, survey specialists used the RTI Forms Appraisal system to evaluate the clarity, sensitivity, bias, and response categories for all questionnaire items. They also reviewed the questionnaire for consistency in style and format, logical ordering of questions, correct skip patterns, and timing.

We conducted the BCFS interview with the parent, step-parent, or guardian of at least one of the selected children. The respondent answered all the questions on behalf of other family members. The BCFS was programmed as a computer-assisted telephone interview (CATI) instrument and took an average of 30 minutes to complete.

3.1.3 Data Collection Procedures and Results

We began data collection for the BCFS on May 7, 2002, with the mailing of prenotification letters and frequently asked question (FAQ) brochures to the Wave 1 NSLP sampled families. Telephone interviewers began calling the families 1 week later. We sent prenotification letters out July 12, 2002, to the Wave 1 enrollee-list sampled families. Because we obtained our desired number of completed surveys from the participating families from the Wave 1 sample, the prenotification letter was modified for the Wave 2 NSLP sampled families to indicate that we wished to interview families with uninsured family members only. These letters went out July 10, 2002; prenotification letters and FAQ brochures went out to the Wave 2 enrollee-list sampled families July 23, 2002.

Approximately 1 month before the end of the data collection period, we reactivated all mild and firm refusals from the enrollee-list sample and sent them a letter offering a $20 incentive to complete the

interview. We offered the incentive in an effort to increase the enrollee-list sample response rate, and paid the incentive even if the sample member was screened out as ineligible. We did not send a letter to any case previously coded as a "hostile" refusal by the telephone interviewers. In total, we mailed incentive letters to 133 enrollee-list sampled families. Out of these 133 cases, a total of 52 sampled families either completed the survey or were screened out as ineligible and received an incentive check for $20.

Upon completion of the telephone interview, we offered a BadgerCare informational brochure (provided by the DHFS) to BCFS respondents in families meeting our definition of eligible nonparticipating families. We sent the brochures on a flow basis throughout the data collection period to any respondent who indicated that they wanted to receive the information. In total, we mailed 348 informational brochures.

Data collection ended for the NSLP sample on September 23, 2002. The final NSLP sample response rate was 59 percent; we completed interviews for 631 families with BadgerCare enrolled members and 385 families with eligible nonenrolled members. We obtained more than our desired 500 interviews from BadgerCare enrolled families because of the need to finish out the Wave 1 sample and a delay in implementing new programming code for early termination of the interviews with enrollee families. We stopped data collection at 385 completed interviews from families with eligible nonenrolled members because we determined that extending data collection was not cost-effective, given the very low rate of intake for these families. Our original assumptions of a 30/70 split between participants and nonparticipants and a 40 percent rate of insurance coverage among the nonparticipants in the NSLP sample turned out to be incorrect. The split between participants and nonparticipants was 40/60 and the rate of insurance among nonparticipants was 78 percent. Thus, we found far fewer eligible nonparticipating families than we had anticipated.

Data collection for the enrollee-list sample ended on September 28, 2002. The final enrollee-list sample response rate was 57 percent. We obtained a total of 1,340 completed interviews: 448 completed interviews from income stratum 1; 445 completed interviews from income stratum 2; and 447 completed interviews from income stratum 3.

3.1.4 Data Analysis

In the following sections, we present the results of the BCFS. For all measures, we present unweighted results for BadgerCare participants and nonparticipants from the NSLP sample and weighted results for BadgerCare participants from the enrollee-list sample. We did not compute weights for the NSLP sample estimates because the sampling was not population-based; the estimates are not necessarily representative of the entire NSLP population. Nevertheless, they are an important subgroup, and measured relationships between program participation and variables such as premiums provide important information for CMS and State program staff.

In ***Section 3.2***, we provide a profile of the demographic, socioeconomic, and health status characteristics of BadgerCare participants and eligible nonparticipants, as well as comparative information on their health service use in the prior year. In ***Section 3.3***, we investigate factors motivating families' decision to enroll in BadgerCare, paying particular attention to the role of family coverage and premium payments in this decision. Finally, in ***Section 3.4***, we investigate families' knowledge of and experiences with BadgerCare. In particular, we focus on the enrollment and recertification process, payment of premiums, and access to health care services.

3.2 PROFILE OF BADGERCARE PARTICIPANTS AND NONPARTICIPANTS

In this chapter, we present comparative profiles of selected demographic and socioeconomic characteristics of BadgerCare participants and eligible nonparticipants. We use these data to assess the effectiveness of outreach and to identify whether certain eligible population groups were more or less likely to enroll in BadgerCare. Then, to determine whether the program is reaching eligible Wisconsin residents in the greatest need of health care, we present similar profiles of their health status and health service use.

Few differences existed between BadgerCare participating and eligible nonparticipating families. Although the program enrolled proportionally more families with greater health care needs—the poorest, those with young children, and members with special health care needs—a large proportion of families with these characteristics remained uninsured.

We investigate both family-level and individual-level characteristics. For the family-level analysis, we first compare the characteristics of BadgerCare participating families from the NSLP sample with those of eligible nonparticipating families from the NSLP sample. BadgerCare participating families are defined as families with at least one family member enrolled in the program. Eligible nonparticipating families meet the income requirements of the program but have no BadgerCare enrolled members and at least one uninsured member. We then investigate any major differences in the family characteristics of BadgerCare participating families from the NSLP sample and those from the more representative enrollee-list sample.

For the individual-level analysis, we compare the demographic and socioeconomic characteristics, health status, and health service use patterns of adults and children from the NSLP sample by health insurance status: (1) enrolled in BadgerCare, (2) covered by employer-sponsored or other health insurance, and (3) uninsured. BadgerCare enrollees are from BadgerCare participating families only, whereas other insured and uninsured individuals are from both BadgerCare participating and eligible nonparticipating families. To examine the representativeness of the NSLP sample of enrollees, we also present the characteristics of Medicaid/BadgerCare enrollees from the enrollee-list sample.

3.2.1 Family Characteristics

The characteristics of BadgerCare participating and eligible nonparticipating families from the NSLP-list sample and of BadgerCare participating families from the enrollee-list sample are shown in ***Table 3-1***.

Participating versus Eligible Nonparticipating Families

The majority of both BadgerCare families and eligible nonparticipating families from the NSLP sample were female-headed, single-parent families (58 percent and 61 percent, respectively). Only about one-third of all families were two-parent families. BadgerCare families were about 5 percentage points more likely to be a two-parent household than eligible nonparticipating families (38 percent vs. 33 percent), but the differences in the distribution over the family structure categories between participating and eligible nonparticipating families are not statistically significant.

Table 3-1. Characteristics of BadgerCare Participating and Eligible Nonparticipating Families

Characteristic	NSLP List		Enrollee List: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
	(n = 385)	*(n = 631)*	*(n = 1,340)*
Average Family Size	4.1	4.2	3.9
Family Structure*			
Two-parent families	32.5%	37.6%	44.1%
Female-headed single parent	60.5	58.3	53.3
Male-headed single parent	6.8	4.1	2.6
Single parent, unknown gender	0.2	0.0	0.0
Presence of Children*†			
Children aged 0–5 only	0.5	0.0	17.7
Children aged 6–17 only	76.4	66.4	57.1
Children in both age groups	23.1	33.6	25.2
Families with Employed Adult†			
With two employed parents	16.6	14.9	18.5
With one employed parent	59.2	59.8	63.1
With no employed parents	22.1	24.9	17.3
Don't know/refused/missing	2.1	0.5	1.0
Family Monthly Income†			
At or less than 68% FPL	24.4	29.6	17.6
Between 68% and 150% FPL	48.1	49.9	59.0
At or more than 150% FPL	21.8	16.2	18.2
Don't know/refused/missing	5.7	4.3	5.3
Geographic Residence*			
Milwaukee	32.5	29.2	25.7
Other metropolitan counties	30.4	32.7	32.6
Nonmetropolitan counties	37.1	38.2	41.7
Families with Special Health Care Needs*†			
Yes	31.4	40.4	29.0
No	66.2	58.6	70.0
Don't know/refused/missing	2.3	1.0	1.1

[1] Percentages are weighted.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at $p \leq 0.05$ level.

The average family size for BadgerCare eligible families was four members, which does not vary by program participation. Because of the sampling frame, virtually all families from the NSLP list had children aged 6 to 17 years. More eligible nonparticipating families had children aged 6 to 17 but no children under 6 compared to BadgerCare families (76 percent vs. 66 percent, respectively). About one-third of BadgerCare families had children in both age groups, whereas slightly fewer eligible nonparticipating families (23 percent) had children in both age groups.

About three-quarters of BadgerCare participating and eligible nonparticipating families from the NSLP sample had at least one parent who was employed. There is no statistically significant difference between BadgerCare participating families and eligible nonparticipating families with regard to having one or two employed parents. Furthermore, although eligible nonparticipating families were slightly more likely to have had family incomes over 150 percent of the FLP—in the range requiring a premium payment for BadgerCare participation—differences in the distributions over income categories are not statistically significant between participating and eligible nonparticipating families.

Slightly more eligible nonparticipating families lived in Milwaukee compared with participating families (33 percent versus 29 percent). Finally, more NSLP BadgerCare participating families had a family member with special health care needs compared with eligible nonparticipating families (41 percent vs. 32 percent).

Table 3-2 shows participation of Wisconsin Works (W-2) and other social programs among BadgerCare participating and nonparticipating families. Almost 15 percent of BadgerCare families had received W-2 benefits since 1999, compared with only 9 percent of eligible nonparticipating families. Furthermore, proportionally, three times as many BadgerCare families as nonparticipating families were receiving W-2 benefits at the time of the survey. BadgerCare families were also almost three times more likely than eligible nonparticipating families to have received food stamps in the prior 12 months, and two and one-half times more likely to have received government assistance in paying for child care. These results are not surprising given that eligibility for these programs is determined at the same time as Medicaid/BadgerCare.

Table 3-2. Program Participation among BadgerCare Participating and Eligible Nonparticipating Families

Participation	NSLP List		Enrollee-List: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
Since July 1999, have you or your family received any Wisconsin Works (W-2) benefits?*			
Yes	9.1%	14.9%	13.1%
No	87.5	83.5	84.3
Don't know/refused/missing	3.4	1.6	2.7
Are you or your family receiving Wisconsin Works benefits right now?*			
Yes	2.1	6.3	5.4
No	94.6	91.9	92.0
Don't know/refused/missing	3.4	1.7	2.7
In the past 12 months, did anybody in the family receive Food Stamps?*†			
Yes	13.0	38.2	30.9
No	84.7	61.0	68.3
Don't know/refused/missing	2.3	0.8	0.8
In the past 12 months, did anybody in the family receive government assistance in paying for child care?*			
Yes	5.2	16.3	16.8
No	92.5	82.9	82.5
Don't know/refused/missing	2.3	0.8	0.8
In the past 12 months, did anybody in the family receive WIC vouchers?*†			
Yes	7.3	19.5	22.3
No	92.2	80.4	77.2
Don't know/refused/missing	0.5	0.2	0.6
In the past 12 months, did anybody in the family receive Supplemental Security Income (SSI)?†			
Yes	12.2	14.6	6.5
No	84.9	83.5	92.6
Don't know/refused/missing	2.9	1.9	0.9

[1] Percentages are weighted.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at ≤ 0.05 level.

However, BadgerCare participating families were also more likely to participate in programs with separate eligibility determination, such as WIC (the Supplemental Food Program for Women, Infants, and Children). Participation in one program allows greater contact with county workers and therefore greater opportunities to have learned about BadgerCare. Participating and eligible nonparticipating families were equally likely to have had a family member receiving Supplemental Security Income (SSI) payments.

NSLP versus Enrollee-List Participating Families

As expected, some significant differences exist between the BadgerCare participating families from the NSLP sample and those from the enrollee-list sample. In particular, whereas nearly all families from the NSLP list had children aged 6 to 17 years (by design), 18 percent of the representative sample of BadgerCare families from the enrollee list had only children under 6 years of age. Furthermore, the percentage of two-parent families in the representative sample was somewhat higher than that found in BadgerCare families from the NSLP sample; 44 percent of all BadgerCare participating families had two parents (either biological or stepparents) residing in the home, compared to 38 percent of BadgerCare families with children receiving NSLP benefits.

The percentage of all BadgerCare participating families from the enrollee list with at least one employed parent was significantly higher (82 percent vs. 75 percent) and those with incomes under 68 percent of the FPL was significantly lower (18 percent vs. 30 percent) than among BadgerCare families from the NSLP sample. Compared to the representative sample, BadgerCare participating families from the NSLP list were less likely to have received WIC vouchers (20 percent vs. 22 percent) but more likely to have received food stamps (38 percent vs. 31 percent). Finally, proportionally fewer families from the enrollee list had family members with special health care needs (29 percent vs. 40 percent) or family members receiving SSI benefits (7 percent vs. 15 percent).

3.2.2 Health Insurance Coverage

Families in the BCFS had to have at least one family member eligible for BadgerCare. To be eligible for BadgerCare, an individual must:

Many family members of BadgerCare participating and eligible nonparticipating families are not eligible for BadgerCare because of Medicaid, employer-sponsored or other health insurance coverage.

- be under 19 years of age, a parent of a child under 19 years of age living in the household, or the spouse of such a parent living in the household;
- have family income below 185 percent of the FPL (or once enrolled, under 200 percent of the FPL); and
- not be eligible for Medicaid or covered by employer-sponsored (ESI) or other health insurance.

Thus, certain children and adults in the family may have been ineligible due to having Medicaid, ESI, or other coverage.

Wisconsin's Medicaid State Plan covers all children from birth through 5 years of age in families with incomes less than 185 percent of the FPL and older children born after September 30, 1983, in families with incomes less than 100 percent of the FPL. At the time of our survey, all but a handful of children under 19 (i.e., 18-year-olds with birthdays between May 17 and September 30) with family incomes under 100 percent of the FPL were eligible for Medicaid instead of BadgerCare. Children aged 6 to 18 years with family incomes between 100 percent and 185 percent of the FPL and all adults not otherwise eligible for Medicaid were eligible for BadgerCare. Any family member with ESI or other qualifying health insurance was ineligible for BadgerCare coverage. ESI and other private coverage do not disqualify individuals who meet eligibility requirements for Medicaid coverage from enrolling in Medicaid. Thus, within a family, there may have been some individuals enrolled in Medicaid, others enrolled in BadgerCare, and still others not eligible for either program.

Table 3-3 shows the health insurance status of adults and children in BadgerCare participating and eligible nonparticipating families from the NSLP sample and of BadgerCare participating families from the enrollee-list sample. Looking at the column for the representative sample of BadgerCare families from the enrollee list (also shown in ***Figure 3-1***), we see that one-quarter of adults, one-third of children aged 6 to 17, and almost two-thirds of children aged 0 to 5 in these families were not enrolled in BadgerCare. Assuming that all family members were considered in the eligibility determination process, these individuals were probably found not eligible for the program. For all age groups, the most common reason for ineligibility was eligibility for Medicaid; 13 percent of adults, 23 percent of older children, and 57 percent of preschool-aged children were enrolled in

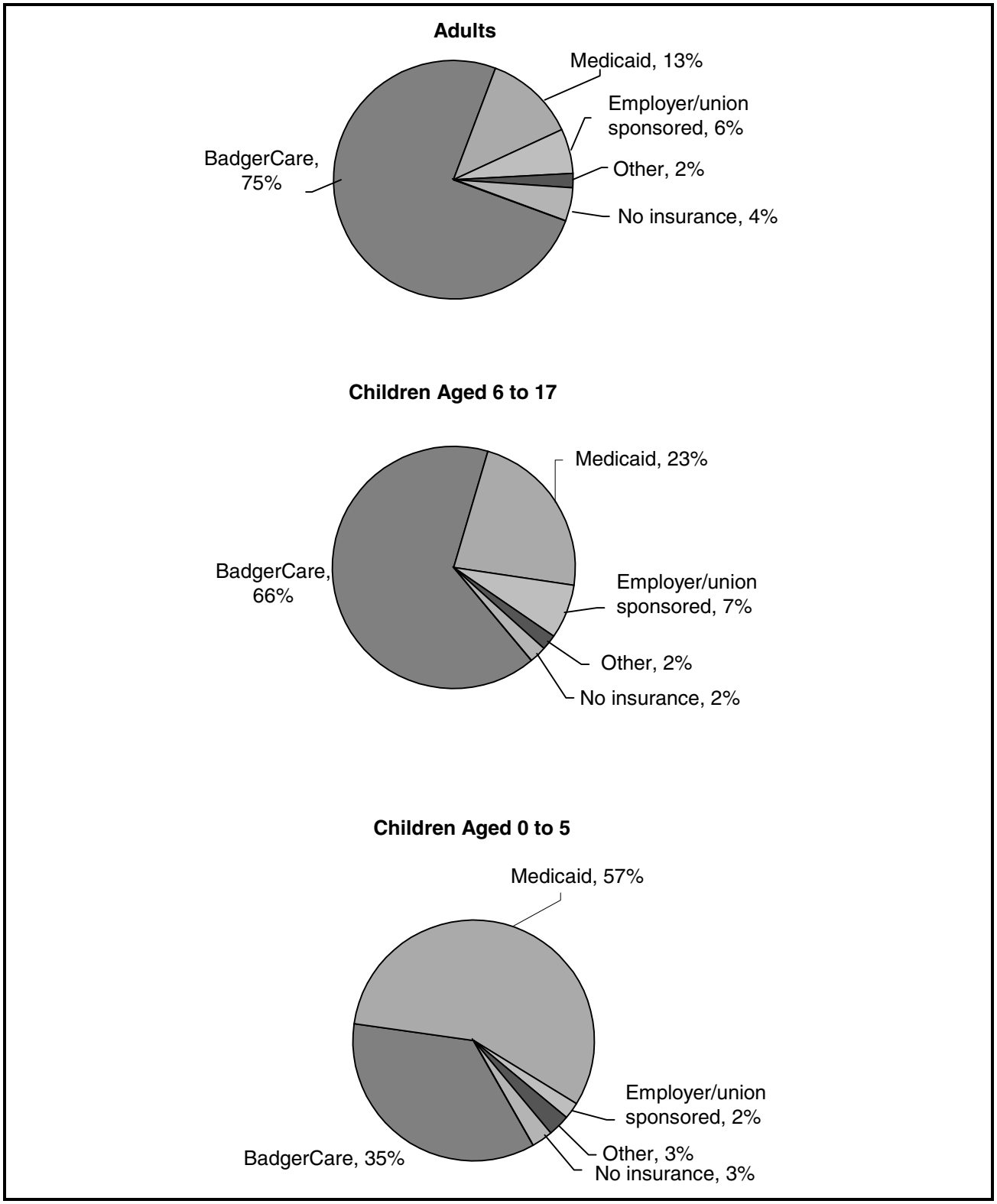
Table 3-3. Health Insurance Status of Individuals in BadgerCare Families and Eligible Nonparticipating Families

Age Group— Health Insurance Coverage	NSLP-List Sample		Enrollee-List Samples: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
Adults			
BadgerCare	—	61.6%	75.2%
Medicaid	3.3%	10.3	12.7
Employer/union sponsored	21.0	15.7	5.6
Other[2]	8.0	5.3	2.1
No insurance	67.1	6.9	4.4
Don't know/refused/missing	0.6	0.2	0.0
Children Aged 6 to 17			
BadgerCare	—	62.8	66.0
Medicaid	7.3	22.0	22.8
Employer/union sponsored	26.6	8.7	7.1
Other[2]	7.6	3.8	1.9
No insurance	57.7	1.4	2.3
Don't know/refused/missing	0.8	1.3	0.0
Children Aged 0 to 5			
BadgerCare	—	33.0	35.4
Medicaid	12.1	58.0	56.7
Employer/union sponsored	24.2	4.7	2.4
Other[2]	9.9	1.4	2.6
No insurance	53.9	1.9	2.9
Don't know/refused/missing	0.0	0.9	0.0

[1] Percentages are weighted.

[2] Includes private/individual plan, Medicare, CHAMPUS or other military insurance, Indian health insurance, Wisconsin risk sharing plan, and other.

Figure 3-1. Enrollee-List Samples: Health Insurance Coverage by Age Group



Medicaid. Another 8 percent of adults, 9 percent of children aged 6 to 17, and 5 percent of younger children were enrolled in ESI or other public or private health insurance. The remaining individuals were uninsured—some of whom may have been undergoing a waiting period for BadgerCare eligibility.

A comparison of the two samples of BadgerCare participating families in Table 3-3 reveals that significantly more adults and slightly more children from the NSLP sample were ineligible for BadgerCare or otherwise did not participate in the program. In the enrollee-list sample, approximately one-quarter of adults, one-third of the children aged 6 to 17, and two-thirds of the children under 6 were covered by either Medicaid, ESI, or other insurance, or were uninsured; in the NSLP sample, these percentages were 30 percent, 36 percent, and 66 percent, respectively. Compared to the enrollee-list sample, the NSLP sample had more individuals enrolled in ESI. Among adults, 16 percent from the NSLP sample were enrolled in ESI vs. 6 percent from the enrollee-list sample. There were also more adults with other insurance coverage (5 percent vs. 2 percent) and more uninsured adults (7 percent vs. 4 percent) in the NSLP sample compared to the enrollee-list sample.

