

North Carolina
Department of
Health and Human Services
Division of Medical Assistance

North Carolina
Medicaid Be Smart Family Planning Waiver
Waiver Year Five
Interim Annual Report

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**North Carolina Family Planning Waiver Program
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Other Evaluation Reports

Be Smart Evaluation reports for current and previous years are available online at:
<http://www.ncdhhs.gov/dma/services/familyplanning.htm>

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EXECUTIVE SUMMARY

The North Carolina Department of Health and Human Services (DHHS) engaged Navigant Consulting, Inc. to provide an independent evaluation of the State's Medicaid Family Planning Waiver, and to determine the extent to which the Waiver objectives have been met. This report presents the results of the evaluation on the performance of North Carolina's Medicaid "Be Smart" Family Planning Waiver Program for the five-year demonstration from October 1, 2005 to September 30, 2010.

Through our evaluation of the fifth year of North Carolina's Be Smart Family Planning Waiver, Navigant Consulting observed the following:

- The State enrolled an estimated 70,321 females and 8,743 males in Waiver Year Five, which includes both new enrollees and enrollees continuing into Waiver Year Five from prior years. This represents a 14 percent enrollment rate for women from an estimated 514,168 potential female enrollees across the State, and a 2 percent enrollment rate for men from an estimated 444,906 potential male enrollees.¹
- Among enrollees, the Waiver is projected to provide services to an estimated 26,874 females and 93 males during Waiver Year Five. The participation rates among Waiver enrollees are estimated to be 38 percent among enrolled women and 1 percent among enrolled men.
- Across the five-year demonstration, the Be Smart Family Planning Waiver is estimated to be budget neutral with respect to Federal expenditures. The reduced costs associated with the estimated range of 2,240 to 2,318 averted births for Waiver Year Five offset the costs of the Waiver by an estimated \$20.5 to \$21.5 million.
- Although data are not yet available for Waiver Year Five, the number of primary care referrals among the participants surveyed during Waiver Year Four was higher than in Waiver Year Three, 48 percent of females compared with 35 percent, respectively.
- Although data are not available for Waiver Year Five, among Non-Participant Survey respondents, 44 percent of respondents who did not use services in Waiver Year Four indicated they planned to use Be Smart services

¹ The number of potential eligibles was determined using American Community Survey (ACS) population data.

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in Waiver Year Five. As in Waiver Year Three, survey responses continued to indicate a lack of knowledge about and eligibility for the program.

- The Family Planning Waiver expenditures are estimated to be approximately \$8.4 million for Waiver Year Five. The average costs per participant for Waiver Year Four was approximately \$307 and projected to be \$311 for Waiver Year Five.

Table 1 displays the summarized results for Waiver Year Four for the 14 measure objectives outlined in the Waiver Evaluation Plan; Waiver Year Five results were too preliminary to present at this time. In this report, Navigant Consulting provides results for thirteen of the measures because the data required for the one remaining measure is not yet available.

Table 1: Summary of Waiver Year Four Measure Results

Hypothesis Number	Measure Objective	Waiver Year Four
Short-term Outcomes		
C.1.1	Increase the number of eligible men and women enrolled.	Women: 13%
		Men: 3%
C.1.2	Increase the number of women receiving services.	39%
C.1.3	Increase the number of men receiving services.	3%
C.1.4	Increase the number of women returning for services.	26%
C.1.5	Increase rate of continuous use of contraception among Waiver participants with any contraceptive use.	23%
C.1.6	Increase the use of more effective methods of contraception among Waiver participants with continuous contraceptive use.	Effectiveness Score: 96.5
Intermediate-term Outcomes		
C.2.1	Reduce the number of inadequately spaced pregnancies to enrolled women.	2%
C.2.2	Reduce the number of unintended pregnancies among women eligible for Medicaid.	Not Reported

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Table 1: Summary of Waiver Year Four Measure Results (*continued*)

Hypothesis Number	Measure Objective	Waiver Year Four
Long-term Outcomes		
C.3.1	Decrease the number of Medicaid paid deliveries and annual expenditures for pregnancy, newborn and infant care among Waiver participants.	Age-Adjusted Births Averted Rate Range (per 1,000): 83.8 to 86.9
		Averted Births Range: 2,138 to 2,216
C.3.2	Estimate overall cost savings in Medicaid spending and assessment of budget neutrality.	Budget Neutral: Yes
		Overall Averted Medicaid Costs Range: \$27.69 to \$28.6 Million
		Estimated Medicaid Cost Savings Range: \$19.8 to \$20.8 Million
Process Indicators		
D.1	Increase awareness of availability of Waiver services.	21%
D.2	Increase the number of Waiver participants referred to a source of primary care.	48%
D.3	Assess or evaluate reasons for non-participation in the Waiver.	A majority of respondents reported they either did not know about the Be Smart program or did not know they were eligible for services, or both.
D.4	Increase the number of men and women receiving family planning services through Title X or Title XIX (includes Family Planning Waiver).	Number of men and women: 147,752

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The report that follows describes:

- Navigant Consulting's experience as the Waiver evaluator
- Background on the Be Smart Family Planning Waiver Program
- The Waiver Evaluation Plan and related objectives, hypotheses and measures
- The results of our evaluation of Waiver Years One through Five

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SECTION 1: INTRODUCTION

This report presents the results of Navigant Consulting's evaluation of North Carolina's Medicaid "Be Smart" Family Planning Waiver Program for Waiver Year Five – October 1, 2009 to September 30, 2010. Under a Section 1115 Demonstration Waiver, a state must demonstrate that over the five-year period of the Waiver, Federal Medicaid spending under the Waiver will not exceed what the Federal government would have spent in the absence of the Waiver.

Waiver Overview

Beginning in October 1, 2005, DHHS began enrolling women and men into the Be Smart Family Planning Waiver. The overall goal of the waiver is to reduce unintended pregnancies and improve the health and well-being of children and families in North Carolina. To achieve these ends, the Waiver makes family planning services available to men ages 19 to 60 and women ages 19 to 55, who have incomes at or below 185 percent of the Federal Poverty Level (FPL). Additional information regarding the Waiver's history, objectives, hypotheses and covered services are provided in Appendix A.

Waiver Evaluator

Navigant Consulting, Inc. is a specialized independent consulting firm providing litigation, financial, healthcare, energy and operational consulting services to government agencies, legal counsel and large companies facing the challenges of uncertainty, risk, distress and significant change. The firm has been in existence since 1996 and has offices across the United States and overseas.

Navigant Consulting's Healthcare practice Payer Group, the sector of the firm responsible for conducting this Waiver evaluation, specializes in providing consulting services and litigation support to state healthcare and social service agencies, state workers' compensation programs, third party payers and healthcare providers. We have experience in more than 45 states in the areas of managed care program design, implementation, monitoring; policy analysis; reimbursement and delivery system design, development and implementation; program evaluation; fraud and abuse and potential overpayment determination; Medicaid Management Information System (MMIS) and fiscal agent review; medical and healthcare claims review; and data and report preparation. Our work on this evaluation was supplemented with the assistance of one subcontractor, Alice Lin, Ph. D., who facilitated Waiver Years One, Two and Three participant focus groups for this Waiver evaluation.