In eligible nonparticipating families, two-thirds of adults (67 percent) and slightly fewer children aged 6 to 17 (58 percent) and 0 to 5 (54 percent) were uninsured. More members of eligible nonparticipating families compared with members of participating families had employer-based or other public or private health insurance—29 percent of adults and 34 percent of children aged 6 to 17 had ESI or other public or private insurance. Conversely, fewer members of eligible nonparticipating families had Medicaid coverage—3 percent of adults, 7 percent of children aged 6 to 17, and 12 percent of children aged 0 to 5.

In the analysis tables below, we group individuals enrolled in either Medicaid or BadgerCare into a single category for analysis purposes. The benefit coverage and delivery systems for these two programs in Wisconsin are identical. Furthermore, any distinction in the programs should be transparent to the family. Individuals with no insurance coverage in the sampled families represent the eligible nonenrollees in the tables that follow. Individuals who have ESI or other public or private coverage are the noneligible family members.

3.2.3 Demographic and Socioeconomic Characteristics

Tables 3-4a through ***3-4c*** compare demographic and socioeconomic characteristics of individual family members in the NSLP sample by health insurance coverage broken out by age group—adults (aged 19 or over), children aged 6 to 17, and children aged 0 to 5. The characteristics of Medicaid/BadgerCare enrollees from the enrollee list are also shown.

Adults by Health Insurance Coverage

BadgerCare/ Medicaid adults were more likely to be married and less likely to work full-time than uninsured adults, suggesting that time costs may be a barrier to enrollment among some eligible single-headed working families.

Several differences are evident in the demographic characteristics of adults from the NSLP sample broken out by health insurance coverage. However, the differences tended to be small in magnitude. Medicaid/BadgerCare enrollees and the uninsured were somewhat younger than adults with ESI or other insurance.

Medicaid/BadgerCare-enrolled adults had a mean age of 36 and the uninsured had a mean age of 37, whereas adults with ESI or other coverage had a mean age of 41 (***Table 3-4a***). Medicaid/BadgerCare adults were equally as likely as the uninsured to be female (73 percent and 71 percent, respectively) but were almost 10 percentage points more likely to be female than adults with ESI or other coverage (73 percent vs. 63 percent). More of the Medicaid/BadgerCare adults (55 percent) were married compared to uninsured adults (48 percent), but fewer were married compared to adults with ESI or other coverage (66 percent).

Medicaid/BadgerCare enrollees were predominately white non-Hispanic (79 percent); black non-Hispanics accounted for the largest minority race among enrollees (12 percent), with Hispanics, Asians and Native Americans accounting for much smaller proportions. However, Medicaid/BadgerCare enrollees, as well as adults with ESI or other coverage or with no insurance, were more likely to be in a minority race than the population of the state as a whole. According to the Wisconsin Family Health Survey (WFHS), conducted by Wisconsin DHFS, in 2001 the state's household population was 87 percent white non-Hispanic (DHFS, 2003c); only 4 percent of Wisconsin residents were black non-Hispanic and no other minority race constituted more than 2 percent.

Table 3-4a. Demographic and Socioeconomic Characteristics of Adults by Health Insurance Coverage

	NSLP-List Sample			Enrollee-List Samples: Medicaid/BadgerCare Enrollees[1]
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	
	(n =330)	*(n =402)*	*(n = 641)*	*(n = 1,738)*
Mean age (years)*	41	37	36	37
Female(%)*#	63.0%	71.4%	72.9%	68.2%
Married*†#	65.5	48.0	55.1	63.1
Race/Ethnicity*#				
White Non-Hispanic	71.5	74.9	78.8	82.2
Black Non-Hispanic	10.0	10.5	11.5	8.4
Hispanic	8.5	7.7	4.1	5.0
Asian	3.9	2.0	2.3	0.9
Native American	3.0	1.5	1.3	1.2
Other	1.2	2.2	1.7	1.6
Don't know/refused/missing	1.8	1.2	0.3	0.7
Education#				
Less than high school	47.6	41.5	46.5	32.1
High school grad	28.2	38.3	30.7	39.4
Some college/college grad	22.1	18.4	21.5	27.4
Don't know/refused/missing	2.1	1.7	1.3	1.0
Employed*†#				
Full-time (40+ hours)	47.9	43.8	32.5	39.6
With access to ESI for self*#	88.0	40.9	38.9	29.9
With access to ESI for family*	52.5	0.0	2.9	3.2
Part-time (less than 40 hours)	19.4	25.1	30.0	28.5
With access to ESI for self*	84.4	24.8	28.7	33.8
With access to ESI for family*	31.3	0.0	0.0	0.2
Not employed	31.2	27.9	35.4	29.6
Don't know/refused/missing	1.5	3.2	2.2	2.4
Family Monthly Income*†#				
At or less than 68% FPL	17.3	23.1	31.7	16.7
Between 68% and 150% FPL	50.9	47.8	50.2	60.2
At or more than 150% FPL	26.7	23.9	13.6	16.8
Don't know/refused/missing	5.2	5.2	4.5	6.3
Geographic Residence#				
Milwaukee	30.0	28.6	26.1	20.7
Other metro	30.9	32.1	32.3	33.1
Nonmetro	39.1	39.3	41.7	46.3

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

\# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p < 0.05$ level.

In the NSLP sample, proportionally fewer adults with ESI or other coverage and with no insurance were white non-Hispanic (72 percent and 75 percent, respectively) compared with Medicaid/BadgerCare enrollees (79 percent), but only the difference between the other insured and Medicaid/BadgerCare enrollees is statistically significant. Among Medicaid/BadgerCare enrollees and the comparison groups, there is little difference in the proportion of black non-Hispanics. However, Hispanics comprised a significantly greater proportion of adults with ESI or other coverage (9 percent) and those with no insurance (8 percent) than those with BadgerCare/ Medicaid (4 percent). Furthermore, Asians and Native Americans comprised greater proportions of adults with ESI or other insurance coverage than either Medicaid/BadgerCare enrollees or the uninsured. The latter result can be partially explained by the fact that for this analysis, Native Americans were classified as insured if they reported qualifying for care under the Indian Health Service (IHS), even though these individuals are not precluded from Medicaid/BadgerCare eligibility.

Almost 47 percent of adult Medicaid/BadgerCare enrollees had less than a high school education, and another 31 percent were high school graduates but had no college experience; only 22 percent had some postsecondary school education. This finding varies significantly from the education levels reported for the general adult population in the 2001 WFHS. Only 9 percent of Wisconsin household residents had less than a high school diploma, compared to 36 percent who were high school graduates and 55 percent who had at least some college education (DHFS, 2001). Adults with ESI or other health insurance coverage were similarly distributed across the educational attainment categories, and although uninsured adults were more likely to have a high school diploma but less likely to have attended college than insured adults, the differences were not statistically significant.

Adult Medicaid/BadgerCare enrollees were significantly less likely than either adults with ESI or other insurance and uninsured adults to work full-time—one-third of Medicaid/BadgerCare enrollees, whereas 48 percent of other insured and 44 percent of the uninsured worked 40 hours or more per week. Higher percentages of adult BadgerCare enrollees worked part-time (30 percent) and were unemployed (35 percent) compared to other insured and uninsured

adults. Surprisingly, the uninsured had proportionally fewer unemployed adults (28 percent) than either of the two insured groups.

None of the uninsured adults with jobs and few BadgerCare adults with jobs reported working for employers offering family coverage.

These data together with the lower percentage of married adults among the uninsured suggest that time costs may be a significant barrier to enrollment among some eligible families. Another explanation for the relatively higher percentage of uninsured adults with full-time jobs compared to BadgerCare adults may be the mandatory waiting periods for BadgerCare eligibility among uninsured adults with access to employer-sponsored coverage. Approximately 41 percent of the uninsured adults working full-time worked for firms offering health insurance coverage, whereas 39 percent of BadgerCare adults working full-time had access to ESI. None of the uninsured adults and only a handful of BadgerCare/Medicaid adults reported working in establishments that offered health insurance to other family members.

At the time of the survey, Medicaid/BadgerCare enrollees were almost twice as likely as adults with ESI or other coverage to have monthly family incomes at or below 68 percent of the FPL (32 percent vs. 17 percent). Conversely, adults with ESI or other insurance coverage were about twice as likely as BadgerCare/Medicaid enrollees to have family incomes at or above 150 percent of the FPL (27 percent vs. 14 percent). Among the uninsured adults, 23 percent had incomes at or below 68 percent of the FPL and another 24 percent had incomes at or above 150 percent of the FPL. About one-half of all insurance groups had incomes between 68 percent and 150 percent of the FPL.

Finally, there were no significant differences in geographic location among the NSLP sample adults by health insurance coverage—26 percent to 30 percent lived in Milwaukee County, 32 percent lived in other metropolitan counties, and 38 percent to 42 percent lived in nonmetropolitan counties. However, the geographic distribution of Medicaid/BadgerCare enrollees did differ markedly from that of the general population; only 10 percent of the general population in Wisconsin lived in Milwaukee and over half of the population lived in other metropolitan areas (DHFS, 2001).

NSLP versus Enrollee-List Adult BadgerCare Enrollees

Adult Medicaid/BadgerCare enrollees from the NSLP sample differed significantly from adult Medicaid/BadgerCare enrollees from the enrollee-list sample on several dimensions. In particular, compared to the representative sample of Medicaid/BadgerCare enrollees, adult Medicaid/BadgerCare enrollees from the NSLP sample were more likely to be female (73 percent vs. 68 percent) and to have less than a high school education (47 percent vs. 32 percent), and less likely to be married (55 percent vs. 63 percent). They were also more likely to be unemployed (35 percent vs. 30 percent), to have family income at or under 68 percent of the FPL (32 percent vs. 17 percent), and to live in Milwaukee County (26 percent vs. 21 percent).

Children by Health Insurance Coverage

More than half of uninsured children had at least one parent who was employed full-time.

Demographic and socioeconomic characteristics of children are broken out by health insurance coverage separately for children aged 6 to 17 (***Table 3-4b***) and children aged 0 to 5 (***Table 3-4c***). No statistically significant differences in gender are evident across the insurance groups for either age group, and the only statistically significant difference in age was between Medicaid/BadgerCare enrollees and uninsured children aged 6 to 17. BadgerCare/ Medicaid children in this age range were 10 years old on average, whereas uninsured children in this age group were slightly older, with a mean age of 12.

Medicaid/BadgerCare children in both age groups were more likely to have had a married parent compared to children with ESI or other coverage (42 percent vs. 34 percent for children aged 6 to 17 and 51 percent vs. 41 percent for children aged 0 to 5). However, because of the small sample size in the preschool-aged groups, the latter difference was not statistically significant. Uninsured children under 6 were equally as likely as Medicaid/BadgerCare children to have had married parents.

Medicaid/BadgerCare children aged 6 to 17 were less likely to have at least one parent employed full time (43 percent vs. 55 percent and 53 percent, respectively) and were more likely to have unemployed parent(s) (28 percent vs. 22 percent and 19 percent, respectively) compared to uninsured children and children with ESI or other insurance. No statistically significant differences were found in

Table 3-4b. Demographic and Socioeconomic Characteristics of Children Aged 6 to 17 by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: Medicaid/BadgerCare Enrollees[1]
	(n = 210)	*(n =230)*	*(n = 563)*	*(n = 884)*
Mean age (years)†	11	12	10	12
Female (%)	45.7%	48.5%	46.9%	46.0%
Parent Married*#	33.8	38.7	42.3	53.2
Parent Employment Status*†#				
At least 1 parent employed full time	52.9	54.5	43.0	52.9
Parent(s) employed part time only	28.4	23.2	29.0	29.5
Parent(s) not employed	18.7	22.3	28.1	17.6
Race/Ethnicity#				
White Non-Hispanic	69.1	74.8	68.4	75.7
Black Non-Hispanic	11.9	10.9	14.9	12.8
Hispanic	10.5	6.1	8.2	6.7
Asian	2.9	1.7	2.0	1.1
Native American	1.4	0.9	1.2	1.4
Other	2.9	3.5	5.0	1.6
Don't know/refused/missing	1.4	2.2	0.4	0.8
Family Monthly Income*†#				
At or less than 68% FPL	21.4	21.7	32.2	20.0
Between 68% and 150% FPL	50.0	52.2	48.1	59.8
At or more than 150% FPL	24.3	20.0	15.6	15.3
Don't know/refused/missing	4.3	6.1	4.1	5.0
Geographic Residence#				
Milwaukee	32.9	31.7	29.1	25.6
Other metro	29.5	32.2	32.2	29.1
Nonmetro	37.6	36.1	38.7	45.3

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

Table 3-4c. Demographic and Socioeconomic Characteristics of Children Aged 0 to 5 by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: BadgerCare/ Medicaid Enrollees[1]
	(n = 44)	*(n = 53)*	*(n =204)*	*(n = 606)*
Mean age (years)	3	3	3	3
Female (%)	47.7	54.7	47.6	47.1
Parent Married#	40.9	50.9	50.5	58.2
Parent Employment Status#				
At least 1 parent employed full time	41.9	56.9	53.7	52.6
Parent(s) employed part time only	27.9	15.7	21.4	28.2
Parent(s) not employed	30.2	27.4	24.9	14.2
Race/Ethnicity*†				
White Non-Hispanic	68.2	69.8	72.1	69.3
Black Non-Hispanic	9.1	7.6	14.7	12.1
Hispanic	15.9	11.3	6.4	11.2
Asian	6.8	1.9	1.0	1.2
Native American	0.0	0.0	2.5	1.6
Other	0.0	5.7	3.4	4.0
Don't know/refused/missing	0.0	3.8	0.0	0.7
Family Monthly Income#				
At or less than 68% FPL	29.6	24.5	31.4	18.6
Between 68% and 150% FPL	52.3	45.3	48.0	60.6
At or more than 150% FPL	13.6	20.8	16.7	15.8
Don't know/refused/missing	4.6	9.4	3.9	5.0
Geographic Residence				
Milwaukee	25.0	37.7	27.9	26.5
Other metro	34.1	30.2	35.8	36.4
Nonmetro	40.9	32.1	36.3	37.2

[1] Percentages are weighted percents.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p < 0.05$ level.

parents' employment status among the younger children by health insurance coverage.

Similar to their parents, children in all health insurance categories in Wisconsin were predominantly white non-Hispanic. No statistically significant differences were found among children aged 6 to 17 by health insurance coverage. In contrast, among children under 6 years of age, Medicaid/BadgerCare enrollees were more likely to be black non-Hispanic (15 percent) than children with ESI or other insurance (9 percent) and uninsured children (8 percent), and they were less likely to be Hispanic (6 percent) than these other children (16 percent and 11 percent, respectively).

Also similar to their parents, Medicaid/BadgerCare children were more likely to be in the lowest income category compared with children with ESI or other insurance and uninsured children. Furthermore, no statistically significant differences existed in the geographic distribution of children's residence in Milwaukee, other metropolitan counties, and nonmetropolitan counties.

NSLP versus Enrollee-List Child BadgerCare Enrollees

Like their parents, significant differences were evident among child BadgerCare enrollees from the NSLP and enrollee-list samples in several demographic and socioeconomic characteristics. In both child age groups, children from the NLSP sample families were less likely to have married parents and were more likely to have family incomes at or under 68 percent of the FPL. Among children aged 6 to 17, 42 percent of Medicaid/BadgerCare enrollees from the NSLP sample had married parents compared with 53 percent of enrollees from the enrollee-list sample. Among children aged 0 to 5, 51 percent of Medicaid/BadgerCare enrollees from the NSLP sample had married parents compared with 58 percent of enrollees from the enrollee list. For both age groups, about 32 percent of Medicaid/BadgerCare enrollees from the NSLP list had family incomes at or under 68 percent of the FPL compared with about 20 percent of Medicaid/BadgerCare enrollees from the enrollee list. In addition, Medicaid/BadgerCare enrolled children aged 6 to 17 from the NSLP sample were less likely to live in nonmetropolitan counties compared with Medicaid/BadgerCare children aged 6 to 17 from the enrollee list (38 percent vs. 45 percent).

3.2.4 Health Status

No significant differences were seen in reported health status between BadgerCare adult or child enrollees and adults and children who were either uninsured or covered by ESI or other insurance.

To determine whether BadgerCare enrolled individuals with the greatest need for care, we also collected data on measures of health status, including (1) self-reported health status, and (2) physical and mental conditions that limit work activity. These data are shown in ***Tables 3-5a*** through ***3-5c*** for adults, children aged 6 to 17, and children aged 0 to 5, respectively.

Adults by Health Insurance Coverage

Compared to adult BadgerCare enrollees, adults with ESI or other health insurance were more likely to report fair or poor health (24 percent vs. 18 percent) and to have a physical or mental condition limiting their usual activity (26 percent vs. 23 percent), but these differences were not statistically significant (***Table 3-5a***). In addition, no significant differences were seen in reported health status between adult BadgerCare enrollees and uninsured adults, and although proportionally fewer uninsured adults reported a physical or mental limitation compared to BadgerCare adults (17 percent vs. 23 percent), the difference was only marginally significant ($p = 0.055$).

NSLP versus Enrollee-List Adult BadgerCare Enrollees

Adult Medicaid/BadgerCare enrollees from the NSLP sample were less healthy than the representative sample of Medicaid/BadgerCare enrollees from the enrollee list. Proportionally fewer NSLP adult enrollees reported being in excellent or very good health compared to enrollee-list adults (49 percent vs. 56 percent), and a higher proportion of NSLP adult enrollees reported a physical or mental condition limiting their usual activities (23 percent vs. 16 percent).

Children by Health Insurance Coverage

No statistically significant difference in health status was found among children in families from the NSLP sample stratified by health insurance coverage and age group. However, children with ESI or other health insurance were somewhat more likely to be in excellent health and uninsured children were somewhat less likely to have a physical or mental condition limiting their daily activities compared to Medicaid/BadgerCare enrolled children (***Tables 3-5b*** and ***3-5c***). These trends were evident for both children aged 6 to 17 and children aged 0 to 5.

Table 3-5a. Self-Reported Health Status and Physical Limitations of Adults by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: Medicaid/BadgerCare Enrollees[1]
In general, would you say your health is…?[#]				
Excellent	19.1%	20.7%	19.3%	23.5%
Very Good	23.0	27.1	30.0	32.2
Good	33.3	32.3	33.0	29.2
Fair	17.3	14.4	11.2	10.0
Poor	7.0	5.2	6.2	4.8
Don't know/refused/missing	0.3	0.3	0.3	0.3
Do you have a physical, mental or other health condition that limits the kind of amount of work you can do?[#]				
Yes	26.1	16.7	22.6	16.4
No	73.6	83.1	76.9	83.3
Don't know/refused/missing	0.3	0.3	0.5	0.3

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

[#] Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

NSLP versus Enrollee-List Child BadgerCare Enrollees

Similar to the adult enrollees, child Medicaid/BadgerCare enrollees from the NSLP sample were less healthy than child BadgerCare/ Medicaid enrollees from the enrollee list. Compared to enrollee-list children, proportionally fewer NSLP child enrollees were reported to be in excellent or very good health (72 percent vs. 81 percent among children aged 6 to 17 and 69 percent vs. 83 percent among children aged 0 to 5); a higher proportion of NSLP child enrollees were reported to be in fair to poor health (7 percent vs. 2 percent among children aged 6 to 17 and 8 percent vs. 3 percent among children

Table 3-5b. Self-Reported Health Status and Physical Limitations of Children Aged 6 to 17 Years by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Samples: Medicaid/BadgerCare Enrollees
In general, would you say your health is…?#				
Excellent	45.2%	37.8%	39.4%	48.6
Very Good	25.2	33.9	32.0	32.2
Good	21.9	21.7	21.9	17.2
Fair	6.7	4.8	5.9	1.8
Poor	0.5	1.3	0.7	0.3
Don't know/refused/missing	0.5	0.4	0.2	0.0
Do you have a physical, mental or other health condition that limits the kind of amount of work you can do?#				
Yes	23.3	20.0	25.8	15.5
No	76.7	78.7	73.0	83.9
Don't know/refused/missing	0.0	1.3	1.2	0.7

[1] Percentages are weighted.
* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.
† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.
# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

aged 0 to 5); and a higher proportion of NSLP child enrollees were reported to have a physical or mental condition limiting their activity (26 percent vs. 16 percent among children aged 6 to 17 and 12 percent vs. 5 percent among children aged 0 to 5).

3.2.5 Health Care Service Use

We also investigated several measures of health service use, including visits to nurse practitioners, physicians, dentists, mental health professionals, and emergency rooms and overnight hospital stays. A comparison of measures among Medicaid/BadgerCare

Table 3-5c. Self-Reported Health Status and Physical Limitations of Children Aged 0 to 5 Years by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Samples: BadgerCare/ Medicaid Enrollees[1]
In general, would you say your health is…?#				
Excellent	52.3%	45.3%	43.6%	60.7%
Very Good	11.4	24.5	25.0	22.0
Good	34.1	26.4	23.0	13.5
Fair	2.3	1.9	8.3	2.7
Poor	0.0	0.0	0.0	0.6
Don't know/refused/missing	0.0	1.9	0.0	0.4
Do you have a physical, mental or other health condition that limits the kind of amount of work you can do?#				
Yes	9.1	3.8	11.8	4.9
No	88.6	94.3	87.3	94.5
Don't know/refused/missing	2.3	1.9	1.0	0.6

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

enrollees, individuals with ESI or other insurance, and the uninsured from the NSLP sample and of Medicaid/BadgerCare enrollees from the enrollee list are shown in ***Tables 3-6a*** through ***3-6c*** for each of the three age groups—adults, children aged 6 to 17, and children aged 0 to 5, respectively.

Table 3-6a. Health Care Service Use among Adults by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: Medicaid/BadgerCare Enrollees[1]
Physician Visits				
Percent with any visits in past year†	76.1%	55.6%	78.0%	79.8%
Average number of visits per user†	5.7	3.8	6.0	5.0
Nurse Practitioner Visits				
Percent with any visits in past year*†	28.8%	22.6%	36.1%	35.6%
Average number of visits per user	4.6	4.2	4.2	3.8
Dental Visits				
Percent with any visits in past year†	56.8%	41.8%	55.5%	54.4%
Average number of visits per user	2.3	1.8	2.1	2.2
Mental Health Visits				
Percent with any visits in past year*†	9.9%	6.6%	16.4%	10.6%
Average number of visits per user	6.8	—	10.7	7.9
Emergency Room Visits				
Percent with any visits in past year*†#	31.6%	28.9%	40.4%	31.9%
Average number of visits per user†	2.0	1.8	2.6	2.1
Hospital Care				
Percent with a non-delivery-related admission in past year†	9.2%	5.0%	8.3%	9.8%
Percent of females with an admission for delivery of an infant†	4.4%	1.8%	6.4%	6.9%

1 Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

\# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

— Denotes that fewer than 30 cases existed in the cell and therefore figures based on these observations would be unreliable.

Table 3-6b. Health Care Service Use among Children Aged 6 to 17 Years by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: BadgerCare/ Medicaid Enrollees[1]
Physician Visits				
Percent with any visits in past year*†#	74.4%	52.9%	84.5%	80.6%
Average number of visits per user†	3.4	2.6	4.1	2.9
Nurse Practitioner Visits				
Percent with any visits in past year†#	30.0%	22.0%	33.7%	26.9%
Average number of visits per user	3.5	2.5	3.1	2.8
Well-Child Visits				
Percent with any visits in past year*†#	43.3%	26.0%	61.8%	54.0%
Average number of visits per user	1.5	1.4	1.7	1.5
Dental Visits				
Percent with any visits in past year†	77.3%	43.8%	73.3%	72.9%
Average number of visits per user	2.1	2.3	2.1	2.0
Mental Health Visits				
Percent with any visits in past year†#	11.8%	6.3%	14.7%	11.2%
Average number of visits per user	—	—	11.3	8.6
Emergency Room Visits				
Percent with any visits in past year†#	27.4%	20.3%	29.9%	21.6%
Average number of visits per user†	1.6	1.5	2.1	1.7
Hospital Care				
Percent with an admission in past yr†#	5.7%	2.2%	5.9%	2.4%

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

\# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

— Denotes that fewer than 30 cases existed in the cell and therefore figures based on these observations would be unreliable.

Table 3-6c. Health Care Service Use among Children Aged 0 to 5 Years by Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: Medicaid/BadgerCare Enrollees[1]
Physician Visits				
Percent with any visits in past year[†]	88.4%	58.8%	91.5%	90.7%
Average number of visits per user[†]	3.9	2.8	4.9	4.1
Nurse Practitioner Visits				
Percent with any visits in past year[†#]	27.9%	21.6%	40.6%	30.6%
Average number of visits per user	—	—	4.3	3.3
Well-Child Visits				
Percent with any visits in past year[*†]	59.1%	49.0%	82.5%	80.5%
Average number of visits per user	—	—	2.4	2.5
Dental Visits				
Percent with any visits in past year[†]	57.1%	30.6%	64.9%	65.2%
Average number of visits per user	—	—	1.8	1.7
Mental Health Visits				
Percent with any visits in past year	4.8%	0.0%	4.9%	6.5%
Average number of visits per user	—	—	—	—
Emergency Room Visits				
Percent with any visits in past year	47.7%	29.4%	39.4%	37.6%
Average number of visits per user	—	—	2.4	2.4
Hospital Care				
Percent with an admission in past year[†#]	15.9%	2.0%	16.7%	11.3%

[1] Percentages are weighted.

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

\# Denotes a statistically significant difference between Medicaid/BadgerCare enrollees from the NSLP and enrollee lists at the $p \leq 0.05$ level.

— Denotes that fewer than 30 cases existed in the cell and therefore figures based on these observations would be unreliable.

Adults by Health Insurance Coverage

BadgerCare/ Medicaid adults used significantly more health care services of all types in the past year compared to uninsured adults and equivalent or slightly more health care services compared to adults with ESI or other coverage.

Adult Medicaid/BadgerCare enrollees used significantly more health care services than uninsured adults from the NSLP sample. The greater use of services was evident in every service type studied. For example, 78 percent of adult Medicaid/BadgerCare enrollees had at least one physician visit in the past year compared to only 56 percent of uninsured adults. Furthermore, among adults with physician visits, the average number of physician visits for BadgerCare/Medicaid enrollees was more than 1.5 times greater than the average number of physician visits for adults with no insurance (6.0 visits vs. 3.8 visits).

The largest differences between the adult Medicaid/BadgerCare enrollees and uninsured adults were for mental health visits and hospital admissions for delivery of an infant. More than 16 percent of adult Medicaid/BadgerCare enrollees had at least one mental health visit in the prior year, whereas less than 7 percent of uninsured adults had a mental health visit in the prior year, and more than 6 percent of adult female Medicaid/BadgerCare enrollees had a hospital stay related to delivery of an infant in the prior year compared to less than 2 percent of adult females with no insurance coverage. In both of these cases, the need for services may have triggered enrollment in BadgerCare or Medicaid. Outstationed eligibility workers at provider sites, particularly those serving pregnant women, would have helped these individuals enroll in the program.

An unexpected finding is the higher use of emergency rooms among adult Medicaid/BadgerCare enrollees compared to both uninsured adults and adults with ESI or other health insurance. Medicaid/BadgerCare enrollees are not billed for using the emergency room whereas patients with other insurance and the uninsured are billed. This may partially explain the difference in behavior. However, the result is worrisome because emergency room use may be an indicator of problems in access to care—in particular, a lack of a usual source of care and/or primary care provider. Because of the dominance of mandatory managed care in Wisconsin's BadgerCare and Medicaid programs, we expected to find more enrollees with a usual source and provider of care relative to the uninsured. Indeed, we do find this (see ***Section 3.5.4***). However, more adults citing a usual source and provider of care has

not translated into lower use of emergency rooms. More than 40 percent of adult BadgerCare/ Medicaid enrollees had an average of 2.6 emergency room visits in the prior year compared to 29 percent of uninsured adults who had 1.8 emergency room visits on average in the prior year. Other reasons for the higher emergency room use, coupled with their zero cost for Medicaid/BadgerCare enrollees, include an inability to schedule doctor visits during nonwork hours, their convenient location, and the fact that they must by law accept everyone who walks through the door.

Wisconsin, concerned about the use of emergency rooms by its Medicaid and BadgerCare populations, sponsored a series of meetings of interested parties including HMOs, emergency department staff, associations, and other providers and stakeholders to identify strategies to reduce inappropriate use of emergency rooms. A report on the outcome of these meetings will be available in 2004. To the extent possible, Wisconsin Medicaid HMOs follow up with enrollees after visits to the emergency room. The individual strategies used vary, but all HMOs attempt to manage the care of enrollees who visit the emergency room frequently.

Differences in service use among adult Medicaid/BadgerCare enrollees and adults with ESI or other insurance were not as consistent or large. For major service types, such as physician visits, dental visits and hospital care, we found no statistically significant differences between adult Medicaid/BadgerCare enrollees and adults with ESI or other coverage. However, Medicaid/BadgerCare adults were more likely than other insured adults to have had any visits to a nurse practitioner (36 percent vs. 29 percent), a mental health provider (16 percent vs. 10 percent), and an emergency room (40 percent vs. 32 percent).

NSLP versus Enrollee-List Adult BadgerCare Enrollees

For the most part, we found similar patterns of health service use among adult Medicaid/BadgerCare enrollees from the NSLP sample and adult Medicaid/BadgerCare enrollees from the enrollee-list sample. The two exceptions were for mental health visits and emergency room visits. About 11 percent of enrollee-list adults had one or more mental health visits in the prior year compared to 16 percent of adult enrollees from the NSLP sample, and 32 percent of enrollee-list adults had one or more emergency room visits in the

prior year compared to 40 percent of adult enrollees from the NSLP sample. The level of use of these two service types among enrollee-list Medicaid/BadgerCare enrollees is similar to the use of these services among adults with ESI and other insurance coverage in the NSLP sample.

Children by Health Insurance Coverage

We found similar results for children as we did for adults—Medicaid/BadgerCare enrolled children had significantly greater service use than did uninsured children. Among children aged 0 to 5 years, 92 percent of Medicaid/BadgerCare enrollees had one or more physician visits compared to 59 percent of the uninsured. Similarly, Medicaid/BadgerCare children aged 6 to 17 were much more likely to have had one or more physician visits compared to uninsured children in the same age group (85 percent vs. 53 percent).

BadgerCare/ Medicaid children used significantly more health care services of all types in the past year compared to uninsured children and equivalent or more health care services than children with ESI or other coverage. The difference was particularly notable for well-child visits; with BadgerCare/ Medicaid children much more likely to have received well-child care.

The most notable differences in health service use between Medicaid/BadgerCare child enrollees and uninsured children were for well-child, dental, and hospital care. Medicaid/BadgerCare children aged 6 to 17 were more than twice as likely as the uninsured to have had one or more well child visits (62 percent vs. 26 percent), and Medicaid/BadgerCare children aged 0 to 5 were 70 percent more likely to have had one or more well-child visits (83 percent vs. 49 percent). For dental care, the differences by insurance category are nearly as dramatic, with 73 percent of Medicaid/BadgerCare children aged 6 to 17 having had at least one dental visit in the past year compared to 44 percent of uninsured children aged 6 to 17, and 65 percent of Medicaid/BadgerCare children aged 0 to 5 having had a dental visit compared to 31 percent of uninsured children aged 0 to 5. These preventive care services are the easiest to forego for low-income families with no insurance coverage.

However, the low hospital inpatient care seen among uninsured children is probably not reflective of foregone services among the uninsured, but rather of help provided in filling out Medicaid/BadgerCare application forms once service is sought at a hospital. That is, the significant differences seen between Medicaid/BadgerCare enrollees and the uninsured in this measure are most likely the result of outstationed eligibility workers or

hospital staff who aided eligible uninsured clients to enroll in the program. The discrepancy in hospital service use was particularly large for children aged 0 to 5. Almost 17 percent of Medicaid/BadgerCare children aged 0 to 5 had a hospital admission in the past year compared to 2 percent of uninsured children aged 0 to 5. Among children aged 6 to 17, 6 percent of Medicaid/BadgerCare enrollees compared to 2 percent of the uninsured had a hospital admission in the past year.

Medicaid/BadgerCare children used health services at the same levels as children with ESI or other health insurance. This finding does not hold in a few notable instances, however. In particular, Medicaid/BadgerCare children aged 6 to 17 were more likely to have had one or more physician visits in the prior year (85 percent vs. 74 percent), and to have had at least one well-child visit (62 percent vs. 43 percent). Preschool-aged Medicaid/BadgerCare enrollees were also more likely to have had well-child visits compared to preschool-aged children with ESI or other coverage.

NSLP versus Enrollee-List Child BadgerCare Enrollees

For all health service types studied, except dental care, Medicaid/BadgerCare children aged 6 to 17 from the NSLP sample were more likely to be users than children in this age group from the enrollee list sample. For example, whereas 85 percent of Medicaid/BadgerCare children from the NSLP list had one or more physician visits during the year, 81 percent of the enrollee list children had one or more physician visits. Similarly, whereas 62 percent of Medicaid/BadgerCare enrollees from the NSLP list had one or more well-child visits, only 54 percent of these children in the more representative sample had well-child visits. Finally, although 6 percent of Medicaid/BadgerCare enrollees aged 6 to 17 had a hospital stay in the prior year, just over 2 percent of the children aged 6 to 17 on the enrollee-list file had a hospital stay.

Medicaid/BadgerCare children aged 0 to 5 in the two different samples were much more likely to have had similar patterns of health service use than the older children. The only measures on which they differed significantly were nurse practitioner visits and hospital stays. Children from the enrollee list were significantly less likely to have used either of these service types.

3.3 FACTORS MOTIVATING PARTICIPATION

In this section, we examine the various factors influencing families' enrollment decisions. We particularly highlight the role of family coverage and premium payments in this decision.

3.3.1 Reasons for Applying

Most families enrolled in BadgerCare because they needed health insurance and could not get or afford other coverage.

Respondents for BadgerCare participating families were asked to list the reasons why they had applied for health care coverage through the program. They were given the opportunity to answer "yes" or "no" to a list of reasons provided and/or to provide their own reasons. The nine most commonly reported reasons for applying are shown in ***Table 3-7***.

Table 3-7. Reasons for Applying for BadgerCare among BadgerCare Participating Families

	BadgerCare Participating Families	
	NSLP List	Enrollee List[1]
Needed health insurance coverage	95.6%	98.0%
Could not get/afford other coverage	86.8	92.5
Could get family coverage	80.0	83.9
Heard good things about the program	62.8	69.4
Had a family member with special health care needs	37.0	24.5
Health care provider helped them enroll	24.2	21.2
Children needed insurance coverage for school sports	14.2	10.5
Lost job/unemployed	2.1	2.9
Current job doesn't offer coverage	1.6	1.2

[1] Percentages are weighted.

For BadgerCare participating families from both the NSLP and enrollee lists, the most frequently reported reasons for applying for BadgerCare coverage were that they needed health insurance coverage (96 percent) and that they could not get or afford other coverage (87 percent). A majority of respondents also reported that they enrolled in BadgerCare because they could get family coverage (80 percent) and because they had heard good things about the program (63 percent). Slightly more BadgerCare families from the enrollee list reported these four reasons for applying. In contrast,

more participating families from the NSLP list than the enrollee list reported having applied because they had a family member with special health care needs (37 percent vs. 25 percent), a health care provider helped them enroll (24 percent vs. 21 percent), or their children needed insurance coverage for school sports (14 percent vs. 11 percent).

Main Reason for Applying

Respondents were also asked to list their one main reason for applying for BadgerCare. As seen in ***Table 3-8***, the most frequently cited reason for both the NSLP and enrollee list samples of BadgerCare participating families was because they could not get/afford other coverage (44 percent and 54 percent, respectively) and they needed health insurance coverage (34 percent and 32 percent). Only 6 percent of BadgerCare participating families from the NSLP list and 3 percent from the enrollee list listed "could get family coverage" as the main reason for applying for BadgerCare. Another 4 percent of NSLP participating families and 2 percent of enrollee list participating families applied because a family member had a special health care need.

Table 3-8. Main Reasons for Applying for BadgerCare among BadgerCare Participating Families

	BadgerCare Participating Families	
	NSLP List	Enrollee List[1]
Could not get/afford other coverage	44.0%	54.2%
Needed insurance coverage	34.0	31.9
Could get family coverage	6.0	3.2
Had a family member with special health care needs	4.1	1.7
Heard good things about the program	1.9	0.8

[1] Percentages are weighted.

Family Coverage

Family coverage was viewed as a desirable trait for health insurance coverage among most BadgerCare families, but was the dominant reason for enrolling in only a small percentage of cases.

One goal of our analyses was to understand the importance parents placed on family coverage, and whether or not it was important for members of the family to be enrolled in the same health insurance program. In focus groups conducted for our Case Study Report, we found that although participants believed that coverage for adults was important, most insisted that they would have enrolled their children in the program even if they were not covered themselves. They believed children required more health care, both for well-child care and for minor illnesses. The Family Survey results confirmed this finding. In the Family Survey results, a large majority of BadgerCare participants listed the availability of family coverage as a reason among many for enrolling (80 percent). However, when asked what their main reason was for enrolling, only 6 percent of participants listed "could get family coverage" as a reason. Therefore, for most families, the availability of family coverage, although viewed as desirable, was not the predominant factor in making the decision to enroll in BadgerCare.

To further investigate the role of family coverage in families' decisions to enroll in BadgerCare, we also asked respondents to rate the importance of being able to enroll the entire family under the same health insurance. As seen in ***Table 3-9***, BadgerCare participating families were significantly more likely to think it was "very important" (85 percent) compared to the eligible nonparticipating families (72 percent). In addition, eligible nonparticipating families were almost three times more likely than BadgerCare participating families to think that all family members being enrolled in the same program was "not at all important."

3.3.2 Reasons for Not Enrolling

Respondents of eligible nonparticipating families were asked to provide the reason or reasons why they did not enroll. They were given the opportunity to answer "yes" or "no" to a list of reasons provided or to provide their own reason. The 10 most frequently cited reasons are shown in ***Table 3-10***.

The most commonly reported reasons for not enrolling was that they were either told or thought that they were ineligible for the program. About half of the nonparticipating families did not enroll because they found out that they did not qualify and a little less than one-

Table 3-9. Importance for Family to Be Enrolled in Same Health Insurance Program

	NSLP-List Sample		Enrollee-List Sample: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
How important is it to you for your family to be able to enroll in the same health insurance program?*			
Very important	72.2%	85.4%	83.4%
Somewhat important	15.6	10.2	12.9
Not at all important	11.4	4.1	3.6
Don't know/refused/missing	0.8	0.3	0.1

[1] Percentages are weighted.

* Denotes a statistically significant difference between NSLP-list participating families and NSLP-list eligible nonparticipating families at the $p \leq 0.05$ level.

Table 3-10. Reasons for Not Enrolling in BadgerCare among Eligible Nonparticipating Families

Reason	Nonparticipating Families
Found out family did not qualify	49.2%
Too hard to get application paperwork	33.9
Thought family wasn't eligible	30.5
Have other insurance	20.3
Application process too complicated	18.6
Have to wait several months to reapply	18.6
Could not leave the job to apply in-person	17.0
Could not afford premium payments	10.2
Could not understand the language	8.5
Could not get child-care or transportation to apply in-person	6.8

third thought that the family wasn't eligible for BadgerCare. The application process was also viewed as burdensome to some potential enrollees. About one-third of respondents said that it was too hard to obtain the application paperwork, and almost one in five respondents (19 percent) replied that the application process was too complicated. Whether these individuals actually attempted to apply or whether their views are based on perception or outdated is unknown.

As many as one-half of families in our eligible nonparticipating group reported being told that they were not eligible for the program. Many of these families were undergoing waiting periods for BadgerCare eligibility. Difficulties in preparing the application paperwork and premiums were also significant deterrents to enrollment.

One reason why families may have been told that they were not eligible for the program is because of required waiting periods. Applicants are not allowed to enroll in BadgerCare for 3 months following any coverage with private health insurance or within18 months of having access to employer-sponsored insurance. One in five respondents also said that they had to wait several months to reapply (19 percent).

Other less common reasons eligible nonparticipating families cited were not being able to leave their jobs to apply in-person (17 percent), afford the premium payments (10 percent), understand the language (9 percent), and get child care or transportation to apply in-person (7 percent).

Premium Payments

Research with low-income populations has demonstrated that as premiums increase, participation rates decrease (Ku and Coughlin, 1997; Lewin-VHI, Inc., 1994). Based on the evidence from the BCFS, premiums were only a minor deterrent to participation in the program. However, if we take into consideration that only 22 percent of eligible nonparticipating families would be subject to premiums, as shown in ***Section 3.2.1***, then a fair number of potential premium-paying, eligible nonparticipating families may have been deterred from enrolling by the need to pay premiums.

3.4 FAMILIES' KNOWLEDGE OF AND EXPERIENCE WITH BADGERCARE

This section highlights key findings of the BCFS regarding eligible families' awareness and knowledge of BadgerCare, experiences with BadgerCare administration and premium payments, access to care, and satisfaction with the program. The responses of participating and eligible nonparticipating families sampled from the NSLP lists were compared as were the responses of participating families from the NSLP and enrollee-list samples. All questions in this section are answered at the family level, with the exception of questions pertaining to regular source and provider of care, which are answered at the individual level. As in ***Sections 3.2*** and ***3.3***, a family is considered a BadgerCare participating family if anyone in the family was enrolled in BadgerCare; some family members may have been covered by other health insurance or have been

uninsured. Similarly, a family is considered an eligible nonparticipating family if no family members were enrolled in BadgerCare and at least one member was uninsured; some members of eligible nonenrolled families could have been covered by other health insurance and thereby have been ineligible for BadgerCare. For the regular place and provider of care questions, we categorize individuals under their own health insurance coverage, regardless of the BadgerCare enrollment status of other family members.

3.4.1 Awareness and Knowledge of BadgerCare

Most eligible nonparticipating families had heard of BadgerCare; more than one out of four had a family member who was previously enrolled in the program.