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Organization of the Annual Report

The remainder of this Annual Report is divided into the following sections:

- SECTION 2: WAIVER EVALUATION PLAN
- SECTION 3: RESULTS

The report also includes the following appendices:

Appendix A: Background on the Be Smart Family Planning Waiver

Appendix B: Summary of Waiver Program Measures and Data Sources

Appendix C: Data Sources

Appendix D: Maps of Enrollment and Participation

Appendix E.1: Count and Location of Provider Specialties Providing Services to Waiver Year Four Participants, by County

Appendix E.2: Count of Waiver Year Four Participant Visits by Provider Specialty, by County

Appendix F: New Enrollee Survey

Be Smart Evaluation reports for current and previous years are available online at:

<http://www.ncdhhs.gov/dma/services/familyplanning.htm>

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SECTION 2: WAIVER EVALUATION PLAN

Introduction

North Carolina's Centers for Medicare and Medicaid Service's-approved Evaluation Plan is designed to measure short-term, intermediate and long-term outcomes and impact of the Waiver using hypotheses to test the seven objectives listed in the previous section. The Evaluation Plan included additional hypotheses related to process goals for the Waiver that will measure the effectiveness of the delivery system of the Waiver. The Evaluation Plan also identified the data sources to use to calculate the measures to test these hypotheses.

There are two major components of the Waiver Evaluation Plan. The first component of the Plan is designed to evaluate the overall impact of the Waiver. The second component of the Plan addresses the Clinical Innovation Project.

Waiver Evaluation Objectives

The Waiver Evaluation Plan is designed to assess the overall impact of the Waiver using the Waiver objectives listed in Section 2 of this report and to evaluate the Clinical Innovation, a key intervention to provide enhanced family planning services to a demonstration group of Waiver participants. Navigant Consulting will evaluate the impact of the Waiver objectives for all five years of the demonstration. We began to evaluate the Clinical Innovation initiative in August 2009 and will continue this evaluation for the last year of the Waiver.

To conduct the analyses of the Waiver objectives, the Division of Medical Assistance (DMA) identified specific hypotheses, as well as methods and measures to test these hypotheses. There are 14 hypotheses, classified as either short-term (6), intermediate-term (2) or long-term (2); there are also four (4) process measures. These hypotheses and measures are summarized in Table 2 on the following page.

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Table 2: Summary of Hypotheses and Measures Used to Determine if Waiver Objectives Were Met

Waiver Identification	Hypothesis	Measure Objective
Short-term Outcomes: Linking the Target Population to Program Activities		
C.1.1	Increased proportions of eligible women and men will be enrolled in the Waiver each year.	Increase the number of eligible men and women enrolled.
C.1.2	More low-income women who are enrolled in the Waiver will receive family planning services.	Increase the number of women receiving services.
C.1.3	More low-income men who are enrolled in the Waiver will receive family planning services.	Increase the number of men receiving services.
C.1.4	Participant women will be less likely to be lost to follow-up.	Increase the number of women returning for services.
C.1.5	Participant women will be more likely to report continuous use of a contraceptive method.	Increase rate of continuous use of contraception among Waiver participants with any contraceptive use.
C.1.6	Participant women will be more likely to report use of a highly effective method of contraception.	Increase the use of more effective methods of contraception among Waiver participants with continuous contraceptive use.
Intermediate Outcomes: Linking Program Activities to Intermediate Impact		
C.2.1	Participant women will be less likely to have inadequately spaced pregnancies.	Reduce number of inadequately spaced pregnancies to enrolled women.
C.2.2	Lower rates of unintended pregnancy among Waiver participants.	Reduce the number of unintended pregnancies among women eligible for Medicaid.
Long-term Outcomes: Linking Intermediate Impact to Long Term Impact		
C.3.1	Fewer Medicaid paid deliveries and lower annual costs for prenatal, delivery, newborn and infant care.	Decrease the number of Medicaid paid deliveries and lower annual expenditures for pregnancy, newborn and infant care for Waiver participants.
C.3.2	The program achieves cost savings and is budget neutral.	Estimate overall cost savings in Medicaid spending; and assessment of budget neutrality.

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Table 2: Summary of Hypotheses and Measures Used to Determine if Waiver Objectives Were Met (*continued*)

Waiver Identification	Hypothesis	Measure Objective
Process Indicators: Performance Indicators and Quality Improvement		
D.1	Increased percentages of enrollees will indicate that they heard about Waiver services from at least two sources.	Increase awareness of availability of Waiver services.
D.2	Increased proportion of Waiver participants lacking a source of primary care at the time of their enrollment in the Waiver will be referred to an appropriate source of primary care.	Increase the number of Waiver participants referred to a source of primary care.
D.3	Increase understanding about reasons for non-participation.	Assess or evaluate reasons for non-participation in the Waiver.
D.4	Funds available through the Waiver will not supplement or substitute for Title X funds that could also be used for providing family planning services to low-income populations.	Increase the number of men and women receiving family planning services through Title X or Title XIX (includes Family Planning Waiver).

Waiver Measures

The Evaluation Plan specifies the measures to be used to test each hypothesis, and are listed in Appendix B. In addition to these measures, the Evaluation Plan specifies that the evaluation should include targets, or “benchmarks,” to assess whether the objectives of the Waiver have been met. These targets are to be completed after the baseline analysis. The Evaluation Plan suggests that these targets be set in a way that allows comparison with other State programs, particularly, the Title X Family Planning Program. The Department of Health and Human Services (DHHS) representatives have reported to us, however, that this population is not similar to the Waiver population in the year prior to the implementation of the Waiver, and there is likely no other population to which the Waiver population can be compared. Instead, for this and prior evaluations, Navigant Consulting analyzed trends in the measure statistics over the course of the Waiver to evaluate if the Waiver Program has met its stated objectives. As more Waiver data have become available, we have begun to identify trends in the measure statistics and we have included comparisons to other states, where possible. *Navigant Consulting intends to provide a complete comparison of Waiver Year One through Waiver Year Five findings when all data are complete.*

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We propose to conduct comparisons between Waiver Years as final data for each Waiver Year become available. At this time, the MMIS claims data for Waiver Year Five do not include a complete database of paid claims. The findings based on this database provide interim results that will be updated upon the availability of outstanding Waiver Year data sources.²

In developing targets and evaluating whether the Waiver has achieved the desired results, Navigant Consulting believes it is important to consider the following:

- **Impact of outside events.** As the State described in the “Limitations” section of the Waiver Evaluation Plan, many events may influence the results of measures the State proposes to use to evaluate the Waiver. For example, a prolonged decrease in the employment rate among the target population could potentially increase the fertility rate over a period of time as increased income has been associated with lower birth rates. It is possible that such changes could mask the positive impact of the Waiver.
- **Demonstrated success across all proposed measures.** The State is measuring the program’s success across a wide variety of measures and it is possible that the State could see success on some but not all of the proposed measures. For example, the target population’s fertility rate may not decrease from year to year as hypothesized, while all of the other statistics move in their hypothesized direction indicating that the Waiver is having its intended effect for the targeted population.

Data Sources

The data sources listed on the following page were proposed in the evaluation plan as potential sources to develop the measures described in Appendix B to test the Waiver hypotheses. Navigant Consulting has used these data sources, as proposed, in our analyses, as shown in Appendix C. Appendix C provides background and detail for each of the data sources listed, including information about how each source is used within this report.

² Since the Pregnancy Risk Assessment Monitoring System (PRAMS) data are not available for approximately two years after the completion of a Waiver Year, updates might exclude PRAMS data.

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- MMIS Claims and Eligibility Files
- Health Services Information System (HSIS) Reports
- Vital Statistics Data (Baby Love)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- American Community Survey (ACS)
- A Pocket Guide to Managing Contraception³
- Participant Survey
- Non-Participant Survey (Non-Participant Survey report is available on-line at <http://www.ncdhhs.gov/dma/services/familyplanning.htm>)
- Baseline Fertility Rate Calculations (Baseline Fertility Report is available on-line at <http://www.ncdhhs.gov/dma/services/familyplanning.htm>)

³ Hatcher RA, Ziemann M, et al. "A Pocket Guide to Managing Contraception." Tiger, Georgia: Bridging the Gap Foundation, 2007, p. 40.