Wisconsin has conducted a variety of statewide education and outreach activities. Methods and activities used over the past 4 years include televised public service announcements, a public information campaign with brochures in multiple languages, a toll-free BadgerCare hotline, expanded training on BadgerCare policy for state eligibility staff, and outstationing of outreach workers at health care and community establishments frequented by low-income families. These efforts were successful in promoting awareness of BadgerCare. Of those families who were eligible but not enrolled, 28 percent reported that they or their family members had been previously enrolled in BadgerCare (***Table 3-11***). Among the eligible nonparticipating families in which no family member was previously enrolled in the program, 80 percent had heard of BadgerCare prior to the survey.

Table 3-11. Eligible Nonparticipating Families' Experience with BadgerCare

Experience with BadgerCare	Eligible Nonparticipating Families
Have you or your family members ever been enrolled in BadgerCare?	*(n = 385)*
Yes	27.5%
No	69.6
Don't know/refused/missing	2.9
	Never Enrolled Families
Before today, had you heard about the BadgerCare program?	*(n = 279)*
Yes	79.6%
No	17.9
Don't know/refused/missing	2.5

The source through which families first heard of the BadgerCare program differed between participating and nonparticipating families and between participating families in the two samples (***Table 3-12***). Among families in the NSLP sample, the most commonly cited source by which BadgerCare participating families first heard about the program was through a welfare office or county caseworker (43 percent), whereas, for eligible nonparticipating families, it was through friends or family members (35 percent). Family and friends were the second most frequently cited source for participating families (19 percent), and county caseworkers were the second most frequently cited source for eligible nonparticipating families (19 percent). Among participating families from the enrollee list, approximately equal percentages of families had first heard of BadgerCare from welfare workers or caseworkers (29 percent) and from family or friends (30 percent). For all three groups, the third most frequently cited source through which BadgerCare participating and eligible nonparticipating families first heard about the program was a health care provider (10 to 12 percent). This was followed by other sources (7 to 8 percent), radio/television (5 to 8 percent), flyers/posters (4 to 6 percent), newspaper/magazines (3 to 5 percent), and the child's school (1 to 3 percent). Outreach workers, WIC offices, and employers were listed less often.

While efforts to promote BadgerCare have been effective in raising awareness of the program, 56 percent of eligible, nonparticipating families who had either been previously enrolled or had heard of BadgerCare felt that they did not have enough information about BadgerCare. Those who had just heard of the program were more likely than those who had been previously enrolled to report not having enough information about BadgerCare (71 percent vs. 36 percent). A much smaller percentage of current BadgerCare participating families felt that they did not have enough information (***Table 3-12***).

Table 3-12. Source and Adequacy of Information on the BadgerCare Program among Families Who Had Been Enrolled or Had Heard of the Program

	NSLP-List Sample		Enrollee-List Sample: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
Where did you first hear about the BadgerCare program?*†	*(n = 335)*	*(n = 631)*	*(n = 1,338)*
Welfare office/county caseworker	18.8%	42.8%	29.3%
Friend/family member	34.9	18.5	29.5
Health care provider/clinic/hospital	11.6	10.0	11.3
Other	6.6	8.1	6.8
Radio/TV	8.1	5.9	5.2
Flyer/poster	5.7	5.4	3.6
Newspaper/magazine	3.6	3.0	4.7
Child's school	3.0	1.6	1.1
Outreach worker	1.2	1.1	0.9
WIC[2]	2.1	1.1	2.2
Employer	0.9	0.3	1.7
Don't Know/refused/missing	3.6	2.2	3.7
Do you feel that your family currently has enough information about how BadgerCare works?*			
Yes	41.5%	81.6%	81.8%
No	56.4	17.9	16.4
Don't know/refused/missing	2.1	0.5	1.9

[1] Percentages are weighted.

[2] Special Supplemental Nutrition Program for Women, Infants, and Children.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at $p \leq 0.05$ level.

3.4.2 Experiences with BadgerCare Administration

Some families reported problems getting the help they needed when they called or wrote the BadgerCare program, but few reported major problems with BadgerCare paperwork.

To determine whether eligible families sought additional information on the program and the extent to which they encountered problems in doing so, we asked two additional questions. First, we asked whether any family member called or wrote the BadgerCare program for additional information in the last 6 months and then, if they had, how much of a problem it was to get the help they needed. Approximately one-quarter of BadgerCare families and 18 percent of eligible nonenrolled families reported that they attempted to contact BadgerCare program staff during the past 6 months (***Table 3-13***). A greater percentage of eligible nonenrolled families reported encountering problems getting the help that their family needed when calling or writing the program, compared to families with at least one member enrolled in BadgerCare (56 percent vs. 45 percent). However, this difference is not statistically significant ($p = 0.06$) and does not necessarily imply a systematic administrative problem. Sample sizes were too small to allow a further investigation of the nature or level (e.g., county, state, hotline) of the problems. Similar percentages of participating families from the NSLP and enrollee-list samples reported contact with the BadgerCare program staff with equivalent levels of problems.

We then asked current and former BadgerCare enrolled families whether any one in the family had experience with BadgerCare paperwork in the prior 6 months and, if so, how much, if any, of a problem with the paperwork they had. BadgerCare-related paperwork did not appear to be problematic for most currently participating families: more than 70 percent of enrolled families who had experience with BadgerCare paperwork in the past 6 months reported having no problems with the paperwork, and the majority of those who had problems reported that they were small problems. Participating families from the more representative file were more likely than participating families from the NSLP to have had experience with BadgerCare paperwork in the prior 6 months (34 percent vs. 25 percent), but were less likely to have experienced any problems with the paperwork (20 percent vs. 27 percent). A larger percentage of eligible nonenrolled families who had experience with BadgerCare paperwork in the last 6 months reported encountering problems compared to participating families with paperwork experience. We asked the question only of those who

Table 3-13. Source and Adequacy of Information on the BadgerCare Program Among Families Who Had Been Enrolled or Had Heard of the Program

	NSLP-List Sample		Enrollee-List Sample: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
In the last 6 months, how much of a problem, if any, was it to get the help your family needed when you called or wrote the BadgerCare program?*	*(n = 385)*	*(n = 631)*	*(n = 1,340)*
No one in the family called or wrote	79.5%	75.1%	73.8%
Someone called or wrote and it was:	17.9	24.4	25.6
A big problem	5.7	6.3	5.3
A small problem	4.4	4.8	5.7
Not a problem	7.5	12.8	14.5
Don't know if it was a problem	0.3	0.5	0.1
Don't know if anyone called or wrote	2.6	0.5	0.7
	Current and Former BadgerCare Participating Families		
In the last 6 months, how much of a problem, if any, did your family have with BadgerCare paperwork?*†	*(n = 113)*	*(n = 631)*	*(n = 1,340)*
No one in the family had paperwork	77.9%	74.2%	65.2%
Someone had paperwork and it was:	15.9	25.2	33.8
A big problem	5.3	2.2	1.3
A small problem	1.8	4.8	5.6
Not a problem	8.8	18.1	26.9
Don't know if it was a problem	0.0	0.1	0.0
Don't know if anyone had paperwork	6.2	0.6	1.0

[1] Percentages are weighted.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at $p \leq 0.05$ level.

had previously been enrolled in BadgerCare and had responded that they had experience with BadgerCare paperwork in the last 6 months; therefore, hence the number of eligible nonparticipating families responding to this question was very small.

3.4.3 Attitudes Toward Premium Payments

Premium-paying BadgerCare enrollees reported that premium amounts are reasonable.

Most BadgerCare participating families do not pay a monthly premium, only those with incomes between 150 percent and 200 percent of the FPL. Among our survey respondents, only 14 percent of enrolled families reported paying premiums (***Table 3-14***). Among the premium-paying families, 83 percent from the NSLP sample and 86 percent from the representative sample thought that the premiums were reasonable. This finding is consistent with our case study findings, in which BadgerCare premium-paying focus group participants considered the premiums to be "very reasonable" relative to what private insurance would cost. Hence, the monthly premium amounts did not appear to be a significant burden for the majority of premium-paying families.

Table 3-14. Cost Sharing Burden

	BadgerCare Participating Families	
	NSLP-List	**Enrollee-List[1]**
Does BadgerCare charge your family a monthly premium?	*(n = 631)*	*(n = 1,340)*
Yes	13.6%	13.7%
No	83.4	82.1
Don't know/refused/missing	3.0	4.2
	Premium-Paying Families	
Are the premiums reasonable in amount?	*(n = 86)*	*(n = 449)*
Yes	83.0%	85.6%
No	11.4	9.6
Don't know/refused/missing	5.7	4.8

[1] Percentages are weighted.

† Denotes a significant difference between NSLP-list participating families and enrollee-list participating families at the p =0.05 level of significance.

3.4.4 Access to Health Care

Access to care is determined by several different measures, including whether or not individuals had a usual source and provider of care, whether any family member had delayed or foregone a number of different medical services, and overall confidence that the family can

get the care they need when they need it. On all of these measures, BadgerCare enrollees and families were shown to have better access to care than eligible nonparticipating individuals and families.

Usual Source of Care

BadgerCare families experienced better access to care than eligible nonparticipating families; they were more likely to have a usual source of care, had fewer unmet health care needs, and were more confident that they could obtain care when needed.

Survey responses to questions on the usual source of care for adults, children aged 6 to 17, and children aged 0 to 5 are shown in ***Tables 3-15a*** through ***3-15c***, respectively.

Medicaid/BadgerCare adults were significantly more likely than uninsured adults (91 percent vs. 74 percent) and equally as likely as adults with ESI or other coverage (91 percent vs. 93 percent) to have had a regular place for health care. The types of places that the Medicaid/BadgerCare adults usually went to varied only slightly from those frequented by the uninsured and adults with ESI or other insurance. When seeking routine care, Medicaid/BadgerCare adults were more likely than either the uninsured or adults with ESI or other insurance to use a clinic or hospital outpatient department (OPD) (68 percent vs. 64 percent and 63 percent, respectively) and less likely to use a hospital emergency room (1 percent vs. 4 percent and 3 percent, respectively). Furthermore, Medicaid/BadgerCare adults were significantly more likely than uninsured adults to see a regular person for care (84 percent vs. 70 percent) and slightly more likely than adults with ESI or other insurance (84 percent vs. 81 percent), but the difference was not statistically significant.

Children were somewhat more likely than adults to have a usual source and to see a regular person for care; nearly all insured children aged 0 to 5 years had a usual source and person for care. Similar patterns across insurance coverage categories seen for adults were also evident for children in whether they had a usual source of care and a regular person for care. Medicaid/BadgerCare children were more likely than uninsured children and equally as likely as children with ESI or other insurance to have had a usual source of care and to have had a regular person for care. Among children aged 6 to 17, Medicaid/BadgerCare children were more likely to use clinics or hospital OPDs but equally as likely to use physicians' offices as their usual source of care compared to uninsured children. In contrast, among the younger children, Medicaid/BadgerCare children were more likely to use physicians' offices but equally as likely to use clinics or hospital OPDs as their usual source of care compared to uninsured children.

Table 3-15a. Usual Source of Care for Adults in BadgerCare Eligible Families by the Adults' Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: BadgerCare/ Medicaid Enrollees
Is there a regular place where the person goes when he/she is sick or when he/she needs advice about health?†	*(n = 330)*	*(n = 402)*	*(n = 641)*	*(n = 1,738)*
Yes	93.0%	74.4%	90.5%	92.7%
No	6.1	24.9	9.2	6.8
Don't know/refused/missing	0.9	0.8	0.3	0.5
	Individuals with a regular place of care			
What type of place is it that the person usually goes to?*†	*(n = 310)*	*(n = 302)*	*(n = 581)*	*(n = 1,598)*
Clinic or hospital OPD	63.6%	63.3%	67.6%	62.3%
Doctor's office or HMO	32.3	29.8	31.0	36.2
Hospital ER	2.6	3.6	1.2	0.8
Other	0.7	2.3	0.0	0.4
Don't know/refused/missing	1.0	1.0	0.2	0.4
Is there a particular person that the person usually sees when he/she goes there?†				
Yes	80.7%	70.2%	84.2%	84.7%
No	18.4	28.2	15.3	15.0
Don't know/refused/missing	1.0	1.7	0.5	0.4

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

Table 3-15b. Usual Source of Care for Children Aged 6 to 17 in BadgerCare Eligible Families by the Children's Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: BadgerCare/ Medicaid Enrollees
Is there a regular place where the person goes when he/she is sick or when he/she needs advice about health?†	*(n = 210)*	*(n = 230)*	*(n = 563)*	*(n = 884)*
Yes	94.3%	75.7%	95.2%	93.7%
No	4.8	22.6	4.4	6.2
Don't know/refused/missing	1.0	1.7	0.4	0.1
	Individuals with a regular place of care			
What type of place is it that the person usually goes to?†	*(n = 200)*	*(n = 178)*	*(n = 537)*	*(n = 830)*
Clinic or hospital OPD	63.0%	60.1%	65.2%	57.8%
Doctor's office or HMO	35.0	33.7	33.7	41.1
Hospital ER	1.0	1.7	0.7	0.2
Other	0.0	1.7	0.0	0.7
Don't know/refused/missing	1.0	2.8	0.4	0.2
Is there a particular person that the person usually sees when he/she goes there?†				
Yes	86.2%	79.2%	89.6%	89.6%
No	13.0	18.5	10.2	9.7
Don't know/refused/missing	1.0	2.3	0.2	0.8

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

Table 3-15c. Usual Source of Care for Children Aged 0 to 5 in BadgerCare Eligible Families by the Children's Health Insurance Coverage

	NSLP-List Sample			
	ESI/Other Insured	Uninsured	BadgerCare/ Medicaid Enrollees	Enrollee-List Sample: BadgerCare/ Medicaid Enrollees
	(n = 42)	*(n = 53)*	*(n = 204)*	*(n = 606)*
Is there a regular place where the person goes when he/she is sick or when he/she needs advice about health?*†				
Yes	95.5%	86.8%	99.5%	93.7%
No	4.6	9.4	0.5	3.9
Don't know/refused/missing	0.0	3.8	0.0	0.4
	Individuals with a regular place of care			
	(n = 42)	*(n = 48)*	*(n = 203)*	*(n = 585)*
What type of place is it that the person usually goes to?†				
Clinic or hospital OPD	59.5%	62.5%	62.6%	56.9%
Doctor's office or HMO	40.5	29.2	36.0	42.0
Hospital ER	0.0	0.0	1.0	0.4
Other	0.0	4.2	0.5	0.2
Don't know/refused/missing	0.0	4.2	0.0	0.5
Is there a particular person that the person usually sees when he/she goes there?*†				
Yes	97.6%	83.3%	92.6%	93.9%
No	2.4	12.5	7.4	5.7
Don't know/refused/missing	0.0	4.2	0.0	0.5

* Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and ESI/other insured at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between Medicaid/BadgerCare enrollees and the uninsured at the $p \leq 0.05$ level.

No statistically significant differences were found in the source of care variables between BadgerCare participating families from the NSLP and enrollee list samples.

Unmet Health Care Needs

Dental care was the most frequent unmet health care need among all families. The greatest discrepancies in unmet health care needs between eligible nonparticipating and participating BadgerCare families were for medical/surgical care and prescription medications.

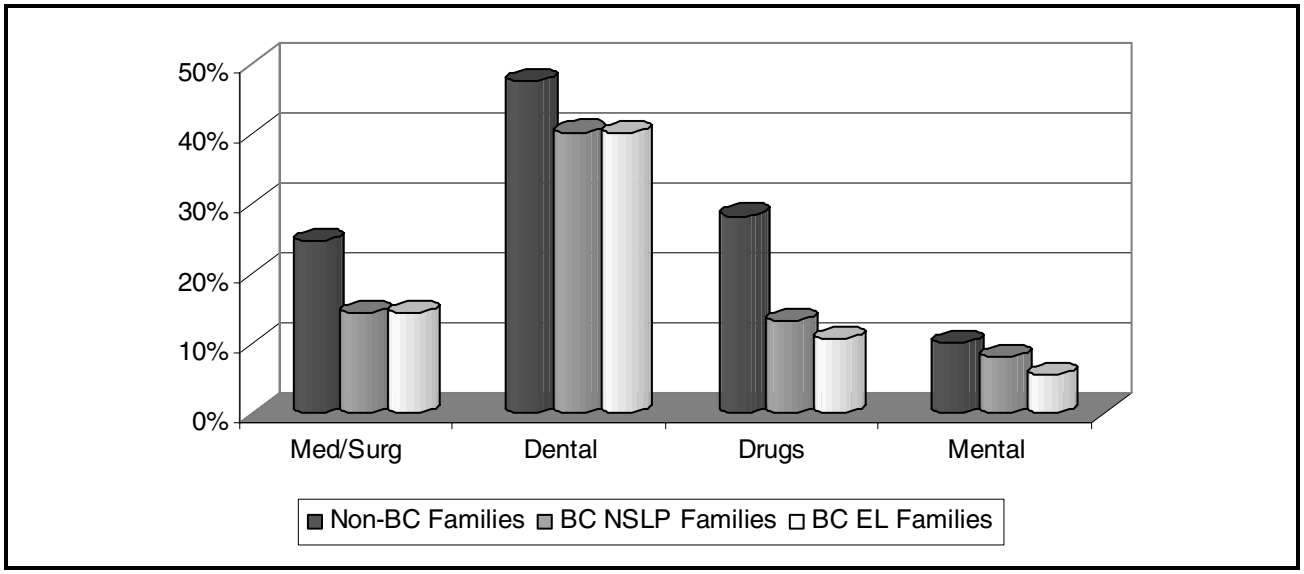
We also asked a series of questions pertaining to postponing or not getting specific types of services when needed and whether the lack of insurance or money was the reason for delaying or not getting these services. The service types investigated were medical/surgical care, dental care, prescription drugs, and mental health services or counseling. For each of these service types, BadgerCare participating families were significantly less likely than eligible nonparticipating families to postpone or not obtain care when needed (***Figure 3-2*** and ***Table 3-16***). Moreover, BadgerCare participating families were significantly less likely than eligible nonparticipating families to cite lack of insurance or money as a reason for postponing or not obtaining services when needed.

The type of care that was most frequently postponed or foregone was dental care. Forty percent of BadgerCare participating families had a member who had not obtained or had postponed needed dental care in the previous 12 months. However, an even higher 48 percent of eligible nonparticipating families had a member who had not obtained or had postponed needed dental care.

The largest discrepancies in unmet health care needs were found for medical/surgical care and prescription drugs. Whereas 14 percent of BadgerCare participating families reported that a family member had not received or had postponed needed medical care or surgery during the prior 12 months, 25 percent of eligible nonparticipating families reported not getting needed care. Similarly, 13 percent of BadgerCare families and 28 percent of eligible nonparticipating families did not receive or postponed needed medications when they needed them.

A smaller percentage of BadgerCare eligible families reported not having obtained or having postponed needed mental health services. But again, we see a discrepancy by BadgerCare enrollment status: 8 percent of BadgerCare participating families reported having foregone or postponed needed mental health services or counseling compared to 10 percent of eligible nonparticipating families.

Figure 3-2. Percentage of Families with Members Who Did Not Get or Postponed Selected Health Care Services When They Needed Them



Virtually all eligible nonparticipating families cited lack of health insurance or money as a reason for postponing or not receiving health care when needed. Most BadgerCare participating families also reported these financial reasons for delaying or not receiving needed care. The difference between the percentage of BadgerCare participating families and eligible nonparticipating families reporting financial reasons for not obtaining or postponing care was statistically significant for all service types: 77 percent vs. 99 percent for medical/surgical care, 76 percent vs. 96 percent for dental care, 89 percent vs. 98 percent for prescription medications, and 83 percent vs. 97 percent for mental health care.

BadgerCare participating families from the enrollee list were equally as likely as BadgerCare families from the NSLP list to have unmet health care needs for all service types, except mental health. The more representative sample of participating families was less likely to report not receiving mental health care services when needed compared to the NSLP sample of participating families (6 percent vs. 8 percent). There were also statistically significant differences in the percentage of BadgerCare families from the enrollee list reporting lack of insurance or money as the reason for not receiving or delaying dental care, prescription drugs and mental health care, but the differences were small and not meaningful.

Table 3-16. Unmet Health Care Needs Among BadgerCare Participating and Eligible Nonparticipating Families

	NSLP-List Sample		Enrollee-List Sample: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
Percentage of families with members who did not get or postponed getting the following health care services when they needed it:	*(n = 385)*	*(n = 631)*	*(n = 1,340)*
Medical care or surgery*	24.7%	14.3%	14.6%
Dental care*	47.5	40.3	40.1
Prescription drugs*	28.3	13.3	10.8
Mental health services*†	10.1	8.2	5.6
Percentage of families with unmet health care needs reporting the lack of insurance or money as the reason for not getting or postponing needed health care:			
Medical care or surgery*	99.0%	76.7%	77.9%
Dental care*†	95.6	75.6	78.2
Prescription drugs*†	98.2	89.3	87.6
Mental health services†	97.4	82.7	79.5

[1] Percentages are weighted.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at $p \leq 0.05$ level.

Confidence in Ability to Obtain Needed Care

Finally, we also asked the family respondent how confident he/she was that family members could get health care if they needed it. Approximately 70 percent of BadgerCare families were very confident or extremely confident that their families could get health care if needed (***Figure 3-3*** and ***Table 3-17***). In contrast, only 38 percent of eligible nonparticipating families were very or extremely confident. Twenty-four percent of eligible nonparticipating families were not at all confident that they could get health care if needed compared to only 5 percent of BadgerCare families. Confidence levels of participating families from the representative sample were very similar to those of participating families from the NSLP sample.

Figure 3-3. BadgerCare Eligible Families' Confidence in Their Ability to Access Needed Care

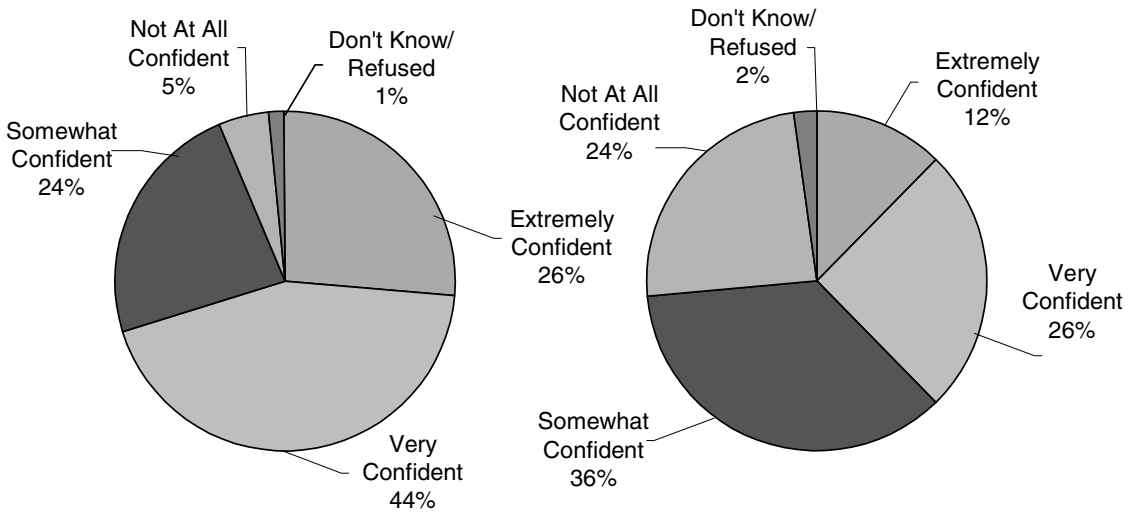


Table 3-17. Families' Confidence in Ability to Access Needed Care Among BadgerCare Participating and Eligible Nonparticipating Families

	NSLP-List Sample		Enrollee-List Sample: BadgerCare Participating Families[1]
	Eligible Nonparticipating Families	BadgerCare Participating Families	
How confident are you that your family members can get health care if they need it?*	*(n = 385)*	*(n = 631)*	*(n = 1,340)*
Extremely confident	12.2%	26.3%	30.1%
Very confident	25.7	43.6	41.9
Somewhat confident	35.8	23.6	22.8
Not at all confident	24.2	5.2	4.5
Don't know/refused/missing	2.1	1.3	0.7

[1] Percentages are weighted.

* Denotes a statistically significant difference between eligible nonparticipating families and BadgerCare participating families from the NSLP sample at the $p \leq 0.05$ level.

† Denotes a statistically significant difference between BadgerCare participating families from the NSLP sample and families from the enrollee-list sample at $p \leq 0.05$ level.

3.5 KEY FINDINGS

In this section, we presented the results of the BCFS. The responses of participating BadgerCare families were compared to eligible nonparticipating families. The survey sample was not based on a representative sample of BadgerCare eligible families or even of families enrolled in the NSLP. However, they represent an important subgroup of eligibles and thereby provide important information for policy makers. A summary of the key findings with regard to differences in demographic, socioeconomic, and health characteristics between participants and eligible nonparticipants, factors motivating participation, and families' experiences with BadgerCare are provided below.

3.5.1 Demographic and Socioeconomic Characteristics

We found few differences in family characteristics between BadgerCare participating and eligible nonparticipating families. The largest differences are in the percentages of families with preschool-aged children and with members with special health care needs. Participating families were more likely to have children under age 6 and a family member with a special health care need. Nevertheless, a considerable percentage of eligible nonparticipating families had young children (23 percent) and members with special health care needs (31 percent)—both of which are higher users of health care services.

The BadgerCare and Medicaid programs in Wisconsin are enrolling a larger share of the very poor—those with income under 68 percent of the FPL. Furthermore, more Medicaid/BadgerCare adults were unemployed or were working in part-time jobs, which typically do not offer health insurance coverage. These findings are not surprising given the eligibility rules of the program and the opportunity of very low-income families to hear of the program through other social programs with which they may be in touch.

More surprising is how small in magnitude the differences are between Medicaid/BadgerCare enrollees and the uninsured. Although BadgerCare covers a good share of the very poor, a significant number remain uninsured. About 22 percent of uninsured adults and older children and 25 percent of uninsured children under age 6 had family incomes at or below 68 percent of the FPL. Furthermore, 28 percent of uninsured adults were

unemployed and about one-quarter of uninsured children had parents who were not working. This finding is consistent with a recent report by FamiliesUSA, where using the Current Population Survey (CPS), researchers found that 78 percent who went without health insurance during 2001-2002 were connected to the workforce (FamiliesUSA, 2003). However, we found that none of the uninsured adults with jobs in our sample worked for employers offering coverage for family members.

Also consistent with the FamiliesUSA report was our finding that a disproportionally small share of Medicaid/BadgerCare adults and children under age 6 were Hispanic. The FamiliesUSA report found that Hispanics were much more likely to be uninsured compared to white non-Hispanic individuals (FamiliesUSA, 2003). Hispanics may be disproportionally working at jobs that do not offer health insurance, and many may be ineligible for publicly sponsored programs, such as BadgerCare, because of residency requirements.

Finally, the greater likelihood that Medicaid/BadgerCare adults were married compared to the uninsured and the greater likelihood that the uninsured worked full-time compared to Medicaid/BadgerCare enrollees suggests that time costs may be a barrier to BadgerCare participation among some eligible families.

3.5.2 Health Status and Health Service Use

We found no significant differences in reported health status between Medicaid/ BadgerCare adult or child enrollees and low-income adults and children who were either uninsured or covered by ESI or other coverage. However, fewer low-income, uninsured adults and children reported a physical or mental limitation compared to Medicaid/BadgerCare adults and children, although the differences were not statistically significant.

With few exceptions, levels of service use for both adults and children enrolled in Medicaid/BadgerCare were equivalent to those of adults and children with ESI or other public or private insurance. This was true even for dental care, despite the problems finding dentists to serve the Medicaid/BadgerCare population that interviewees reported during our site visit for the Case Study Report (Gibbs et al., 2002). Furthermore, the exceptions were often favorable. For example, compared with other insured children, higher percentages of Medicaid/BadgerCare children received well-

child visits in the prior 12 months. However, we also found a higher use of emergency rooms among Medicaid/BadgerCare enrollees compared to low-income, uninsured enrollees, despite a greater percentage of Medicaid/BadgerCare enrollees reporting a usual source and provider of care.

Medicaid/BadgerCare enrolled adults and children used significantly more health care services of all types compared with uninsured adults and children. Among adults, the largest differences were seen for mental health visits and hospitalizations for maternity-related care. For children, the largest differences were seen for well-child, dental, and hospital care.

3.5.3 Factors Motivating Participation

Most BadgerCare participating families responding to our Family Survey reported that they enrolled in BadgerCare because they needed health insurance and could not get or afford other coverage. The availability of family coverage was viewed as desirable among a large majority of BadgerCare participating families (80 percent). However, when asked what their main reason was for enrolling, only 6 percent of participants listed "could get family coverage" as a reason.

Premiums, although burdensome for some families, were not a major deterrent to participation in the program. Ten percent of respondents for eligible nonparticipating families in the Family Survey gave "could not afford premium payments" as a reason for not enrolling; only 22 percent of these families would be subject to premiums. However, more than 82 percent of respondents of premium-paying BadgerCare families thought that the premiums were reasonable.

About one-half of families identified as eligible but nonparticipating in the Family Survey reported being told that they were not eligible for the program. Many of these families were undergoing waiting periods for BadgerCare; one in five eligible nonparticipating families said that they had to wait several months to reapply.

The Family Survey also indicated that difficulties in preparing the application paperwork were also a deterrent to enrollment for some families. About one-third of respondents for eligible nonparticipating families said that it was too hard to obtain the application

paperwork, and almost one in five replied that the application process was too complicated.

3.5.4 Families' Experiences with BadgerCare

Based on the Family Survey results, the State's outreach efforts were successful in promoting awareness of BadgerCare. Most eligible nonparticipating families had heard of BadgerCare. More than one out of four had a family member who was previously enrolled in the program. Among the eligible nonparticipating families in which no family member was previously enrolled in the program, 80 percent had heard of BadgerCare prior to the survey. The main sources through which families had first heard of BadgerCare were welfare offices or county caseworkers, family or friends, and health care providers.

Whereas efforts to promote BadgerCare have been effective in raising awareness of the program, many families responding to the survey felt that they did not have enough information about the program, including 56 percent of eligible nonparticipating families and 18 percent of BadgerCare participating families.

The State's enrollment simplification measures were also largely successful in facilitating enrollment and redetermination. Although some families reported problems getting the help they needed when they called or wrote the BadgerCare program, few reported major problems with BadgerCare paperwork.

Among Family Survey respondents, BadgerCare participating families reported experiencing better access to care than eligible nonparticipating families. In addition, BadgerCare families were more likely to have a usual source of care, had fewer unmet health care needs, and were more confident that they could obtain care when needed than eligible nonparticipating families.

4 Analysis of Premium-Paying Disenrollees

Among the questions on the BadgerCare program that CMS asked us to investigate under this contract were the impact of premiums on churning and turnover in the program and whether whole families, including Medicaid eligible children, were dropped from coverage when the family failed to pay the premiums. In Section 2, we reported on our investigation of these two questions using administrative enrollment data. In particular, we estimated the impact of premium payments on the probability of disenrolling and reenrolling in the program and determined whether children were dropped from coverage when their parents were dropped for failure to pay premiums. In this section, we expand on these findings in an analysis of responses to a survey of premium-paying families with one or more members who had disenrolled from BadgerCare in the first half of 2002. The survey collected information on the demographic, geographic, socioeconomic and health characteristics of these families; their current health insurance coverage; reasons for disenrollment; satisfaction with BadgerCare and their current coverage; and access to care under BadgerCare and their current coverage.

4.1 METHODS

The BadgerCare Disenrollee Survey (BCDS) was a mail survey with telephone follow-up of families who had paid premiums and who had disenrolled from BadgerCare in the first half of 2002. Brief descriptions of the sampling design, survey instrument, and data collection procedures and results are provided below. More detailed information on the BCDS can be found in our *BadgerCare*

Disenrollee Survey Data Collection Report, available from the RTI Project Director.

4.1.1 Sampling Design

Wisconsin's Department of Health and Family Services (DHFS) provided an electronic file with contact information for a list of premium-paying families who had disenrolled from BadgerCare between January 1, 2002, and June 30, 2002. We used this file as our sampling frame for the survey. After eliminating duplicate entries, the file contained contact information for 3,118 families. A stratified random sample of 914 families on this list was selected for the BCDS. The list was stratified by the six-category urban/rural categorization used to select school districts for the BCFS discussed in ***Section 3.1***.

4.1.2 Survey Instrument

The BCDS questionnaire was modeled after the Consumer Assessment of Health Plans (CAHPS) Medicare Disenrollment Reasons Survey. Some questions from the CAHPS disenrollment survey were revised to reflect issues relevant to the BadgerCare program or dropped altogether. In addition, some new questions important to the study had to be developed. These questions were based on information gained in the site visit interviews, focus groups, and document review that were part of the case study for this evaluation project (see Gibbs et al., 2002).

After drafting the BCDS instrument, survey specialists used the RTI Forms Appraisal system to evaluate the clarity, sensitivity, bias, and response categories for all questionnaire items. Particular attention was paid to ensuring that the questions could be asked and understood equally well in a mail survey and over the telephone. The questionnaire also was reviewed for consistency in style and format, logical ordering of questions, correct skip patterns, and timing.

The final BCDS questionnaire consisted of sections on family members' age, relationship to respondent, and current health insurance coverage; reasons why family members left BadgerCare; the family's experiences reapplying for BadgerCare and accessing care under the program; their relative satisfaction with BadgerCare and their current health care coverage; access to care under their current coverage; health status questions about members of the

family; and demographic information on the respondent. The mail version of the instrument was a scannable, optical-character recognition form. For the telephone follow-up, the questionnaire was programmed as a computer-assisted telephone interviewing (CATI) instrument.

The BCDS interview was completed by or conducted with the "most knowledgeable adult" in the family. This was the parent or adult in the family who knew the most about the family's health care and health insurance. The BCDS took an average of 20 minutes to complete.

4.1.3 Data Collection Procedures and Results

Data collection was conducted from August 12, 2002, to December 13, 2002. We used a multiwave survey process that involved numerous attempts to reach respondents by regular mail, telephone, and overnight mail. The mail portion of the BCDS data collection was conducted by the MayaTech Corporation, whereas the telephone follow-up was conducted by RTI staff. To maximize the projected response rate, we used the modified Dillman approach.

We received a total of 483 complete or partially complete surveys for a response rate of 59.3 percent. Among these 483 cases are 10 with no evidence that someone in the family had disenrolled from BadgerCare (they did not list any family member as having left BadgerCare and they provided no reason why a family member had disenrolled from the program). These cases were given a weight of zero for the analyses. For the remaining 473 families, we computed positive weights to account for the stratified design and adjusted for nonresponding families and the small number of ineligible families.

4.1.4 Data Analysis

In the following sections, we present the results of the survey of premium-paying disenrolled families. Both weighted and unweighted figures are presented in the tables, whereas weighted percentages are discussed in the text.

We first present a profile of these families. Specifically, data are presented on the demographic, geographic, and health characteristics of the disenrollees and their families and on their current health insurance coverage. We then report on their responses to a series of questions designed to determine the reasons

they disenrolled from the program. Finally, we report on the families' experience with the BadgerCare program, including experiences with the reapplication process, overall satisfaction with the program, and access to care under BadgerCare. Their satisfaction with and access to care under BadgerCare are compared to their satisfaction with and access to care under their current coverage.

4.2 PROFILE OF PREMIUM-PAYING DISENROLLEES

4.2.1 Characteristics of Respondents and Their Families

Disenrolled premium-paying families reported relatively higher rates of adults and children in fair to poor health.

Demographic characteristics of respondents to the BCDS are provided in ***Table 4-1***; the demographic, geographic, and health characteristics of their families are shown in ***Table 4-2***. As indicated, the majority of the respondents were white, non-Hispanic females with either a high school degree or GED or some college experience. In addition, nearly all respondents were between the ages of 18 and 54, with over two-thirds of the respondents between the ages of 25 and 44—the average age was 34 years.

The respondents' family size ranged from one to 11 persons, with an average of approximately three family members per household. Although families must have children under the age of 19 to be eligible for BadgerCare, 12 percent of disenrolled families had no children under 19 listed in the roster of family members. In approximately 5 percent of the families, the youngest family member listed was 19 years old, suggesting that these families disenrolled because their child(ren) aged out of the program. In addition, about 1 percent of families noted that they disenrolled because they lost custody of their children, although this was a write-in response and therefore may actually be higher. Almost 39 percent of families noted that they had a child aged under 6 years and 66 percent noted that they had a child aged 6 to 18 years. Slightly less than half (48 percent) of the weighted sample of families included only one adult.

Table 4-1. Characteristics of Respondents to the BadgerCare Disenrollee Survey

	Percent	
	Unweighted	**Weighted**
Race/Ethnicity		
White, Not Hispanic	79.3	64.6
Black, Not Hispanic	3.8	17.7
Asian/Pacific Islander	0.6	0.3
American Indian/Alaskan Native	0.8	0.8
Hispanic	0.6	0.3
Other	6.1	6.1
Don't know/refused/missing	8.7	10.2
Gender		
Male	19.7	10.6
Female	78.2	87.1
Don't know/refused/missing	2.1	2.3
Educational Attainment		
Eighth grade or less	1.7	2.8
Some high school, did not graduate	8.0	8.0
High school graduate or GED	43.6	40.8
Some college/2-year degree	37.0	39.5
Four-year college degree	5.5	4.6
More than 4-year college degree	2.1	2.1
Don't know/refused/missing	2.1	2.3
Respondent Age		
Under 18	1.9	1.5
18 to 24	15.9	15.3
25 to 34	31.3	31.8
35 to 44	35.1	31.5
45 to 54	10.6	11.8
55 and over	1.0	0.6
Don't know/refused/missing	4.2	7.5

Table 4-2. Characteristics of Disenrolled Premium-Paying Families

	Percent	
	Unweighted	Weighted
Family Size		
1	5.9	8.1
2	18.8	26.4
3	28.1	42.5
4	27.1	13.7
5+	19.5	8.9
Don't know/refused/missing	0.6	0.4
Family Composition—percent of families with		
Children[1]		
No children listed	11.4	12.3
Aged 0 to 5	39.7	39.4
Aged 6 to 18	66.8	66.1
Aged 19 only	2.8	5.3
Adults		
No adults listed	0.8	1.3
One adult	31.5	47.6
Two or more adults	66.4	49.8
Don't know/refused/missing	1.3	1.3
Family Health Status—percent of families with		
Family member in fair or poor health[1]	31.5	43.8
Children aged 0 to 5	4.0	5.6
Children aged 6 to 17	11.2	13.3
Adults	26.6	40.8
Don't know/refused/missing	2.5	3.0
Family member with a physical, learning, or mental health condition[1]	33.2	34.2
Children aged 0 to 5	3.0	8.4
Children aged 6 to 17	14.2	12.1
Adults	20.9	20.8
Don't know/refused/missing	2.1	2.3
County Type		
Central city of large metropolitan area	4.4	28.8
Fringe county of large metropolitan area	5.7	6.3
Other metropolitan county	15.0	30.0
Nonmetropolitan county adjacent to a metropolitan county	37.4	21.8
Nonmetropolitan county not adjacent to a metropolitan county	14.4	7.1
Rural county	23.0	6.0

[1] The categories are not mutually exclusive—that is, families can have both children aged 0 to 5 and children aged 6 to 17.

[2] Respondent did not list family members and provide their ages.

Disenrolled family members were in relatively poor health. Nearly 41 percent of families reported having an adult member in fair to poor health and 21 percent reported an adult member with a physical, mental or other health condition that limited the amount or kind of work they could do. Among BadgerCare participating adults from the enrollee-list sample of the BCFS, only 15 percent were reported to be in fair to poor health and 16 percent reported a health condition limiting work (see ***Table 3-5a***). Similarly, relatively high percentages of disenrolled families had children in fair to poor health. Nearly 6 percent of disenrolled premium-paying families reported a child aged under 6 in fair to poor health and 13 percent reported a child aged 6 to 17 in fair to poor health. Furthermore, 8 percent reported children under 6 with a condition limiting participation in play activities, and 12 percent reported children aged 6 to 17 with a condition limiting school work or other usual activities for their age group.

The majority of the disenrolled families lived in urban areas; nearly one-quarter (23.5 percent) lived in Milwaukee County alone. Compared to the enrollee-list sample of the BCFS, slightly fewer disenrolled premium-paying families lived in non-metropolitan areas (35 percent versus 42 percent).

4.2.2 Health Care Coverage

In three out of four disenrolled premium-paying families, family members experienced periods of no insurance following disenrollment; more than one-third of adults and older children were uninsured for 6 or more months.

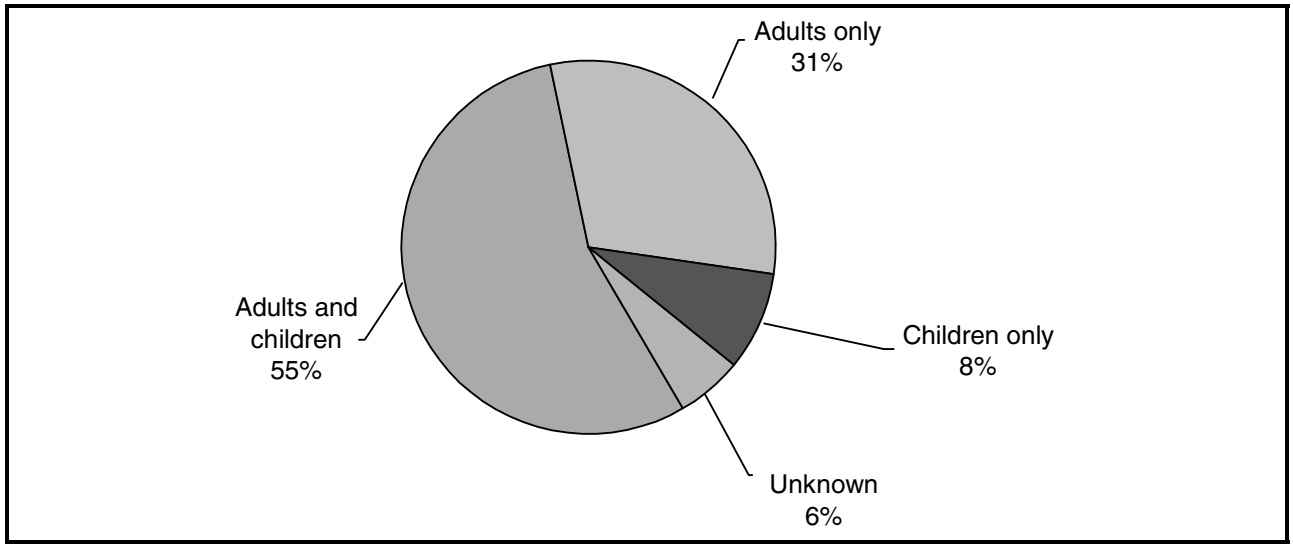
As shown in ***Table 4-3***, almost one-third of disenrolled premium-paying families were enrolled in BadgerCare for less than 6 months, and more than one-half (56 percent) of the families were enrolled for less than one year before they disenrolled. In 55 percent of the families, both adults and children disenrolled, whereas in 31 percent only adult family members disenrolled and in 8 percent only children disenrolled (***Figure 4-1***). In 6 percent of the cases, the ages of disenrolled members were unknown, and therefore, we could not tell whether only adults, only children, or both had disenrolled.