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SECTION 3: RESULTS

Introduction

In this section of our report, Navigant Consulting presents the results of the analyses described in Section 2. We report results for 13 of the 14 measures. We do not report the results for measure C.2.2, because the PRAMS survey will not have data available for the first three months of Waiver Year Five until summer 2012. Data will not be available until summer 2013 for the remaining nine months of the Waiver Year.

Results

Navigant Consulting presents the results for the measures in the following pages.

We present the measure results in a table with columns for each of the five Waiver Years. The results for Waiver Year Five are preliminary because there were only four months of data available at this time, when possible we have projected results for Waiver Year Five otherwise we do not report Waiver Year Five results. For most measures, the results for Waiver Years One through Four are updated; however, the number of births averted and cost savings for Waiver Year Four are preliminary until final birth counts are available.

Navigant Consulting proposes to conduct comparisons between Waiver Years as final data for each Waiver Year becomes available. At this time, the MMIS claims data for Waiver Year Five do not include a complete database of paid claims. The results based on this database provide interim results that will be updated upon the availability of all outstanding Waiver Year data sources.

In Appendix D, since Waiver Year Five data are preliminary, Navigant Consulting presents four maps that display Waiver activity for Waiver Year Four among the counties in the state. The maps demonstrate visually how female and male Waiver enrollees and participants are distributed across the State and will be updated for Waiver Year Five for the final report.

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Discussion

The State developed the Waiver Evaluation Plan before an in-depth analysis of data sources was undertaken. As a result, it was difficult to predict the data sources that could be used to measure the results for each of the stated objectives and measures for the program. Therefore, Navigant Consulting has interpreted the evaluation plan as necessary in conducting this evaluation. For example, although the evaluation plan suggests that HSIS data, coupled with MMIS claims data, can be used for several measures, we determined that the MMIS claims data provide all of the service information related to Family Planning Waiver services that we required to conduct our analyses for the related measures. However, HSIS data are used to measure D.4 to compare Waiver family planning services with Title X services provided at clinics.

Within the discussion section for each measure, Navigant Consulting summarizes the results of the measure and any data limitations or considerations when reviewing the results.

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Objective C.1.1: Short-term Outcome – Increase the number of eligible men and women enrolled.

Measure Definition: Unduplicated count of clients enrolled divided by unduplicated count of eligible clients.

Hypothesis: Increased proportions of eligible men and women will be enrolled in the Waiver each year.

Data Sources: MMIS Claims and eligibility files; ACS

Calculation: Navigant Consulting calculated the unduplicated count of enrollees in the Waiver from MMIS as a percentage of estimates of eligible clients from the ACS.

Annual Results: The following tables show the measure results for all women and men in the age category that defines eligibility and by five age categories.

Table C.1.1.1: Female Enrollee Rate, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ⁴
19 – 55	5%	9%	10%	13%	14%
19 – 39	8%	12%	14%	19%	20%
Age Category					
19 – 24	11%	19%	20%	25%	25%
25 – 29	7%	13%	15%	19%	21%
30 – 34	5%	9%	11%	16%	17%
35 – 39	4%	6%	7%	9%	11%
40 – 55	1%	2%	3%	3%	4%

⁴ Waiver Year Five data are preliminary.

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Table C.1.1.2: Male Enrollee Rate, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ⁵
19 – 60	1%	2%	2%	3%	2%
19 – 39	2%	3%	3%	3%	3%
Age Category					
19 – 24	2%	3%	3%	4%	3%
25 – 29	2%	3%	2%	3%	2%
30 – 34	2%	3%	2%	3%	3%
35 – 39	1%	2%	2%	3%	2%
40 – 60	1%	1%	1%	1%	1%

Discussion:

The enrollment rate among women of all ages is 14 percent, or an estimated 70,321 enrollees of 514,168 women eligible in North Carolina. The enrollment rate among women ages 19 to 39 is 20 percent, or an estimated 63,168 enrollees of 323,497 women eligible in North Carolina. The enrollment rate is highest for the youngest age category, 19 to 24 year old women, at 25 percent. We have overstated the number of eligible women in North Carolina because this estimate of 514,168 women includes women who are pregnant and women who are unable to become pregnant; neither group would qualify for Family Planning Waiver services. We provide the enrollment rate for 19 to 39 year olds to show that there was a higher enrollment rate for women who we expect to have higher fertility rates.

The enrollment rate among men of all ages is 2 percent, or 8,743 enrollees of 444,906 men eligible in North Carolina. The enrollment rate among men ages 19 to 39 is 3 percent, or 6,590 enrollees of 249,609 men eligible in North Carolina. The enrollment rate is highest among 19 to 24 year old men and 30 to 34 year old men, at 3 percent. We have overstated the number of eligible men because this estimate includes men who are already

⁵ Waiver Year Five data are preliminary.

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sterile and therefore would not qualify for Family Planning Waiver services.

Navigant Consulting presents maps showing the distribution of enrollees across the State in Appendix D.

Evaluation:

Navigant Consulting projected the total number of enrollees for Waiver Year Five based on the current number of enrollees and the historical relationship between the number of enrollees and participants. The number of women enrolled in the Waiver is projected to increase from Waiver Year Four to Waiver Year Five; however, the number of men is expected to decrease.

The enrollment rate increased five percentage points among women ages 19 to 39 from Waiver Year Three to Waiver Year Four, and we are projecting one percentage point increase for Waiver Year Five. Women ages 19 to 24 and 30 to 34 experienced the highest enrollment rate increase of five percentage points, from the third Waiver Year to the fourth, while enrollment of women ages 40 to 55 remained constant. The overall estimated enrollment rate of 14 percent for Waiver Year Five was the highest among the waiver years, but was low considering that other states target at least 50 percent of eligibles to be enrolled.

The enrollment rate among men ages 19 to 60 increased one percentage point from Waiver Year Three to Waiver Year Four; however, we are projecting a one percentage point decrease in Waiver Year Five. The overall enrollment rate among men of three percent for Waiver Year Four was the highest among waiver years.

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Objective C.1.2: Short-term Outcome – Increase the number of women receiving services.

Measure Definition: Unduplicated count of enrollees receiving services in the last 12 months (participants).

Hypothesis: More low-income women who are enrolled in the Waiver will receive family planning services.

Data Source: MMIS Claims

Calculation: Navigant Consulting divided the count of female participants by the count of female enrollees.

Annual Results: The following table shows the measure results for all women in the age category that defines eligibility and by five age categories.

Table C.1.2: Female Participation Rate, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ⁶
19 – 55	39%	39%	38%	39%	38%
Age Category					
19 – 24	45%	45%	42%	44%	44%
25 – 29	40%	40%	40%	40%	41%
30 – 34	34%	35%	35%	37%	37%
35 – 39	29%	30%	30%	31%	30%
40 – 55	19%	19%	21%	22%	22%

Discussion: The numerator of Objective C.1.1, number of female enrollees, becomes the denominator of this measure. The participation rate among female enrollees is projected to be 38 percent overall, or 26,874 participants of the 70,321 female enrollees. The participation rate is projected to be slightly lower than Waiver Year Four. Participation rates consistently decrease with age,

⁶ Waiver Year Five data are preliminary.

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from a high of 44 percent for women ages 19 to 24 (12,083 participants of the 27,706 female enrollees), to a low of 22 percent for women ages 40 to 55 (1,596 participants of the 7,153 female enrollees).