In only one out of four premium-paying families who left BadgerCare did no family members have gaps in health care coverage immediately after disenrollment. Furthermore, almost 40 percent of families continued to have uninsured members 6

Table 4-3. Enrollment Characteristics of Disenrolled Premium-Paying Families

	Percent	
	Unweighted	**Weighted**
Longest length of BadgerCare enrollment among family members		
Less than 6 months	28.1	31.4
7 to 12 months	24.1	20.9
More than 12 months	44.4	44.4
Don't know/refused/missing	3.4	3.2
Who in the family left BadgerCare in the prior 6 to 8 months		
Children aged 0 to 5		
All	55.6	54.9
Some	4.8	2.4
None	39.6	42.8
Children aged 6 to 17		
All	74.3	70.9
Some	6.5	4.7
None	19.2	24.5
Adults		
All	71.9	69.3
Some	20.1	19.9
None	8.0	10.8
Longest amount of time any family member was without health insurance since leaving BadgerCare		
Never without health insurance	22.8	24.4
1 month or less	13.1	9.9
2 to 3 months	15.0	13.2
4 to 5 months	13.0	10.8
6 or more months	32.8	38.8
Don't know/refused/missing	3.2	2.9

Figure 4-1. Type of Family Members Disenrolling from BadgerCare



months following disenrollment. ***Table 4-4*** gives the current health insurance status at the time of the survey of family members who had disenrolled from BadgerCare in the first half of 2002. By the time of the survey, most (87 percent) of the younger children who had left BadgerCare had obtained health insurance coverage—20 percent had reenrolled in BadgerCare, 12 percent had enrolled in Medicaid, 46 percent had obtained ESI, and 9 percent had other health insurance coverage. In contrast, nearly 38 percent of older children and adults remained uninsured. Compared to younger children, an equivalent percentage of older children (21 percent) and only slightly fewer adults (15 percent) had reenrolled in BadgerCare, but many fewer older children and adults had enrolled in Medicaid (3 percent and 5 percent, respectively) or had obtained ESI (31 percent and 35 percent, respectively) or other insurance (4 percent and 7 percent, respectively).

4.3 REASONS FOR LEAVING BADGERCARE

We first asked respondents whether their family or family members had decided to leave BadgerCare on their own or whether they had left because the State dropped them. We then asked about a number of specific reasons for leaving BadgerCare, including because they were healthy and no longer needed health insurance, did not want help from the government, experienced changes in family circumstances, had an increase in pay or non-work-related

Table 4-4. Current Health Insurance Coverage of Disenrolled Family Members

	Percent	
	Unweighted	**Weighted**
Children aged 0 to 5		
BadgerCare	9.5	19.8
Medicaid	11.6	11.7
Employer/union sponsored	42.9	45.8
Other	8.8	9.2
No insurance	25.2	12.6
Don't know/refused/missing	2.0	1.0
Children aged 6 to 18		
BadgerCare	11.4	21.3
Medicaid	2.7	3.1
Employer/union sponsored	37.0	30.8
Other	4.1	4.0
No insurance	40.9	37.2
Don't know/refused/missing	3.9	3.6
Adults		
BadgerCare	11.1	15.4
Medicaid	2.3	4.9
Employer/union sponsored	36.3	34.7
Other	6.7	6.6
No insurance	42.2	37.6
Don't know/refused/missing	1.4	0.8

income, obtained health insurance from an employer or other source, did not do what was required for recertification, or had problems paying the premium, problems with health care providers, or problems with transportation or the distance to providers. For the last three reasons, we asked additional questions about the particular types of problems the family had encountered. Families were asked to mark all reasons that applied, and to list the one most important reason why the family had left BadgerCare. They were also allowed to write in any other reason for disenrolling.

Respondents' answers to these questions are provided in ***Table 4-5***. Two-thirds of the families reported being dropped by the State; only about one-quarter of the families reported leaving on their own. The two most common reasons for disenrolling from BadgerCare, each given by approximately one-third of the families, are that they (1) had an increase in job-related income and (2) had become eligible for health insurance from an employer or another source. Among families who had disenrolled because of an increase in job-related income, only 36 percent also listed becoming eligible for employer or other health insurance as a reason for disenrolling.

Many of the reasons given for leaving BadgerCare were related to changes in circumstances that affected the families' eligibility for BadgerCare. However, the most frequent main reason given for disenrolling was problems paying premiums.

Approximately 38 percent of children and adults in families who had disenrolled from BadgerCare because of an increase in job-related income were uninsured at the time of the survey, suggesting that their well-being may not have improved and may even have deteriorated with the pay increase.

The third most common reason for leaving BadgerCare, listed by 31 percent of the disenrolled premium-paying families, was difficulties in paying the premiums. Among the disenrollees who left BadgerCare because of problems paying premiums, 60 percent said that they could not afford the premium and 52 percent said that they could not get the premium to the State on time (***Figure 4-2***).

Factors that had a smaller influence on the disenrollment decision were changes in family circumstances, increased non-job-related income, not wanting governmental help, not meeting the 12-month income/family circumstances requirements, provider problems, transportation issues, and being healthy.

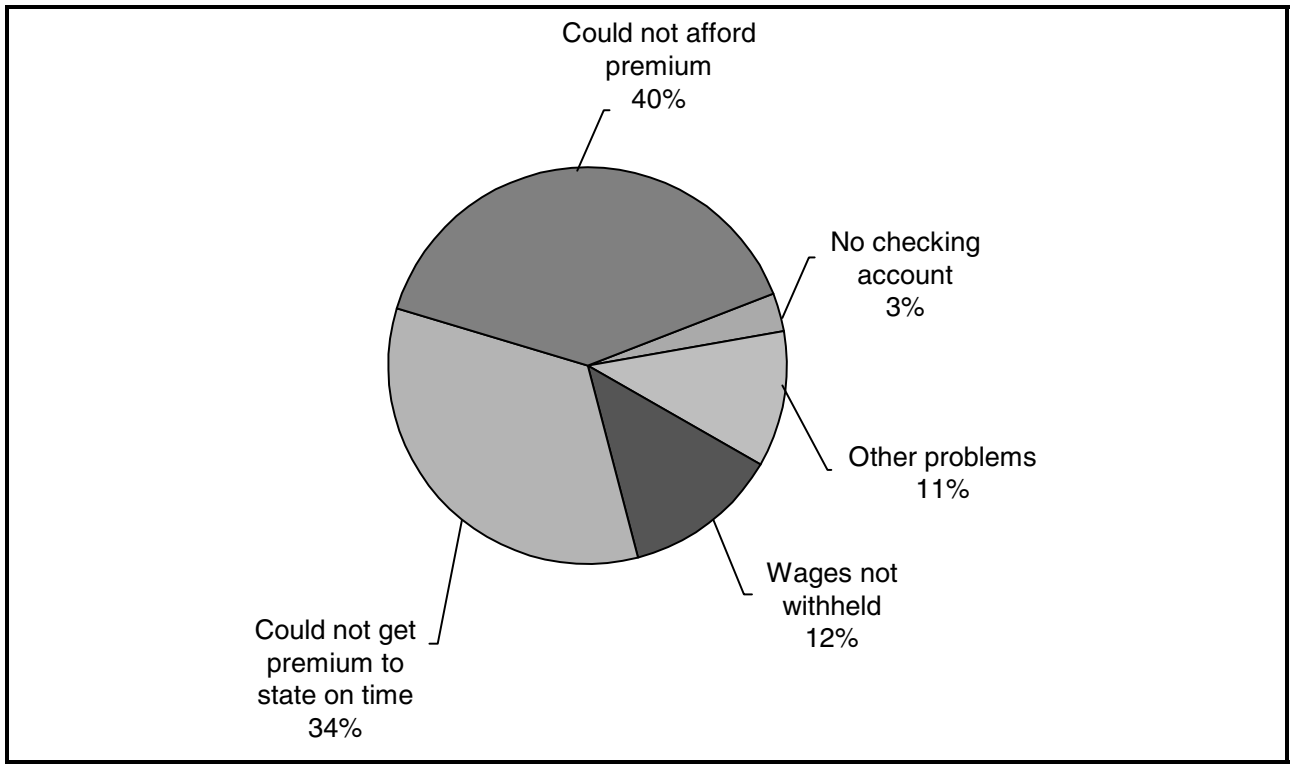
The most frequently cited main reason for disenrolling among premium-paying families was problems paying the premiums. More than one-quarter of the disenrollees identified premium-related problems as being their main reason for leaving BadgerCare (26 percent). Slightly fewer respondents indicated that they had obtained health insurance from an employer (22 percent) or other source or that they had an increase in income (from all sources) (20 percent). Seventeen percent of the families did not list a main reason for disenrolling.

Table 4-5. Reasons for Leaving BadgerCare

	Percent	
	Unweighted	Weighted
Did your family or family members decide to leave BadgerCare on your own, or did you leave because the State dropped you?		
Left on own	28.1	25.6
Dropped by State	64.5	66.8
Some were dropped and some left on their own	3.6	2.2
Don't know/refused/missing	3.8	5.4
Reasons given for leaving BadgerCare:[1]		
Increased job-related pay	38.7	33.6
Eligible for health insurance from employer/other source	35.9	33.3
Problem paying premiums	23.3	31.3
Could not afford monthly premium	14.8	19.4
Could not get premium to state on time	13.1	16.4
Job did not withhold wages to pay premium	3.6	6.0
No checking account	1.9	1.5
Other problems paying premiums	5.1	5.3
Change in family	10.1	8.1
Unspecified change in family	6.3	5.3
Moved in with another family/individual	2.1	2.1
Lost custody of children	1.7	0.7
Got married	1.5	0.6
Increased non-job-related income	3.8	4.9
Not want Government help/public services	3.8	4.1
Did not do what was required for 12 month review of income/family circumstances	3.0	3.6
Problem with doctor/nurse/other provider	2.5	3.5
Could not understand doctor/nurse/other provider	2.5	3.5
Did not have problems with doctor or providers	2.5	3.5
Could not see doctor/provider wanted to see	1.7	3.3
Could not get appointment as soon as wanted	1.3	2.5
Could not find a doctor/provider	1.3	2.2
Had to wait too long at the doctor's office to see doctor/nurse	0.6	0.4
Other problems with doctors/providers	1.3	2.4
No transportation/had to travel too far to see doctor	0.6	0.4
Healthy, no longer needed health insurance	1.3	0.4
Other (unspecified) reasons	21.4	23.6
Main reason given for leaving BadgerCare:		
Premium-related reason	17.3	26.3
Obtained health insurance from employer or other source	26.4	21.8
More income (all sources)	25.6	20.2
Other reason for leaving	12.1	14.7
Don't know/refused/missing	18.6	17.0

Note: Data are sorted in descending order based on weighted percentages.

Figure 4-2. Types of Problems Encountered in Paying the BadgerCare Premiums



4.4 FAMILIES' EXPERIENCE WITH BADGERCARE

4.4.1 Reapplication

Many families faced waiting periods before they could reenroll in BadgerCare. A smaller but substantial number of families had not reapplied because of problems paying the premium.

We asked a series of questions on families' experience with reapplying for BadgerCare, including whether disenrolled family members had reenrolled or had attempted to reapply for the program, whether they were undergoing a waiting period to reapply for BadgerCare or had been told that they were no longer eligible for the program, and their reasons for not reapplying. If a family paying a monthly premium is terminated for failure to pay or withdraws from BadgerCare for reasons other than "good cause," then the family is ineligible to reenroll for another 6 months. Good cause includes an administrative error in recording the nonpayment of premiums or a change in the family composition. To reenroll in BadgerCare after the restrictive reenrollment period, the family will have to pay all outstanding premiums.

Respondents' answers to the questions on reapplication are shown in ***Table 4-6***. At the time of the survey, nearly one-third of disenrolled families had reapplied or had tried to reapply for the program, but less than 2 percent had actually reenrolled. In 30 percent of the families, some or all family members who had disenrolled were told that they had to wait before reapplying for BadgerCare. In 29 percent of families, some or all disenrolled family members were told that they were no longer eligible for BadgerCare.

The two most frequent reasons given for not reapplying were related to factors that made them ineligible for the program—26 percent of respondents indicated that they or their family had obtained health insurance from an employer or other source, and more than 15 percent reported receiving an increase in job-related pay. However, problems paying premiums was also a significant factor in disenrolled families' decisions to not reapply for BadgerCare: 9.5 percent of the families said that they did not reapply because they could not afford the premiums and almost 3 percent noted problems in getting the premium payments to the State.

4.4.2 Satisfaction with BadgerCare versus Current Coverage

Disenrolled premium-paying families were more satisfied with their health care coverage while enrolled in BadgerCare than they are with their current health care coverage.

Respondents for disenrolled families who had paid premiums were more satisfied with their health care coverage while enrolled in BadgerCare than they are with their current health care coverage. As shown in ***Table 4-7*** and ***Figure 4-3*** over 72 percent of all disenrolled premium-paying families were satisfied or very satisfied with their coverage under BadgerCare, whereas only 60 percent of these families who had obtained coverage by the time of the survey were satisfied or very satisfied with the coverage they obtained. In addition, whereas only 6 percent of the disenrolled families reported dissatisfaction with BadgerCare, almost 14 percent of the families who had obtained new coverage since disenrolling from BadgerCare were dissatisfied with the coverage they obtained.

Table 4-6. Experience Reapplying for BadgerCare

	Percent	
	Unweighted	**Weighted**
Have any of the family members who left BadgerCare reapplied or tried to reapply to the program?		
Yes	27.7	32.1
No		
Don't know/refused/missing		
Have all, some, or none of your family members who left BadgerCare in the past 6 months reenrolled in the program?		
All	1.1	.6
Some	1.7	1.3
None	57.9	55.5
Unknown	39.3	42.6
Were all, some, or none of your family members who left BadgerCare in the past 6 months told that they have to wait before reapplying for BadgerCare?		
All	24.1	25.0
Some	4.2	5.3
None	14.2	9.2
Not told anything about reapplying	49.9	55.3
Unknown	7.6	5.2
Has the State told all, some, or none of your family members who left BadgerCare in the past 6 months that they are no longer eligible for the program?		
All	26.6	22.3
Some	7.4	6.3
None	6.1	5.2
Not told anything about eligibility	18.9	23.0
Unknown	41.0	43.2
What are the reasons why you or your family members have not tried or do not want to reapply for BadgerCare[1]		
Obtained health insurance from an employer/other source	27.9	26.2
Increased job-related pay	19.5	15.5
Family could not afford premiums	7.8	9.5
Reapplication process too difficult	4.7	5.0
Change in family	4.9	3.7
Do not want Government help	2.7	3.0
Problems getting premium payments to State	2.7	2.6
Problems with doctors/nurses	1.3	1.9
Family members have already reenrolled in BadgerCare	1.1	1.4
Family members are healthy, not need health insurance	1.7	1.1
More income, non-job-related sources	2.1	1.0
No transportation to doctor's office/office too far away	0.4	0.8
Unspecified reason	3.4	7.4

[1] Data are sorted in descending order based on weighted percentages. Data are not mutually exclusive; respondents requested to answer all that apply.

Table 4-7. Satisfaction with Health Care Coverage Among Disenrolled Premium-Paying BadgerCare Families: BadgerCare vs. Current Coverage (%)

	All Families *(n = 473)*		Families with Current Coverage *(n = 350)*			
	BadgerCare		BadgerCare		Current Coverage	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Overall, how satisfied were/are you with BadgerCare/your current health care coverage?*						
Very satisfied	53.3	43.9	52.0	42.3	23.1	19.5
Satisfied	28.8	28.6	29.1	29.5	34.6	40.7
Somewhat satisfied	12.3	18.0	11.9	16.6	23.7	21.5
Not satisfied	1.9	5.7	2.0	6.9	14.6	13.8
Don't know/Refused/Missing	3.8	3.8	5.1	4.7	4.0	4.5

Note: Families in which all family members were uninsured at the time of the survey were not asked about their satisfaction with current coverage.

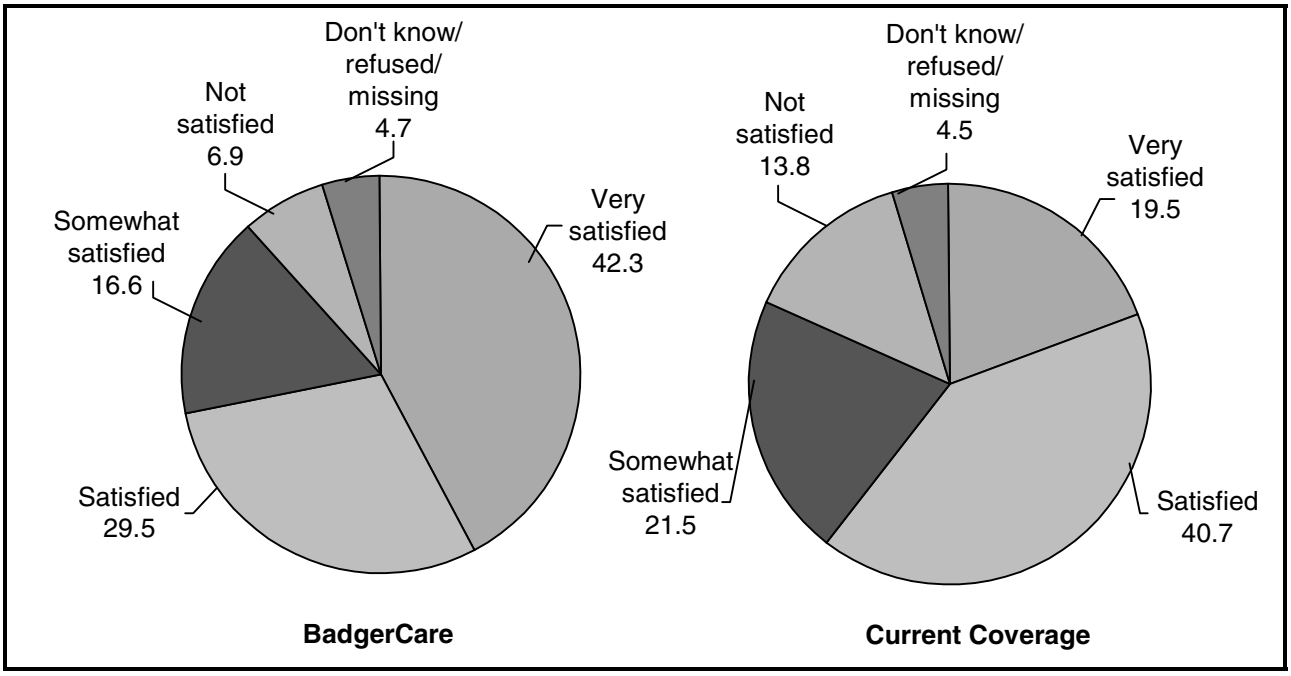
* Denotes a statistically significant difference between respondents' answers for when their family members were enrolled in BadgerCare and since they were disenrolled at the $p \leq 0.001$ level.

4.4.3 Access to Care under BadgerCare versus Current Coverage

Premium-paying disenrollees had poorer access to care since they disenrolled from BadgerCare. The restricted access led to significant unmet health care needs in this population.

We asked several questions to determine families' access to care under BadgerCare and their current health care coverage, including whether they had a usual source of care, whether they had a personal doctor or nurse to whom they usually went first for health problems, and how often families were able to get care when they needed it. All study families were asked these questions regardless of whether they currently had health insurance. The responses to these questions are shown in ***Table 4-8***.

Figure 4-3. Disenrolled BadgerCare Families' Satisfaction with BadgerCare versus Current Coverage



All three measures indicate that the families had better access to care under BadgerCare than under their current health care coverage. More than 70 percent of the families reported that their family members had a personal doctor or nurse while enrolled in BadgerCare, compared to 60 percent post-BadgerCare. Similarly, 81 percent of the families reported that their family members had a regular place to obtain care while in BadgerCare, compared to 67 percent post-BadgerCare. Finally, 69 percent of the families reported being able to obtain care, medical tests, and treatment as soon as they needed it, compared to 41 percent of the families members post-BadgerCare.