Navigant Consulting presents the rate of female participation by county in the map in Appendix D, Figure D.3.

Evaluation:

Navigant Consulting projected the number of participants for Waiver Year Five because there were only four months of data available. We determined the number of participants using ratios calculated from actual participant counts from Waiver Years Three and Four.

Women ages 19 to 24 had the highest overall participation rate (44 percent). Participation for this age group increased by two percentage points from Waiver Year Three to Waiver Year Four; however, the participation rate decreased in Waiver Year Two (there was a decrease of three percentage points from Waiver Year Two to Three).

The overall participation rate of 38 percent is comparable to findings from other states in the region where rates range from 33 percent to 51 percent. South Carolina, for example, targets a participation rate of 50 percent for women.

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Objective C.1.3: Short-term Outcome – Increase the number of men receiving services.

Measure Definition: Unduplicated count of enrollees, participants and vasectomies.

Hypothesis: More low-income men who are enrolled in the Waiver will receive family planning services.

Data Source: MMIS Claims

Calculation: Navigant Consulting divided the count of male participants by the count of male enrollees.

Annual Results: The first table shows the measure results for all men in the age category that defines eligibility and by five age categories. The second table shows the number of men who had a vasectomy in each Waiver Year.

Table C.1.3.1: Male Participation Rate, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5
19 – 60	2%	2%	3%	3%	1%
Age Category					
19 – 24	1%	1%	2%	1%	<1%
25 – 29	4%	3%	3%	4%	1%
30 – 34	4%	3%	5%	4%	1%
35 – 39	3%	3%	4%	3%	1%
40 – 60	1%	1%	2%	3%	2%

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Table C.1.3.2: Number of Vasectomies, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ⁷
19 – 60	32	68	76	78	26

Discussion: The numerator of Objective C.1.1, number of male enrollees, became the denominator of this measure. The Waiver Year Five participation rate among male enrollees is projected to decrease from three percent to one percent overall, or 93 participants of the 8,743 male enrollees. The male participation rate is projected to be highest for the age group 40 to 60.

Navigant Consulting is estimating 26 waiver participants will receive vasectomies in Waiver Year Five; 28 percent of the projected 93 male participants.

We present the rate of male participation by county in the map in Appendix D, Figure D.4.

Evaluation: Navigant Consulting projected the number of participants for Waiver Year Five because there were only four months of data available. We determined the number of participants using ratios calculated from actual participant counts from Waiver Years Three and Four.

The rate of male participation continues to be much lower than the rate of female participation (1 percent compared to 38 percent). We would expect men’s participation to be lower in part because, with the exception of sterilization, other male contraceptives do not require medical intervention. Conversely, most female methods of contraception require a prescription, and therefore a visit to a health care provider. Furthermore, younger men typically do not seek out reproductive health screenings (with the exception of STI screenings) than younger women, and

⁷ Waiver Year Five data are preliminary.

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therefore may be less likely to visit a health care provider for services.⁸⁹

⁸ Sonfield, Adam. "Looking at Men's Sexual and Reproductive Health Needs." The Guttmacher Institute, May 2002, Volume 5, Number 2. <http://www.guttmacher.org/pubs/tgr/05/2/gr050207.html>

⁹ The Family Planning Waiver offers a limited range of services for men, which may explain low utilization of services as compared to services offered for women under the Waiver. It is also important to note that men generally have lower utilization of health care services than women.

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Objective C.1.4: Short-term Outcome – Increase the number of women returning for services.

Measure Definition: Participant return to clinic for annual visit and reason for visit.

Hypothesis: Participant women will be less likely to be lost to follow-up.

Data Source: MMIS Claims

Calculation: Calculate the ratio of female participants who received a follow-up annual visit within a 12 to 15-month time period to all females from the prior Waiver year who had an initial or annual examination.

Annual Results: The following table presents the percentage of women who returned for services from one Waiver year to the next. For informational purposes, the second table provides a count of women who received an initial or annual exam in each Waiver Year.

Table C.1.4.1: Percentage of Women Returning for Services, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ¹⁰
19 – 55		19%	22%	26%	7%
Age Category					
19 – 24		17%	21%	23%	6%
25 – 29		18%	22%	26%	7%
30 – 34		20%	24%	31%	7%
35 – 39		23%	25%	31%	10%
40 – 55		23%	25%	31%	10%

¹⁰ Waiver Year Five data are preliminary and only provide returning service data for the first four months of Waiver Year Five. This measure requires the first three months of data from Waiver Year Six to capture the 15-month period for women who had their first visit at the end of Waiver Year Four.

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Discussion: Of the 10,638 women who had an initial or annual examination in Waiver Year Three, 76 percent (8,115 women) returned for at least one service in Waiver Year Four. Of these women who returned for at least one service, 26 percent (2,128 women) had a follow-up annual examination in Waiver Year Four, 12 to 15 months after their visit in Waiver Year Three.

Although women ages 19 to 24 had the most return visits in Waiver Year Four (797), they also represented the age group with the most women who had a visit in Waiver Year Three (5,292 women). Therefore, despite the high number of returned visits, the proportion of women in this age group who returned for a visit in Waiver Year Four was the lowest of any age group, at 15 percent. Conversely, women in the 40 to 55 year old age group had the fewest return visits in Waiver Year Four (185), but also had the fewest visits in Waiver Year Three (645); thus the proportion of women in this age group who returned for a visit in Waiver Year Four (29 percent) is higher than the proportion of women in all other age groups.

Sixty-one percent of Waiver Year Four participants (15,474 of 25,515) had an initial or annual examination.¹¹ In Table C.1.4.2 on the next page, we provide the number of initial or annual examinations by age category. We will review Waiver Year Five and Six claims data for these women to determine whether they had a follow-up visit 12 to 15 months after the visit in Waiver Year Five.

¹¹ Initial or annual examination is defined by procedure codes listed in the Waiver Evaluation Plan.

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Table C.1.4.2: Number of Women with an Initial or Annual Examination, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ¹²
19 – 55	6,231	9,861	10,794	15,474	4,616
Age Category					
19 – 24	3,332	5,046	5,326	7,498	2,070
25 – 29	1,336	2,322	2,599	3,691	1,201
30 – 34	742	1,219	1,371	2,178	620
35 – 39	469	734	834	1,211	403
40 – 55	352	540	664	896	322

Evaluation: Although Waiver Year Five data are preliminary and only represent four months of service activity, we expect the trend of more women returning for an annual exam to increase for Waiver Year Five. The number of women who returned for an annual exam increased 41 percent comparing Waiver Years Three (1,508 women) and Four (2,128 women). The percentage of women who actually returned for an annual exam and had an initial or annual exam during the prior Waiver Year increased from 22 percent to 26 percent; however, this rate of return for annual exams appears low considering that only one quarter of women had a follow-up exam. The other services these women received were related to contraception services.

In comparison to other states, the rate of North Carolina participants who return for any type of Waiver service within 12 to 15 months is on target at 76 percent. Other states target return services of more than 50 percent, but include any Waiver service in this statistic as opposed to counting only annual exams. North Carolina’s rate of 25 percent of individuals returning for an annual exam should be targeted for improvement.

¹² Waiver Year Five data are preliminary.

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Objective C.1.5: Short-term Outcome – Increase rate of continuous use of contraception among Waiver participants with any contraceptive use.

Measure Definition: Continuous use of contraception during the year.

Hypothesis: Participant women will be more likely to report continuous use of a contraceptive method.

Data Sources: MMIS Claims

Calculation: Calculate the ratio of unduplicated female participants with continuous use of a contraceptive method to all female participants who had a contraceptive claim in the Waiver year.

Annual Results: The following table shows the percentage of women who continuously used contraception from one Waiver year to the next.

Table C.1.5.1: Percentage of Women Using Continuous Contraception, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Waiver Year 5 ¹³
19 – 55		25%	21%	23%	
Age Category					
19 – 24		24%	19%	21%	
25 – 29		27%	21%	22%	
30 – 34		26%	23%	23%	
35 – 39		28%	25%	26%	
40 – 55		35%	24%	31%	

¹³ Waiver Year Five data are too preliminary to provide a statistic because there were only four months of Waiver activity.

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Table C.1.5.2: Number of Sterilizations, by Waiver Year

Sex	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ¹⁴
Male	32	68	76	78	8
Female	207	310	249	315	35

Discussion:

This measure includes those contraceptive methods that are indicated by Waiver claims. It does not include methods that are not indicated by Waiver claims, e.g., condom use. Consistent claims data for a method of contraception over the course of each study year will represent consistent use of contraception over the year’s time period. Less consistent claims data will signify less consistent use.

We have established the following timeframes over which to count women who were continuous users for at least 12 consecutive months:

- Waiver Year Two: November 1, 2005 to October 31, 2006.
- Waiver Year Three: November 1, 2006 to October 31, 2008.
- Waiver Year Four: November 1, 2007 to October 31, 2009
- Waiver Year Five: November 1, 2008 to October 31, 2010

Continuous contraception use for a Waiver Year might span multiple Waiver Years, i.e., a women who begins her use of contraception in Waiver Year Three and has 12 continuous months that conclude in Waiver Year Four will be counted as a continuous user for Waiver Year Four. Women who have multiple 12-months spans of continuous use of contraception will be counted in each Waiver Year in which those spans occur.

¹⁴ Waiver Year Five data are preliminary; we are reporting the actual number of sterilizations identified in the four months of Waiver Year Five data that are available. In measure C.1.3 we projected that there would be 26 male sterilizations in Waiver Year Five because historically approximately 30 percent of sterilizations occurred in the first four months of the year.

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Table C.1.5.1 displays the percentage of women who were considered to be continuous contraception users, i.e., those Waiver Year Four participants who had continuous use of contraceptives for at least 12 months on a rolling 12-month basis.^{15,16} The percentages reported in Table C.1.5.1 are not only impacted by the number of women who were continuous users but are also influenced by the number of women who had a contraception claim during the time period. For example, if the number of continuous contraception users increases at a slower rate than the total number of contraception users, this ratio will show a decrease when there was actually an increase in the number of continuous users.

Out of a total of 18,104 women who had one or more contraception claims in Waiver Year Four, we found 3,486 women used contraception for at least 12 months, a continuity rate of 19 percent. Fifty-five percent of these women (9,994) used the pill, while 24 percent of these women (4,442) chose Depo-Provera injections.

These calculations do not include the number of women who were sterilized while on the program during Waiver Year Four, because these women will no longer be eligible for the program and therefore we do not expect them to participate in subsequent Waiver years. However, these women and men are still considered to be continuous contraception users. As reported in Table C.1.5.2, the number of men choosing sterilization as their method of contraception increased by three percent (from 76 to 78) in Waiver Year Four. The number of women who chose sterilization as their method of contraception increased by 27 percent (from 249 to 315) in Waiver Year Four.

Evaluation: This measure requires 12 months of claims data to evaluate whether women were continuous in their use of contraception and that is not yet available for Waiver Year Five. The percentage of women using continuous contraception increased from 21 percent in Waiver Year Three to 23 percent in Waiver Year Four. Continuous use for most age groups increased in Waiver Year

¹⁵ Since most contraceptive methods rely on a 28-day month, we counted continuous use as 12 28-day months.

¹⁶ Defined as women who began using Waiver services in Waiver Year Three and continued using services into Waiver Year Four.

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Four. The largest increase was in the 40 to 55 age group where continuous contraception use increased from 24 percent to 31 percent.

From Waiver Year Three to Waiver Year Four, the number of female participants with continuous contraception use increased by 69 percent and any contraception use increased by 32 percent.¹⁷ These increases are higher than both the increase in the number of females enrolled (29 percent) and females participating in the Waiver (32 percent).

¹⁷ The number of female participants with continuous contraception use increased from 2,062 in Waiver Year Three to 3,486 in Waiver Year Four and the number with any contraception use increased from 13,736 in Waiver Year Three to 18,104 in Waiver Year Four.

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Objective C.1.6: Short-term Outcome – Increase the use of more effective methods of contraception among Waiver participants with continuous contraception use.

Measure Definition: Types of methods used over the course of the year.

Hypothesis: Participant women will be more likely to report use of a highly effective method of contraception.

Data Sources: MMIS Claims; *A Pocket Guide to Managing Contraception*

Calculation: Navigant Consulting will calculate the weighted average of female Waiver participants’ continuous use of contraception methods indicated in claims data and the estimated percent of women not experiencing an unintended pregnancy within the first year of use to develop an average effectiveness score for the Waiver year.

Annual Results: The following table shows the average effectiveness score of women who use highly effective methods of contraception from one Waiver year to the next.

Table C.1.6.1: Average Effectiveness Score of Selected Contraceptive Methods for Women with Continuous Contraception Use, by Waiver Year

Measure	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Preliminary Waiver Year 5 ¹⁸
Typical Use for Continuous Users		96.1%	96.4%	96.5%	98.5%

Discussion: Navigant Consulting assessed the specific type of contraceptive method that each enrollee chose. We calculated a weighted average that measures the effectiveness of the contraception used continuously during each Waiver Year as the “Estimated Percent of Women Not Experiencing an Unintended Pregnancy within the First Year of Use.” This measure includes those contraceptive methods that are indicated by Waiver claims. It does not include methods that are not indicated by Waiver claims, e.g., diaphragm

¹⁸ Waiver Year Five data are preliminary.

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or condom use or Implanon, which is considered a highly effective method that was not covered under the Family Planning Waiver until Waiver Year Five.¹⁹

Implanon has been available to women in North Carolina prior to its inclusion in the Family Planning Waiver, in fact use of the method increased significantly between calendar years 2007 and 2008, 385 to 1,774 users respectively. There were approximately 2,200 users in calendar year 2009.²⁰ Considering the popularity of this method in the overall family planning patient population in North Carolina, this method is expected to be similarly popular among Waiver participants and we anticipate it will lead to greater effectiveness scores and continuous users.

Although we have reported a statistic for Waiver Year Five, these data are limited to services provided in the first four months of the year and are very preliminary. For Waiver Year Four, we reviewed the Waiver Year Three participants who had continuous contraception use for at least 12 months on a rolling 12-month basis. We counted the number of unduplicated participants who used a “highly effective” method as those women who had continuous use for 12 months and used one of the methods listed in Table C.1.6.2.²¹

We estimated an effectiveness score by determining that 96.5 percent of men and women enrolled in the Waiver for 12 continuous months that concluded in Waiver Year Four would not experience an unintended pregnancy within the first year of contraception use. The effectiveness score calculation is the weighted average of the number of contraception users multiplied by the effective score for each contraception method. The effectiveness score for each contraception method is based on national figures for the percent of women experiencing an unintended pregnancy within the first year of typical use.²² We subtracted this percent from 100 to estimate the percent of women

¹⁹ CMS approved Implanon as an allowable contraception method under the Be Smart Family Planning Waiver in November 2009, during Waiver Year Five.