The greater access to care while enrolled in BadgerCare may be attributed to the mandatory managed care component of the program. We did not collect data on the extent to which family members were enrolled in a managed care program post-BadgerCare, so we could not measure the effect of this type of coverage.

Table 4-8. Access to Health Care under BadgerCare and Current Health Care Coverage (%)

	BadgerCare		Post-BadgerCare	
	Unweighted	Weighted	Unweighted	Weighted
Do all, some, or none of your family members have a personal doctor?*				
All family members	72.1	70.7	60.7	59.9
Some family members	14.0	13.1	15.6	12.9
No family members	10.8	12.9	20.3	24.3
Don't know/refused/missing	3.1	3.2	3.4	2.9
Do all, some, or none of your family members have a regular place, like a clinic or doctor's office, where they go to get care?*				
All family members	83.7	81.0	69.1	67.1
Some family members	7.4	6.4	13.1	9.3
No family members	5.5	9.0	14.4	20.5
Don't know/refused/missing	3.4	3.7	3.4	3.1
How often are your family members able to get the care, tests, or treatment they need as soon as they need it?*				
Always	70.4	69.2	43.8	41.4
Usually	18.0	14.2	15.0	11.0
Sometimes	5.9	8.5	24.5	26.9
Never	2.5	4.6	13.1	17.6
Don't know/refused/missing	3.2	3.6	3.6	3.1

* Denotes a statistically significant difference between respondents' answers for when their family members were enrolled in BadgerCare and since they were disenrolled at the $p \leq 0.001$ level.

The compromised access to care experienced by the premium-paying families after disenrollment from BadgerCare led to significant unmet health care needs in this population. As shown in ***Table 4-9***, the percentage of families with members who did not get or postponed getting needed health care since leaving BadgerCare was quite high for all service types investigated: In 44 percent of families, a member had not gotten or had postponed medical care or surgery; 62 percent had not gotten or had postponed dental care; 40 percent had not gotten or had postponed filling prescriptions for medications; and 12 percent had not gotten or had postponed receiving mental health services. When asked whether lack of

Table 4-9. Unmet Health Care Needs Among Disenrolled Premium-Paying Families Since Leaving BadgerCare vs. Currently Enrolled Premium-Paying Families from the Enrollee-List Sample

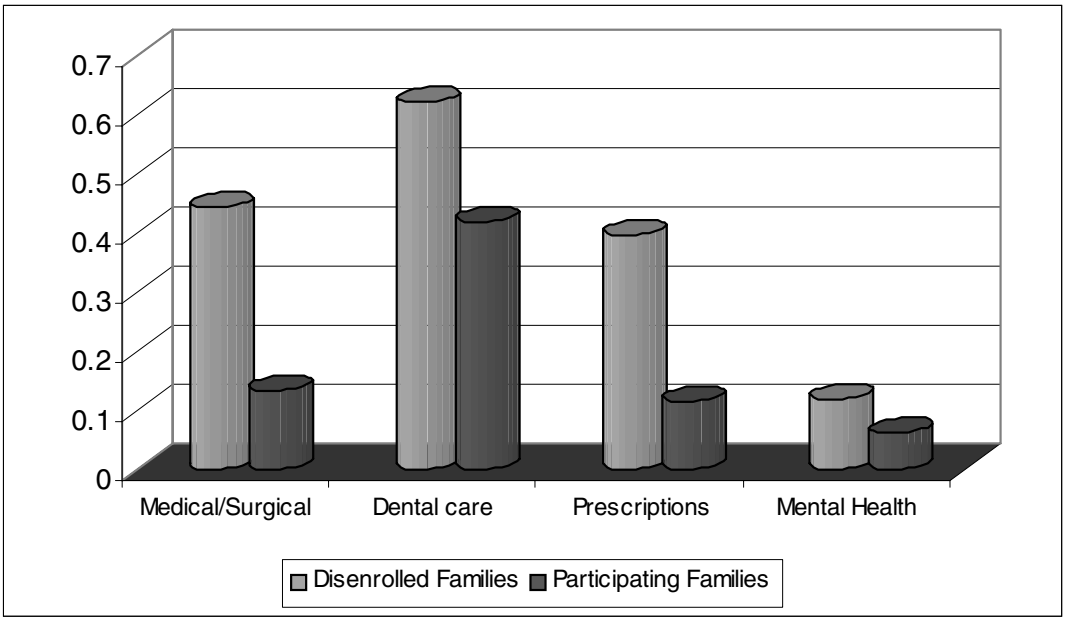
	Disenrolled Families with Incomes > 150% of FPL		BadgerCare Families with Incomes > 150% of FPL[1]
	Unweighted	Weighted	
Percentage of families with members who did not get or postponed getting the following health care services when they needed them:	*(n = 473)*		*(n= 447)*
Medical care or surgery	41.0	44.3	13.3
Dental care	56.5	62.2	42.0
Prescription drugs	37.0	39.7	11.6
Mental health services	13.5	11.9	6.1
Percentage of families with unmet health care needs reporting lack of insurance or money as the reason for not getting or postponing needed health care:			
Medical care or surgery	95.9	96.2	69.6
Dental care	96.6	97.1	78.9
Prescription drugs	98.9	99.7	86.6
Mental health services	96.9	94.3	79.5

[1] Data from the enrollee-list sample of the BadgerCare Family Survey.

insurance or money was a reason for not receiving the needed care, nearly all respondents of disenrolled families responded affirmatively.

For a comparison, we show the unmet need in the prior year among BadgerCare participating families with incomes greater than 150 percent of the FPL from the enrollee-list sample of the BCFS. As shown in ***Figure 4-4***, disenrolled families who had paid premiums were much more likely than the participating families paying premiums to have unmet health care needs. In addition, fewer participating families noted lack of insurance or money as a reason for not receiving or postponing the needed care.

Figure 4-4. Unmet Health Care Needs Among Disenrolled Premium-Paying Families Compared to Participating Premium-Paying Families



4.5 KEY FINDINGS

At least two-thirds, and potentially as many as three-fourths, of disenrolled premium-paying families left BadgerCare involuntarily. Most either became ineligible for the program or had difficulties meeting the program requirements. One out of four of the disenrolled families in this income range (150 percent to 200 percent of the FPL) had problems paying the relatively modest premiums of the program.

When they left the program most of the disenrolled family members experienced a period of uninsurance, and many remained uninsured 6 to 12 months later. Those that obtained new coverage were less satisfied with their new coverage than they had been with BadgerCare. Furthermore, access to care deteriorated for the disenrolled families and unmet medical care needs rose. Family members of the disenrolled premium-paying families were reported to be in relatively poorer health than current BadgerCare enrollees.

5 Summary and Conclusions

CMS posed several questions for this evaluation of BadgerCare, Wisconsin's innovative health care program for uninsured low-income families. These questions concern a range of topics, including

- program planning and implementation,
- outreach and enrollment simplification,
- enrollment trends,
- the relative health characteristics of program participants and eligible nonparticipants,
- factors motivating participation,
- the impact on families of failure to pay premiums,
- integration with ESI and Medicaid managed care,
- stakeholder satisfaction, and
- program revenue and costs.

We used a variety of data sources and analytic methods to address these questions. A case study involving site visit interviews, focus groups, and document review was conducted; administrative enrollment data were obtained and analyzed; and surveys of program participants, eligible nonparticipants, and premium-paying disenrollees were fielded and analyzed. Our findings related to each question from all data sources are synthesized and presented below by topic area.

5.1 PROGRAM PLANNING AND IMPLEMENTATION

What was the process used by the State to develop and implement the demonstration? How was the participation of various interested parties in the planning process secured? Are there lessons to be learned in this area that would be beneficial to other states?

The process used by the State to develop and implement the BadgerCare demonstration is best characterized as collaborative and marked by compromise. Because State planners believed that a commitment from all stakeholders was key to getting BadgerCare approved, they involved a wide range of stakeholders from the outset. Stakeholders were identified from previous planning efforts. State officials worked with stakeholders one on one and jointly in a series of meetings held to discuss the issues. All stakeholders in the process agreed on the need to extend health insurance to the working poor; disagreements arose only in the details of how to do so. Compromises on crowd-out provisions, including premium payments for the higher income eligibles, were vital to gaining stakeholder support.

Collaboration and compromise extended to the State's interaction with CMS in obtaining approval for the program. The State's initial BadgerCare application, like the predecessor waiver application for the W-2 Family Health Plan, was denied because, among other things, the proposed cap on enrollment was incompatible with the entitlement nature of the Medicaid program. By January 1999, a compromise was negotiated in which BadgerCare would be an entitlement program and, in place of an enrollment cap, the State would be allowed to lower the income eligibility threshold if necessary to avoid budget overruns.

The BadgerCare planning process worked in part because of the pride Wisconsin residents feel in their progressive tradition and in the determination of a handful of policy makers to develop a workable solution to the State's growing number of uninsured. These factors may be difficult to replicate in other states. However, the use of a collaborative process that includes representation from all major stakeholders was also key and can be replicated.

The State's use of existing infrastructure is also potentially reproducible by other states. Recognizing that the system was not perfect, State officials chose to use the State's existing Medicaid eligibility and health delivery system for the BadgerCare program and to fine-tune the systems later as needed. As a result, implementation was quick and effective.

5.2 OUTREACH AND ENROLLMENT SIMPLIFICATION

What steps were taken by the State to publicize the existence of the BadgerCare program and to encourage qualifying families to apply? How effective were these efforts?

Wisconsin conducted a variety of statewide outreach activities for the BadgerCare program. These included a public information campaign with brochures, a toll-free hotline, and televised public service announcements featuring then-governor Tommy Thompson; the training of outreach workers; and placement of outreach workers at health care and community establishments frequented by low-income families (i.e., outstationing). Wisconsin also had two *Covering Kids* pilot sites—one in Milwaukee and the other in a four-county area in north-central Wisconsin—which have now been expanded statewide. Activities covered under the initiative include training, capacity-building among community agencies, information dissemination, and process improvements.

Targeted outreach activities have also been conducted in Wisconsin. For example, the State facilitated creation of a BadgerCare Coordinating Committee in Milwaukee to provide a forum for sharing information on BadgerCare policy and program changes and to coordinate strategic outreach efforts. The committee is composed of State and local officials, health advocates, and business representatives. Another committee was formed to address school outreach; this group supported BadgerCare outreach as part of Kindergarten Round-Up in several large school districts and has developed proposals for other approaches to increasing enrollment through schools. Managed care companies and providers, including tribal clinics and the Marshfield Clinic, a multisite provider in north-central Wisconsin, also initiated and supported outreach efforts.

In addition to its outreach efforts, Wisconsin has taken other approaches to encourage qualifying families to apply for BadgerCare. In particular, the State created a distinct image for the program so that it would not be associated with welfare and therefore would be more acceptable to low-income working families.

Based on the Family Survey results, these efforts were successful in promoting awareness of BadgerCare. Most eligible nonparticipating families had heard of BadgerCare. More than one out of four had a family member who was previously enrolled in the program.

Among the eligible nonparticipating families in which no family member was previously enrolled in the program, 80 percent had heard of BadgerCare prior to the survey. The main sources through which families had first heard of BadgerCare were welfare offices or county caseworkers, family or friends, and health care providers.

Whereas efforts to promote BadgerCare have been effective in raising awareness of the program, many families responding to the survey felt that they did not have enough information about the program, including 56 percent of eligible nonparticipating families and 18 percent of BadgerCare participating families.

The State also adopted several enrollment simplification measures, including the elimination of the Medicaid assets test, implementation of a simplified mail-in and phone-in application, and acceptance of self-declaration of income; instituted training of county workers to help them understand the philosophical differences between Medicaid/BadgerCare, W-2, and food stamps; and streamlined the redetermination process.

These measures were largely successful in facilitating enrollment and redetermination. Although some families reported problems getting the help they needed when they called or wrote the BadgerCare program, few reported major problems with BadgerCare paperwork.

5.3 BADGERCARE ENROLLMENT

How many people participate in BadgerCare? What are the demographic and enrollment characteristics of the BadgerCare participants? Has the demonstration increased the percentage of the W-2 participating population who have health insurance? Has the demonstration succeeded in increasing the percentage of the population with incomes below 200 percent of the FPL who have health insurance?

From the start, BadgerCare enrollment has exceeded expectations. More families were enrolled earlier than planners and policy makers predicted, reversing the downward trend in Medicaid family coverage resulting from the declining welfare rolls. Enrollment has continued to grow each year since the program was implemented. By August 2003, BadgerCare was providing health care coverage to over 111,000 people. Furthermore, BadgerCare has increased enrollment of children in Medicaid. The State estimates that since the implementation of BadgerCare, an additional 81,900 children have enrolled in Medicaid (DHFS, 2003a). However, many of these new Medicaid child enrollees have

been enrolled in the two most recent years, and therefore, are attributable to the declining economy, which has increased the number of children eligible for Medicaid.

5.3.1 Demographic Characteristics

In contrast to AFDC-related and Healthy Start coverage categories, BadgerCare enrolled more adults than children. About two out of three BadgerCare enrollees were parents or spouses of parents. Many of the children of BadgerCare adult enrollees were enrolled in Medicaid/Healthy Start, which covers children under age 6 in families with incomes up to 185 percent of the FPL and children aged 6 to 18 in families with incomes up to 100 percent of the FPL. Any child eligible for Medicaid coverage is not eligible for BadgerCare. As a result, BadgerCare children were older than children enrolled in Medicaid. In 2001, only 5 percent of BadgerCare child enrollees were under 6 years of age, whereas 50 percent of Medicaid children were under age 6.

BadgerCare enrollees were also more geographically dispersed throughout the State, compared with enrollees in AFDC-related Medicaid categories, more than half of whom lived in Milwaukee County.

5.3.2 Enrollment Characteristics

Besides increasing the number of publicly insured low-income adults and children in Wisconsin, BadgerCare also increased the lengths of Medicaid enrollment. Nevertheless, many enrollees continued to have enrollment periods of short duration; only about half of adult AFDC-related and BadgerCare enrollees remained enrolled beyond the first year of enrollment. AFDC-related children generally remained enrolled longer than AFDC-related adults (63 percent of children aged 6 to 18 and 75 percent of children aged 0 to 5 remained enrolled for 12 months or longer). In contrast, BadgerCare children were about as likely as BadgerCare adults to remain enrolled beyond the first year of enrollment (52 percent of children aged 6 to 18 and 53 percent of children aged 0 to 5).

Individuals who disenrolled from Medicaid or BadgerCare often reenrolled in one of these programs after only a short period of time. Gaps between enrollment spells were shorter on average after BadgerCare implementation than before. Churning (i.e., reenrollment shortly after disenrolling) was particularly high among

Medicaid and BadgerCare children. As many as 15 to 20 percent of children reenrolled after only 1 month, and 60 to 70 percent had reenrolled within the first 2.5 years after disenrolling.

5.3.3 Pregnant Women

Lengths of enrollment and disenrollment for adult pregnant women enrolled in Healthy Start were substantially affected with the implementation of BadgerCare. Prior to BadgerCare, most adult Healthy Start women lost their eligibility for Medicaid 60 days after delivering their infant. With the implementation of BadgerCare, new mothers whose deliveries were paid by Medicaid and who did not have access to other health insurance coverage were able to transfer to BadgerCare and thereby retain their coverage. Prior to BadgerCare, only 12 percent of Healthy Start pregnant women were still enrolled 12 months after enrolling, whereas post BadgerCare, 40 percent of these women were still in the program at 12 months following enrollment. In addition, before BadgerCare, 26 percent of these women had reenrolled within the first year after losing eligibility, whereas after BadgerCare, 43 percent reenrolled in public coverage within 1 year.

5.3.4 Cash Assistance Recipients

Based on numbers that we received from Wisconsin's DWD for 2000, virtually all W-2 cash assistance recipients were covered by Medicaid or BadgerCare. The total number of Medicaid/BadgerCare enrollees who were cash assistance enrollees declined from 1997 to 2000, but increased in 2001 as unemployment rose. Most of the cash assistance recipients were enrolled in traditional Medicaid eligibility categories; only about 12 percent were enrolled in BadgerCare. BadgerCare had no impact on length of enrollment for short-term enrollees receiving cash assistance, but increased the probability of longer enrollment episodes for long-term enrollees receiving cash assistance. Medicaid/BadgerCare enrollees with some months of cash assistance were also more likely than enrollees with no cash assistance months to reenroll in public health care coverage at every month of the 32-month study period.

5.3.5 Impact on Insurance Coverage

All available data indicate that the uninsurance rate in Wisconsin dropped significantly following BadgerCare implementation (U.S. Census Bureau, 2001; DHFS, 2000, 2001). The WFHS indicated

that 11 percent of the State's residents went without health insurance during part or all of 2000, whereas 13 percent were uninsured during part or all of 1999. In addition, despite a growing unemployment rate and worsening economic conditions, insurance coverage has remained high in Wisconsin. The percentage of Wisconsin's household population without health insurance coverage for all or part of the year remained unchanged from 2000 to 2002 (DHFS, 2002, 2003b), and the State continues to have uninsurance rates among the lowest in the nation (U.S. Department of Commerce, 2003). This success can be attributed at least in part to the safety net insurance coverage provided by the BadgerCare program.

5.4 PROFILE OF BADGERCARE PARTICIPANTS AND NONPARTICIPANTS

Is there any evidence that persons enrolled in BadgerCare tend to have higher or lower health status than persons who have not enrolled?

We looked at a variety of factors to determine whether individuals enrolled in BadgerCare have higher or lower health status than eligible nonparticipating individuals. In particular, in the Family Survey, we collected data on two individual-level measures of health status: (1) self-reported health status, and (2) physical and mental conditions that limit work activity. We found no significant differences in reported health status between Medicaid/BadgerCare adult or child enrollees and low-income adults and children who were either uninsured or covered by ESI or other coverage. However, fewer low-income, uninsured adults and children reported a physical or mental limitation compared to Medicaid/BadgerCare adults and children, although the differences were not statistically significant. In addition, we found BadgerCare participating families, defined as families with at least one family member enrolled in BadgerCare, were more likely to have a family member with a special health care need than eligible nonparticipating families, defined as families with incomes under 200 percent of the FPL and at least one uninsured member.

We also looked at various measures of health service use in the prior year. With few exceptions, levels of service use for both adults and children enrolled in Medicaid/BadgerCare were equivalent to those of low-income adults and children with ESI or other public or private insurance. However, Medicaid/BadgerCare enrolled adults and children used significantly more health care

services of all types compared with low-income, uninsured adults and children. Among adults, the largest differences were seen for mental health visits and hospitalizations for maternity-related care. For children, the largest differences were seen for well-child, dental, and hospital care. We also found a higher use of emergency rooms among Medicaid/BadgerCare enrollees compared to low-income, uninsured enrollees, despite a greater percentage of Medicaid/BadgerCare enrollees reporting a usual source and provider of care.

Thus, the evidence shows that Medicaid/BadgerCare is covering individuals with relatively greater need for health care services. Nevertheless, the need for care among eligible nonparticipants is also high. A considerable percentage of eligible nonparticipating families had members with special health care needs (31 percent). In addition, fewer uninsured children had received routine well-child and dental visits, and more eligible nonparticipating families reported unmet health care needs.

5.5 FACTORS MOTIVATING PARTICIPATION

What motivates families to participate or not participate in BadgerCare? Is there any evidence that family coverage has increased participation of children in Medicaid or the State Children's Health Insurance Program (SCHIP)? Have premiums deterred families from enrolling in BadgerCare? How many persons and/or families are deemed ineligible for BadgerCare coverage due to anti-crowd-out provisions?

Most BadgerCare participating families responding to our Family Survey reported that they enrolled in BadgerCare because they needed health insurance and could not get or afford other coverage. The availability of family coverage was viewed as desirable but, for most families, was not the predominant factor in making the decision to enroll in BadgerCare. Premiums, although burdensome for some families, were not a major deterrent to participation in the program.

Focus group participants told us that they believed that coverage for adults was important, but that they would have enrolled their children in the program even if they were not covered themselves. They believed children required more health care, both for well-child care and for minor illnesses. The Family Survey results confirmed this finding; a large majority of BadgerCare participating families listed the availability of family coverage as one reason among many for enrolling (80 percent). However, when asked what their main reason was for enrolling, only 6 percent of participants listed "could get family coverage."

Premiums were a deterrent to BadgerCare enrollment for a small but significant percentage of BadgerCare eligibles. Ten percent of respondents for eligible nonparticipating families in the Family Survey gave "could not afford premium payments" as a reason for not enrolling; only 22 percent of these families would be subject to premiums. However, 82 percent of respondents of premium-paying BadgerCare families thought that the premiums were reasonable. Focus group participants also did not view premiums as a deterrent to coverage; in contrast, they contended that it made them feel proud to not be "leeching off the system."

As many as one-half of families identified in the Family Survey as eligible but nonparticipating reported being told that they were not eligible for the program. Many of these families were undergoing waiting periods for BadgerCare; one in five eligible nonparticipating families said that they had to wait several months to reapply. Three out of 10 families responding to the Disenrollee Survey were told they had to wait before reapplying to BadgerCare.