²⁰ Data received March 12, 2010 from the Department of Public Health, source: HBS 085, FPAR CY 2003-2009

²¹ Since most contraceptive methods rely on a 28-day month, we counted continuous use as 12 28-day months.

²² Ziemann M, Hatcher RA et al. *A Pocket Guide to Managing Contraception*. Tiger, Georgia: Bridging the Gap Foundation, 2007.

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not experiencing an unintended pregnancy within the first year of typical use.

In Table C.1.6.2 at the end of this section, we provide the effectiveness rate by contraception method with the number of participants using that method continuously concluding in Waiver Year Four (as defined above). We did not estimate the population of women who are using a contraception method other than by prescription or sterilization. The count of male and female sterilizations are an accumulation from Waiver Year One through Waiver Year Four, assuming these individuals remain sterilized; they are counted as both effective and continuous for the Waiver Evaluation.

We observed that some women changed contraceptive methods during the year, so we counted the method that they used most recently to categorize counts by method.

Evaluation:

Waiver Year Five data are preliminary therefore we discuss Waiver Year Four statistics in this section. The average effectiveness score increased slightly from Waiver Year Three (96.4 percent) to Waiver Year Four (96.5 percent).

Birth control pills, which are relatively less effective than other “highly effective” methods of contraception, continue to be the most popular contraceptive for women who continuously used highly effective means of contraception.²³ However, use of IUDs and sterilizations increased from Waiver Year Three to Waiver Year Four by 63 percent and 27 percent, respectively.²⁴

Among the other methods, the number of women using Depo-Provera increased by 35 percent (566 in Waiver Year Three to 762 in Waiver Year Four); NuvaRing increased by 29 percent (87 in Waiver Year Three to 112 in Waiver Year Four); users of the Patch remained the same from Waiver Year Three to Four.

Based on the Waiver Year Four data for women with any contraceptive use (including women without continuous use), it

²³ Excluding sterilizations, which are reported on a cumulative basis.

²⁴ The number of continuous women using IUDs increased from 278 in Waiver Year Three to 454 in Waiver Year Four. The number of continuous women with a sterilization increased from 249 in Waiver Year Three to 315 in Waiver Year Four. Male sterilizations increased from 76 in Waiver Year Three to 78 in Waiver Year Four.

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appears that women changed their contraceptive types to more effective methods over the course of the year. Navigant Consulting will continue to monitor these figures in upcoming Waiver years to determine whether this trend among women with any contraceptive use continues in Waiver Year Five, and whether it is also evident in women with continuous use.

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Table C.1.6.2: Count of Women Who Continuously Used “Highly Effective” Methods of Birth Control in Waiver Year Four, by Contraceptive Method and Corresponding Effectiveness Score^{25,26}

Contraceptive Method	Count of Participants With Continuous Use of Contraception in Waiver Year 4²⁷	Estimated Percent of Women <u>Not</u> Experiencing an Unintended Pregnancy within the First Year of Use²⁸
Pills	1,097	92.0%
Ortho Evra Patch	75	92.0%
NuvaRing	112	92.0%
Depo-Provera Injections	762	97.0%
IUD ²⁹	454	99.2%
Female Sterilization ³⁰	1,081	99.5%
Male Sterilization ³¹	254	99.9%
Preliminary Weighted Average of Typical Use Among Participants with Continuous Use	3,835	96.5%

²⁵ Zieman M, Hatcher RA et al. *A Pocket Guide to Managing Contraception*. Tiger, Georgia: Bridging the Gap Foundation, 2007.

²⁶ Count includes women who began participating in Waiver Year Three and continued into Waiver Year Four.

²⁷ Continuous use refers to continual contraception claims from first date of contraception claim.

²⁸ Based on typical use: among typical couples who initiate use of a method (not necessarily for the first time), the percentage who experience an accidental pregnancy during the first year if they do not stop use for any other reason.

²⁹ We could not identify the specific type of IUD on each claim, so we used the percentage for IUD – Paragard because it had a higher rate of unintended pregnancy than IUD – Mirena; therefore, this provided a more conservative estimate.

³⁰ Includes 207 female sterilizations from Waiver Year One, 310 from Waiver Year Two, 249 from Waiver Year Three and 315 from Waiver Year Four.

³¹ Includes 32 male sterilizations from Waiver Year One, 68 from Waiver Year Two, 76 from Waiver Year Three and 78 from Waiver Year Four.

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Objective C.2.1: Intermediate Outcome – Reduce the number of inadequately spaced pregnancies to enrolled women.

Measure Definition: Percent of Waiver enrollees with inter-pregnancy interval of at least 12 months.

Hypothesis: Participant women will be less likely to have inadequately spaced pregnancies.

Data Sources: Baby Love data; MMIS Claims

Calculation: Calculate the ratio of female participants with inadequately spaced pregnancies to all female participants who became pregnant during the Waiver year.

Annual Results: The following table provides the percentage of female participants with inadequately spaced pregnancies.

Table C.2.1: Percentage of Female Participants with an Inadequately Spaced Pregnancy, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Preliminary Waiver Year 4	Waiver Year 5 ³²
19 – 55		5%	7%	7%	
Age Category					
19 – 24		6%	7%	8%	
25 – 29		3%	7%	6%	
30 – 34		3%	6%	5%	
35 – 39		9%	17%	3%	
40 – 55		0%	0%	25%	

³² Data were not available to report birth interval estimates for Waiver Year Five.

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Discussion: Navigant Consulting used an MMIS claims dataset that contained all deliveries to Medicaid women during the time period of October 1, 2005 to January 30, 2010. These were the most reliable data available at the time.³³ We compared these data to Waiver Year claims data to create a subset of data of women who participated in the Waiver prior to conception.³⁴ We calculated pregnancy intervals as the number of months between the birth date of the first child and the date of conception of the second child. Since we do not collect data on dates of conception, Navigant Consulting estimated conception dates by subtracting 280 days (10 months) from the birth date of the second child. We then compared the first child's date of birth to the estimated date of conception of the second child to determine how many months were in between the two pregnancies. According to the Waiver Evaluation Plan, inadequately spaced pregnancies are less than 12 months apart. We used the date of conception to categorize the data into Waiver Years.

For Waiver Year Four, about seven percent (96) of all female Waiver participants who experienced a pregnancy (1,430) had inadequately spaced pregnancies. As seen in Table C.2.1, this figure varied by age group. Women ages 19 to 24 had the highest number of inadequately spaced pregnancies (65), but also had the highest number of total pregnancies (870); as a result, their percent of inadequately spaced pregnancies (8 percent) was only one percentage higher than the overall percentage for all age groups. Conversely, although women ages 40 to 55 had the highest rate (twenty-five percent), this age group had only four pregnancies overall, one of which was inadequately spaced.

Twenty-four percent of female Waiver participants who experienced a pregnancy (344 of 1,430 women) had a second pregnancy that was adequately spaced. This figure represents 79 percent of all women who had a second pregnancy (344 of 434 women). The vast majority of women (990, or 69 percent), however, had no subsequent pregnancies during the period we analyzed. If these women experienced a pregnancy after the

³³ The data in this file for Waiver Year Four was not complete; therefore estimates for Waiver Year Four are preliminary.

³⁴ In this analysis, we did not count the women who had a pregnancy that occurred during the Waiver Years but prior to the women's participation on the Waiver. To be counted in this measure the woman had to participate in Waiver services before the date of conception of the pregnancy.

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period in which we collected data, it would be considered adequately spaced.

Evaluation: Data are not available for Waiver Year Five and data for Waiver Year Four are incomplete. By December 2010 there should be adequate data to realize the final impact of Waiver Year Four and to project the impact of Waiver Year Five.

The objective of this measure is to reduce the number of inadequately spaced pregnancies, which was achieved.³⁵ However, since the measure is calculated as a ratio of inadequately spaced pregnancies to all female participant pregnancies, this ratio actually increased in Waiver Year Four compared to Waiver Year Three. In general, the number of inadequately spaced pregnancies is moving in the right direction (decreasing) and the number of total pregnancies is also decreasing at a faster rate.

We found that the Waiver serves individuals who studies indicate may be more likely to have shorter pregnancy intervals.³⁶ Compared to Waiver Year Three, there was a decrease in the number of participant women who had an inadequately spaced pregnancy, 92 compared to 65, or a 29 percent decrease. The overall number of pregnancies also decreased from Waiver Year Three to Waiver Year Four, 2,090 to 1,430 or a 32 percent decrease. Since providers have a year to submit claims data and the data being analyzed is from three months since the close of Waiver Year Four; these results could change once all claims have been submitted and paid.

South Carolina has established a goal of less than 12 percent for this measure. Based on this analysis, North Carolina's rates are well below this target.

³⁵ We noted that the Waiver Evaluation Plan interchanges the terms enrolled and participating when describing the Measure's objective and hypotheses; we have analyzed women who were participants for this measure.

³⁶ "Risk Factors for Short Interpregnancy Interval -- Utah, June 1996-June 1997." Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report: November 06, 1998/47(43). Pp. 930-934.

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NOT BEING REPORTED IN WAIVER YEAR FIVE

Objective C.2.2: Intermediate Outcome – Reduce the number of unintended pregnancies among women eligible for Medicaid.

Measure Definition: Rate of unintended pregnancy among low-income women and among Waiver enrollees.

Hypothesis: Lower rates of unintended pregnancies among Waiver participants.

Data Sources: PRAMS; Baby Love data; MMIS Claims

Annual Results: The following table provides the percentage of female participants with unintended births.

Table C.2.2: Percentage of Unintended Births, by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Waiver Year 5
19 – 55					
Age Category					
19 – 24					
25 – 29					
30 – 34					
35 – 39					
40 – 55					

Discussion: Navigant Consulting will provide cross-sectional measures for unintended pregnancy rates for Waiver and non-Waiver participants.

Data about pregnancies that occurred in 2008 are expected to be released to the public in June 2010. Data about pregnancies that occurred in 2009 are expected to be released to the public in June 2011.

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The reporting of the unintended pregnancy rates for Waiver Year One, which ended September 2006, requires a 23-month postponement to July 2009 from the original due date of September 2007. For subsequent Waiver years, the reporting of the rate of unintended pregnancy measure will require a 35-month postponement, e.g., Waiver Year Two ended September 2007 and the unintended pregnancy measure can be reported in July 2010. This modification to the reporting is due to the timing of the availability of PRAMS state survey data for the Waiver years.

According to 2007 PRAMS data for a random sample of births in North Carolina from January to August 2007, 40 percent of the survey respondents indicated their pregnancy was unintended, i.e., they reported that they wanted to be pregnant later (mistimed) or not then or any time in the future (unwanted).³⁷ Of the subset of these survey respondents who reported they were a Medicaid recipient, 55 percent indicated their pregnancy was unintended, which is a decrease from 62 percent in 2006. These results are for pregnancies that occurred during Waiver Year One.

Evaluation:

For the final Waiver Year Five report, Navigant Consulting will have the data to perform this analysis for Waiver Years One and Two. We will evaluate this objective by observing whether the measure result decreases from year to year of the Waiver.

³⁷ North Carolina State Center for Health Statistics, "2007 North Carolina Pregnancy Risk Assessment Monitoring System Survey Results," *Intendedness of Pregnancy*, (website updated June 9, 2009). Available online: http://www.schs.state.nc.us/SCHS/prams/2007/FEEL_PG.html

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Objective C.3.1: Long-term Outcome – Decrease the number of Medicaid paid deliveries and lower annual expenditures for pregnancy, newborn and infant care among Waiver participants.

Measure Definition: Age-adjusted births averted rate and births averted.

Hypothesis: Fewer Medicaid paid deliveries and lower annual costs for prenatal, delivery, newborn and infant care.

Data Sources: MMIS Claims; CPS; Baby Love
Input from Baseline Year Fertility Rate Report

Calculation: Navigant Consulting calculated the annual results for this measure in three steps. The births averted rate is age-adjusted because we analyzed the first two steps by age category.

First, Navigant Consulting calculated the fertility rate by age category for each Waiver Year. The fertility rate for a Waiver Year is equal to the number of participants with a delivery from MMIS divided by the total number of participants divided by one thousand.

Second, Navigant Consulting calculated the averted birth rate by age category in each Waiver Year. The averted birth rate in a Waiver Year is equal to the Waiver's baseline fertility rate minus the fertility rate for the Waiver Year. The age-adjusted averted birth rate is an average weighted by the number of participants in each age category.

Third, Navigant Consulting calculated the averted births in each Waiver Year. The Waiver Year's averted births are equal to the number of participants in the Waiver Year times the Waiver Year averted birth rate.

Annual Results: The following table shows the measure results and its components.

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Table C.3.1.1: Births Averted Rate and Births Averted³⁸

Measure	Waiver Year 1	Waiver Year 2	Waiver Year 3	Preliminary Waiver Year 4	Preliminary Waiver Year 5
Estimated Age-Adjusted Births Averted Rate (per 1,000)	88	74	74	83.8 to 86.9	83.3 to 86.3
Estimated Averted Births ³⁹	878	1,237	1,419	2,138 to 2,216	2,240 to 2,318

Table C.3.1.2: Steps for Fertility Rate and Births Averted Estimates for Waiver Year Five⁴⁰

Age Range	Baseline Fertility Rate (per 1,000) ⁴¹	Estimated Annual Births By Participants	Total Participants	Estimated Waiver Year Fertility Rate (per 1,000)	Estimated Averted Births Rate (per 1,000)	Estimated Averted Births
19 – 55	n/a	974 to 1,053	26,874	n/a	83.3 to 86.3	2,240 to 2,318
19 – 24	154.8	530 to 587	12,083	43.9 to 48.6	106.2 to 110.9	1,283 to 1,340
25 – 29	157.9	299 to 313	7,004	42.7 to 44.7	113.2 to 115.2	793 to 807
30 – 34	61.2	99 to 111	3,924	25.2 to 28.2	33.0 to 36.0	129 to 141
35 – 39	31.1	38 to 41	2,267	16.9 to 18.1	13.0 to 14.2	29 to 32
40 – 55	3.31	3 to 5	1,596	1.9 to 2.9	0 to 1.4	1 to 2

³⁸ The births averted rate and the number of births averted per 1,000 participants are preliminary for Waiver Year Five because of the lack of birth data available, used projected Waiver Year Four data as a proxy.

³⁹ The averted births are estimated for Waiver Years Four and Five; the count of averted births will be updated when complete data are available for the fourth and fifth Waiver Year.

⁴⁰ Waiver Year Five data are preliminary estimates.

⁴¹ Values for the baseline fertility rate by age category are from the Baseline Year Fertility Rate Report.

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Discussion: To project births for Waiver Year Five, the most recent births data available included three months of data from Waiver Year Four and earlier data from Waiver Year Three. Rather than projecting nine months of deliveries based on three months of data, we used a linear regression model (method of least squares) using data from Waiver Year Three and Waiver Year Four to develop a range of birth counts using two approaches:

- Approach 1: Use 15 months of deliveries, starting from June 2008 through August 2009.
- Approach 2: Use the last nine months of deliveries, starting from December 2008 through August 2009.