The Family Survey also indicated that difficulties in preparing the application paperwork were a deterrent to enrollment for some families. About one-third of respondents for eligible nonparticipating families said that it was too hard to obtain the application paperwork, and almost one in five replied that the application process was too complicated. One factor identified in the focus groups as motivating participation was the availability of a person to help enrollees through the application process from start to finish.

Another deterrent to BadgerCare participation identified by several case study respondents was the requirement that women establish their children's paternity, which could lead to a court order that fathers pay child support. Many mothers are reluctant to name their children's fathers.

5.6 IMPACT OF FAILURE TO PAY PREMIUMS ON CHURNING AND TURNOVER

Have premiums caused additional churning in the BadgerCare population relative to what would have existed in the absence of premiums? Are there cases in which entire families drop coverage for failure to pay premiums, including children who are entitled to retain coverage? How frequently does this occur?

In an analysis of the administrative enrollment data, we found no evidence that premium payment increased churning. In fact, because of the mandatory waiting period of 6 months for premium-paying families following disenrollment for reasons other than "good cause," families who had paid premiums were more likely to delay reenrollment compared to nonpremium-paying families in the short term. However, they exhibited similar disenrollment and reenrollment patterns as nonpremium-paying families in the long term.

We also found that most (two-thirds) of families who paid premiums always paid their premiums on time. Furthermore, in more than half of the families who missed a premium payment, no family members were disenrolled for failure to pay premiums. In only a small number of families (< 2 percent of premium-paying families) were Medicaid eligible children disenrolled with other family members after failing to make premium payments.

Nevertheless, many families reported difficulties in making the premium payments each month. One out of four respondents for the disenrolled premium-paying families in our Disenrollee Survey reported problems paying the relatively modest premiums of the program. In fact, "problems paying the premium" was the most frequent reason given as the main reason for disenrolling.

Problems paying premiums was also a significant factor in disenrolled families' decisions to not reapply for BadgerCare. Ten percent of the respondents for these families said that they did not reapply because they could not afford the premiums, and almost 3 percent noted problems in getting the premium payments to the State. Thus, premiums appear to be a significant contributing factor to turnover, but not churning.

5.7 INTEGRATION WITH ESI AND MEDICAID MANAGED CARE

What percentage of the BadgerCare population receives coverage through Medicaid managed care, through exclusively FFS Medicaid/BadgerCare, and through employer-sponsored insurance?

Wisconsin's Medicaid managed care delivery system for the AFDC-related/Healthy Start population is the primary health care delivery system under BadgerCare. However, if an eligible family has access to a qualifying ESI plan and the plan is determined to be cost effective compared with enrollment in a Medicaid HMO, the State buys into the ESI plan for the family.

The HIPP program, Wisconsin's premium assistance plan, is one of the major innovative features of BadgerCare. However, to date, HIPP has succeeded in enrolling only a handful of program eligibles. Measures taken to improve HIPP enrollment, including lowering the required employer contribution amount from 60 percent to 40 percent and allowing self-funded employer plans to be considered as qualifying HIPP plans, did not increase enrollment.

The main reason cited for low enrollment in HIPP is stringent eligibility rules for families, employers, and health plans. Low familiarity and understanding of the program and a general opposition to expanded government involvement in health care among Wisconsin employers and their representatives also hampered enrollment. The State has not conducted any BadgerCare outreach or education programs for the business community.

For BadgerCare families not in an ESI plan and residing in a geographic area served by two or more Medicaid HMOs, enrollment in a Medicaid managed care plan is mandatory. Families in a geographic area served by a single Medicaid HMO have a choice between HMO or FFS coverage. Those in areas with no Medicaid HMO service are enrolled in FFS. Furthermore, families are covered by FFS Medicaid during the time it takes for them to enroll in an HMO or ESI plan.

We found that three-fourths of BadgerCare enrollees were enrolled in an HMO plan for at least part of their enrollment episodes and one-quarter were enrolled exclusively in FFS. Because BadgerCare enrollees are more geographically dispersed and more likely to live in areas not served by two or more Medicaid HMOs, compared with AFDC-related Medicaid eligibles, a slightly higher percentage of BadgerCare enrollees were enrolled in FFS exclusively, compared

with traditional Medicaid enrollees. Furthermore, the percentage of traditional Medicaid enrollees with FFS exclusively increased from 19 percent prior to BadgerCare implementation to 23 percent post-BadgerCare. This latter result may be due to the concurrent enrollment of Medicaid eligible children with their BadgerCare eligible parents in geographic areas not served by more than one HMO.

The initial delay in HMO enrollment was substantial for 7 to 8 percent of enrollees (i.e., greater than 6 months). Some of the delay was due to the State back dating eligibility from the date of application. Proportionally more Medicaid enrollees had lengthy delays in initiating HMO enrollment post BadgerCare. These delays are troublesome because they could potentially lead to delays in receiving prenatal and well-child care. However, the State has successfully implemented practices to reduce delays in HMO enrollment for pregnant women.

5.8 STAKEHOLDER SATISFACTION

How do the various interested parties view the demonstration now that it has been implemented and is operating?

BadgerCare is widely viewed as a success by those involved with the program. The nature of its perceived success and remaining concerns vary according to the stakeholder's perspective. State officials view BadgerCare's higher than expected enrollment as evidence that the program is meeting its two fundamental goals of reducing uninsurance and supporting the transition from welfare to work. They cite the program's quick start-up and efficient administration as successful outcomes of early design decisions to build BadgerCare on existing Medicaid infrastructure.

Health care advocates applaud BadgerCare's success in increasing access to health care, hailing BadgerCare as a "lifeline" and praising its success in extending insurance among adults and rural residents. At the same time, they remain attentive to specific aspects of program operations that may create barriers for individuals.

Managed care plans value BadgerCare's role in extending coverage to previously uninsured individuals but remain concerned over the cost effect of the program's higher proportion of adult enrollees. Nevertheless, they praise the responsiveness of state health officials to their needs and are committed to working with the program.

Health care providers in primary care and tribal health centers value BadgerCare as a means of increasing the support available to provide care for previously uninsured clients. For tribal health officials, however, substantial barriers to increasing enrollment remain for tribal members in the premium-paying income range who are accustomed to free care through the Indian Health Service.

Among all stakeholders, representatives of business associations expressed the greatest reservations about BadgerCare. Their concerns center on the program's effect on government costs and potential for crowd-out of ESI. In particular, they object to state provision of a relatively rich benefits package at a time when small businesses and other employers are facing rapid premium escalation that makes it increasingly difficult for them to offer insurance.

More than 80 percent of BadgerCare families asked about their satisfaction with the program responded that they were satisfied or very satisfied with the family's overall experiences with BadgerCare. Among Family Survey respondents, BadgerCare participating families reported experiencing better access to care than eligible nonparticipating families. In addition, BadgerCare families were more likely to have a usual source of care, had fewer unmet health care needs, and were more confident that they could obtain care when needed than eligible nonparticipating families. Similarly, disenrolled premium-paying families were more satisfied with their health care coverage while enrolled in BadgerCare than they were with their health care coverage at the time of the Disenrollee Survey. These families had experienced poorer access to care and greater unmet health care needs since leaving BadgerCare.

BadgerCare enrollees participating in focus groups viewed BadgerCare as distinct from Medicaid and expressed a desire to retain this distinction. However, those with prior experience with private insurance found the enrollment process and redetermination process burdensome and were frustrated by the difficulty of accessing dental care. Dental care was the service type with the greatest unmet need among surveyed participating, eligible non-participating, and disenrolled families alike.

Finally, legislative support has been sustained without reductions in benefits or eligibility, despite challenges from conservative legislators. The program is widely viewed as an achievement that

resonates with the State's longstanding commitment to increase access to health care and its more recent crusade to reduce welfare dependency.

5.9 REVENUES AND COSTS

What are the funding sources for the BadgerCare program, and what is the relative importance of each? How much do premiums contribute to total revenues?

BadgerCare is largely supported by federal funds, which account for nearly two-thirds of the program's revenue. All BadgerCare children are funded under Title XXI (SCHIP) with enhanced federal matching funds at 71 percent. Until January 2001, parents and their spouses were funded under a Title XIX Section 1115 waiver at a 59 percent federal matching rate. Premiums have contributed a small portion—approximately 2 percent—of total program revenues.

State funding for BadgerCare is limited to the amounts appropriated for the program. If the program's costs are projected to exceed budgeted levels, the State may implement an enrollment trigger, subject to approval by the Joint Committee on Finance, to reduce the income level at which new families enroll in the program.

The State's ability to sustain its portion of program funding was called into question soon after its initial implementation, as higher than expected growth in enrollment strained the program's fiscal viability. To relieve the financial pressure without resorting to lowering the upper income limit for BadgerCare eligibility, the State requested and in January 2001 was awarded a Section 1115 waiver that granted the State use of Title XXI funds with the higher federal reimbursement of 71 percent for parents with income above 100 percent of the FPL. Parents with income at or below 100 percent of the FPL remain funded under the Title XIX waiver with the regular federal matching rate of 59 percent. The Title XXI waiver amendment increased federal funding by $6.2 million in state fiscal year (SFY) 2002 and by $7.5 million in SFY 2003 (DHFS, 2003a).

However, in addition, the Title XXI waiver essentially locked the State into its current definitions of financial eligibility. If the State were to reduce the upper income limit for financial eligibility, as envisioned under the enrollment trigger provision, the higher match rate would be revoked.

Projected enrollment and funding for the BadgerCare program in SFYs 2003 through 2005 are shown in ***Table 5-1***. Enrollment has already exceeded the projected 106,523 for 2003, and is expected to rise to 125,814 by 2005. State funds are projected to cover approximately 32 percent of program costs, whereas the federal government covers 64 to 65 percent in each of these years. The percentage of revenues from premiums is expected to rise from 2 percent in 2003 to 4 percent in 2005.

Table 5-1. Projected BadgerCare Enrollment and Funding, State Fiscal Years (SFY) 2003-2005

	SFY 2003		SFY 2004		SFY 2005	
	Number	Percentage	Revenues	Percentage	Revenues	Percentage
Children	34,924	32.8	42,491	35.1	44,806	35.6
Parents	71,599	67.2	78,533	64.9	81,008	64.4
Total	106,523	100.0	121,024	100.0	125,814	100.0
	Revenues	Percentage	Revenues	Percentage	Revenues	Percentage
State (GPR)	$61,100,900	31.8	$65,854,200	31.8	68,401,100	31.6
Federal	125,439,000	65.3	134,618,800	65.0	139,399,500	64.3
Premiums	4,306,600	2.2	6,575,700	3.2	8,954,300	4.1
Segregated Funds	1,160,700	0.6	0	0	0	0
Total	$192,007,200	100.0	$207,048,700	100.0	$216,754,900	100.0

Source: Wisconsin Department of Health and Family Services (DHFS), Division of Health Care Financing, Bureau of Health Information. September 2003a. *BadgerCare at a Glance*. Madison, WI: DHFS.

5.10 CONCLUSIONS

By all accounts, BadgerCare has succeeded in achieving its main objective of bridging the gap between Medicaid and private insurance for the working poor. BadgerCare exceeded enrollment projections soon after implementation and continues to gain new enrollees each month. The program has been credited with keeping the rate of uninsurance in the State among the lowest in the nation throughout the recent economic downturn.

The program's success is attributed in part to the collaborative program planning process in which program planners sought and received input from all key stakeholders. Success is also attributable

to the State's progressive tradition in health care and the determination of a handful of policy makers to develop a workable solution.

Program planners credit BadgerCare's quick start-up and effective operation to the decision to use the existing Medicaid infrastructure (including the eligibility determination and health care delivery systems) and to fine-tune the system later as needed. The collaborations forged during the program's planning phase continue to help to bring about the needed system changes.

Besides the implementation and enrollment successes, other significant findings of the evaluation include the following:

- BadgerCare enjoys wide name recognition in the State, attesting to the success of its outreach efforts. The program is viewed as distinct from Medicaid and thereby has succeeded in reducing welfare stigma typically associated with public programs.
- The ability to enroll the entire family in a single health insurance plan was viewed as desirable by most enrollees but was not the most critical factor driving their enrollment.
- Most enrollees who paid premiums believed that they were reasonable in amount. Premiums were a deterrent to enrollment for a relatively small number of families. Furthermore, we found that premiums were not a significant factor affecting the high reenrollment found in the first few years following disenrollment (i.e., churning).
- BadgerCare has also succeeded in improving the continuity of enrollment among low-income publicly insured individuals. Of note is the greater likelihood of continued eligibility and enrollment of women with Medicaid-covered deliveries who would otherwise be uninsured during their infant's first year of life.
- BadgerCare enrollees enjoyed equivalent or better access to care as individuals enrolled in employer-sponsored insurance (ESI) plans and much better access than uninsured, low-income families. Problems accessing dental care were common among all insurance coverage groups.
- No significant differences were seen in reported health status between BadgerCare adult or child enrollees and adults and children who were either uninsured or covered by ESI or other insurance.

Despite the many successes of the program, a few challenges remain. In particular, we found the following areas in which improvements could be made in the program:

- Wisconsin's premium assistance plan has not been successful in enrolling a significant number of families. Stringent eligibility rules for families, employers, and health plans and the lack of efforts to promote the programs to the business community were given as reasons for this failure.
- Churning was high among Medicaid and BadgerCare children. As many as 15 to 20 percent of children reenrolled after only 1 month, and 60 to 70 percent had reenrolled within the first 2.5 years after disenrolling.
- Whereas three-fourths of BadgerCare enrollees are enrolled in HMOs, the delay in initial enrollment in a plan following BadgerCare enrollment was sometimes substantial, potentially leading to delays in receiving routine health care.

Despite the program's success of reaching low-income, uninsured individuals, those who remain uninsured in the State experience substantial unmet health care needs and frequently forego routine and preventive health care. Many of these individuals are precluded from enrolling in BadgerCare because of waiting periods or other program eligibility conditions. Furthermore, none of the uninsured adults in eligible nonparticipating families surveyed in our study reported working for employers offering family coverage.

In three out of four disenrolled premium-paying families, family members experienced periods of no insurance following disenrollment. These families also reported relatively higher rates of adults and children in fair to poor health and with greater unmet health care needs.

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Appendix A

COMPARISON OF LOW-INCOME ADULTS AND CHILDREN FROM THE 1999 NATIONAL SURVEY OF AMERICA'S FAMILIES AND THE BADGERCARE FAMILY SURVEY NATIONAL SCHOOL LUNCH PROGRAM SAMPLE

We also compared selected characteristics of the National School Lunch Program (NSLP) sample with those of the weighted sample from the 1999 National Survey of America's Families (NSAF). Because our sample was designed to identify Medicaid/BadgerCare covered and uninsured individuals, we compared these income groups only.

The demographic characteristics of adults and children from the two samples are shown in ***Table A-1***. Compared to the NSAF sample of Medicaid/BadgerCare enrollees, the NSLP sample had a higher percentage of Medicaid/BadgerCare adult and child enrollees who were male, white non-Hispanic, and residing outside of Milwaukee. The NSLP sample also had a higher percentage of Medicaid/BadgerCare adults aged 35 to 64, children aged 11 to 17, and foreign born adults. These differences are in the expected direction given the program changes, from 1999 to 2002.

Among the uninsured, we see fewer Native American and foreign born adults and children in the NSLP sample compared to the NSAF sample. In addition, the NSLP sample has a greater percentage of adults aged 35 to 64 and children aged 11 to 17, and fewer adults and children residing outside of Milwaukee. Most of these differences can be explained by the different sample designs.

Selected access to care and service use measures for adults and children in the NSLP and NSAF samples are shown in ***Table A-2***. Medicaid/BadgerCare adults and children in the NSLP sample were somewhat more likely to have a usual source of care than Medicaid/BadgerCare adults and children in the NSAF sample. In addition, the source of care was more likely to be a clinic or hospital outpatient department (OPD) and less likely to be a hospital emergency room (ER) for the NSLP sample compared with the NSAF sample.

Furthermore, whereas Medicaid/BadgerCare adults in the NSLP sample had fewer unmet medical/surgical needs, they had more

unmet dental needs than Medicaid/BadgerCare adults in the NSAF sample. Medicaid/BadgerCare children in the NSLP sample had greater unmet needs in all three service types studied—medical/surgical care, dental care, and prescription drugs. Finally, Medicaid/BadgerCare adults and children in the NSLP sample were slightly more likely to have had physician visits and less likely to have had any ER visits in the prior year compared to adults and children in the NSAF sample. However, Medicaid/BadgerCare enrollees in the NSLP sample were less likely to have had dental visits than the NSAF sample enrollees. NSLP child enrollees were also less likely to have had any well-child visits than the NSAF sample. This latter finding is likely due to the relatively older age of children in the NSLP sample rather than to differences in access to care.

Among the uninsured, adults and children in the NSLP sample were less likely to have had a usual source of care; more likely to have had unmet medical/surgical, dental, and prescription drug needs; and less likely to have had any dental visits in the prior year compared with adults and children in the NSAF sample. Uninsured children in the NSLP sample were also much less likely to have had any well-child visits in the prior year and were much more likely to have had ER visits in the prior year compared to children in the NSAF sample. Without further analysis, we cannot determine whether these differences are due to a worsening of access to care for the uninsured in Wisconsin, BadgerCare covering those with relatively better access to care, or the varying demographic characteristics of the two samples described above.

Table A-1. Demographic Characteristics of Adults and Children with Family Incomes <200 Percent, by Insurance Status

	NSAF Sample		NSLP Sample	
	Medicaid/ BadgerCare	Uninsured	Medicaid/ BadgerCare	Uninsured
		Adults		
	(n = 210)	*(n = 239)*	*(n = 560)*	*(n = 334)*
Gender				
Female	86.0%	72.5%	72.9%	71.4%
Male	14.0%	27.5%	27.1	28.6
Age				
18-34	66.1	51.2	44.6	34.7
35-64	33.9	48.8	55.4	65.3
Race/Ethnicity				
White Non-Hispanic	48.6	73.9	78.8	74.9
Black Non-Hispanic	36.8	9.5	11.5	10.5
Hispanic	8.4	9.4	4.1	7.7
Asian	0.3	1.0	2.3	2.0
Native American	5.6	6.4	1.3	1.5
Other	—	—	1.7	2.2
Geographic Residence				
Milwaukee	43.6	21.9	25.9	28.6
Balance of Wisconsin	56.4	78.1	74.1	71.4
Place of Birth				
U.S.	98.1	90.6	94.5	95.8
Foreign	1.9	9.4	5.5	4.2
		Children		
	(n = 482)	*(n = 190)*	*(n = 666)*	*(n = 228)*
Gender				
Female	51.2%	59.2%	46.6%	50.9%
Male	48.8	40.8	53.5	49.1
Age				
0 to 10	73.4	55.3	66.4	46.9
11 to 17	26.6	44.7	33.6	53.1
Race/Ethnicity				
White Non-Hispanic	43.7	70.3	69.8	75.4
Black Non-Hispanic	38.3	9.0	13.8	11.8
Hispanic	7.5	10.7	8.4	5.7
Asian	4.9	0.4	1.8	1.8
Native American	5.6	9.6	1.5	0.9
Geographic Residence				
Milwaukee	39.6	21.8	27.6	32.0
Balance of Wisconsin	60.5	78.2	72.4	68.0
Place of Birth				
U.S.	96.5	93.8	98.7	98.3
Foreign	3.5	6.2	1.3	1.7

Table A-2. Access to and Use of Health Care Services among Adults and Children with Family Incomes <200 Percent, by Insurance Status

	NSAF Sample		NSLP Sample	
	Medicaid/ BadgerCare	Uninsured	Medicaid/ BadgerCare	Uninsured
			Adults	
	(n = 210)	*(n = 239)*	*(n = 560)*	*(n = 334)*
Usual source of care				
None	11.6%	17.9%	9.2%	24.9%
Clinic or hospital OPD	53.1	54.6	61.3	47.5
Doctor's office	28.6	19.8	28.1	22.4
Hospital ER	6.7	6.0	1.1	2.7
Other/Don't know	0.0	1.7	0.3	2.5
Unmet Need				
Medical/Surgical	17.9	20.3	12.9	26.7
Dental	20.7	29.5	41.3	50.0
Drugs	12.0	14.3	11.6	28.4
Service Use (percent with any in past year)				
Physician visits	76.7%	55.4%	78.0%	55.6%
Dental visits	63.0	52.1	55.5	41.8
Emergency room visits	50.0	38.3	40.4	28.9
			Children	
	(n = 482)	*(n = 190)*	*(n = 666)*	*(n = 228)*
Usual source of care				
None	4.8%	11.8%	3.4%	23.3%
Clinic or hospital OPD	55.4	55.8	62.2	48.4
Doctor's office	37.7	27.6	33.1	21.2
Hospital ER	2.2	4.0	0.8	1.8
Other/Don't know	0.0	0.8	0.5	5.3
Unmet Need				
Medical/Surgical	4.5	10.3	13.5	29.4
Dental	8.6	14.3	40.8	46.9
Drugs	1.8	6.5	12.9	30.7
Service Use (percent with any in past year)				
Physician visits	83.5	50.1	86.9	46.9
Dental visits	74.4	64.6	68.1	56.6
Emergency room visits	40.2	24.0	32.3	76.8
Well-child visits	81.3	54.8	68.0	28.0