The results of our estimates provided us with a range of fertility rates and ultimately a range of the count of births averted and cost savings. Approach 1 provided the lower range of the estimates for births and fertility rate while Approach 2 provided the higher estimate of births and fertility rate. Estimates for averted births were higher for Approach 1 and lower for Approach 2. Since there are no birth data available for Waiver Year Five, we used the Waiver Year Four projections of births to represent Waiver Year Five. Along with projections for Waiver Year Five participants, the estimates for averted births in Waiver Year Five are very preliminary. We report our range of estimates in Table C.3.1.2 on the previous page.

Evaluation: The estimates of fertility rates for Waiver Years Four and Five were generally lower compared to the results from Waiver Year Three. Overall, the decrease in fertility rates resulted in an increase in the estimate of averted births for Waiver Year Four (2,138 – 2,216) and Waiver Year Five (2,240 – 2,318), as compared to Waiver Year Three (1,419 averted births).

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Objective C.3.2: Long-term Outcome –Estimate overall cost savings in Medicaid spending; and assessment of budget neutrality.

Measure Definition: Averted Medicaid Costs, Overall Medicaid Cost Savings, and Budget Neutrality.

Hypothesis: The program achieves cost savings and is budget neutral.

Data Sources: MMIS Claims; Vital Statistics; CMS-64 forms
Input of annual results from Objective C.3.1

Calculation: Navigant Consulting calculated the Averted Medicaid Costs and then calculated the Overall Medicaid Cost Savings for the Waiver year. We assessed budget neutrality for Waiver Year Five.

The Averted Medicaid Costs is equal to the births averted times the average Medicaid costs of a birth for the Waiver Year. The Medicaid costs of a birth include pre-natal, delivery, postnatal, newborn and infant care.

The Overall Medicaid Cost Savings is equal to the Averted Medicaid Costs minus the program expenditures for a Waiver Year.

We assess the Waiver to be budget neutral if there are Overall Medicaid Cost Savings. This assessment is for each Waiver Year and for the cumulative Waiver Years.

Annual Results: The following table shows the measure results and its components. There is a column for each Waiver year. Navigant Consulting presents the ranges of averted Medicaid costs and overall Medicaid cost savings based on the ranges of averted births discussed in Measure C.3.1.

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Table C.3.2.1: Budget Neutrality

Measure	Waiver Year 1	Waiver Year 2	Waiver Year 3	Preliminary Waiver Year 4 ⁴²	Preliminary Waiver Year 5 ⁴³
Estimated Averted Medicaid Costs ⁴⁴	\$11,079,644	\$16,055,402	\$18,369,208	\$27,577,000 to \$28,587,000	\$28,900,000 to \$29,901,000
Estimated Overall Medicaid Cost Savings	\$9,056,934	\$11,664,308	\$13,064,803	\$19,813,000 to \$20,822,000	\$20,506,000 to \$21,515,000
Budget Neutral	Yes	Yes	Yes	Yes	Yes

The following table shows values for the steps taken to calculate Overall Medicaid Costs Savings and Averted Medicaid Costs for Waiver Year Five.

Table C.3.2.2: Steps for Overall Medicaid Cost Saving and Averted Medicaid Costs for Waiver Year Five⁴⁵

Estimated Averted Births	Estimated Average Births Costs ⁴⁶	Estimated Averted Medicaid Costs	Waiver Year Program Expenditures ⁴⁷	Estimated Overall Medicaid Cost Savings
2,240 – 2,318	\$12,867	\$28,900,000 to \$29,901,000	\$8,382,310	\$20,506,000 to \$21,515,000

Table C.3.2.3 provides a comparison of births averted and Medicaid cost savings for the four Waiver Years. We are projecting that Waiver Year Four will continue the trend of increased numbers of births averted and increased cost savings for Medicaid.

⁴² Waiver Year Four data are preliminary estimates.

⁴³ Waiver Year Five data are preliminary estimates.

⁴⁴The averted costs are estimated because only three months of birth data were available at the time of analysis for the fourth Waiver year and therefore the births averted is likely overestimated. We will update the averted Medicaid costs when complete data are available for the fourth Waiver year. We expect that these estimates of averted costs and cost savings are currently over stated.

⁴⁵ Waiver Year Four data are preliminary estimates.

⁴⁶ Data are not available for Waiver Year Five estimates of costs; therefore use Waiver Year Four averages.

⁴⁷ Annualized Waiver Year Five program expenditures by multiplying first quarter expenditures by four.

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Table C.3.2.3: Comparison of Averted Births and Cost Savings Across Waiver Years

Measure	Waiver Year 1	Waiver Year 2	Waiver Year 3	Preliminary Waiver Year 4 ⁴⁸	Preliminary Waiver Year 5
Estimated Age-Adjusted Averted Births Rate (per 1,000)	88	74	74	83.8 to 86.9	83.3 to 86.3
Estimated Averted Births ⁴⁹	878	1,237	1,419	2,138 to 2,216	2,240 to 2,318
Estimated Overall Medicaid Cost Savings	\$9,056,934	\$11,664,308	\$13,064,803	\$19,813,000 to \$20,822,000	\$20,506,000 to \$21,515,000
Budget Neutral	Yes	Yes	Yes	Yes	Yes

Discussion: The Evaluation Plan refers to the Waiver year’s overall Medicaid cost savings as the “Budget Limit,” a term that emphasizes these savings as the limit for the Waiver year’s program expenditures in order for the program to be cost-effective.

Navigant Consulting used deliveries of participants in the months June 2008 to August 2009 to estimate the prenatal, delivery and postnatal costs for Waiver Years Four and Five. We used birth

⁴⁸ Waiver Years Four and Five estimates are preliminary. Navigant Consulting will conduct year-to-year comparisons when final data become available. We are evaluating whether there are lower annual costs for prenatal, delivery, newborn and infant care because of births averted among Waiver participants. We are also evaluating whether there are overall Medicaid cost savings because the lower annual costs exceed the costs of administering the program. We will assess that there is budget neutrality if there is overall Medicaid cost savings in a Waiver Year and cumulatively for all years.

⁴⁹ The averted births are estimated because only three months of birth data were available at the time of analysis for the fourth Waiver Year and no birth data for the fifth Waiver Year. We will update the count of averted births when complete data are available for the fourth and fifth Waiver Years.

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data from Baby Love for calendar year 2007 to estimate the costs to Medicaid for infants through their first year of life.⁵⁰

Evaluation: Since the overall estimate of averted births for Waiver Year Four was higher than in Waiver Year Three, estimated cost savings were also higher in comparison to cost savings in Waiver Year Three (\$13.1 million). As reported in Table C.3.2.1, our estimates for cost savings ranged from \$19.8 million to \$20.8 million for Waiver Year Four and \$20.5 million to \$21.5 million for Waiver Year Five. The increase in the number of participants and the decrease in estimated fertility rates affected the Waiver Year Four estimate of cost savings. Likewise, the estimate of an increase in the number of participants and the continued decrease in estimated fertility rates affected the Waiver Year Five estimates of cost savings. The estimated average birth costs decreased by less than one percent from Waiver Year Three to Waiver Year Four, \$12,934 to \$12,867, respectively.⁵¹

The overall cost savings for the first five years of the demonstration is estimated to be from \$74.1 million to \$76.1 million and therefore budget neutral.

⁵⁰ Calendar year 2007 was the latest year available with data regarding infants through their first year of life, but we have not inflated these costs. If these costs have risen because of, for example, payment rate adjustments, then the Estimated Averted Medicaid Costs for the averted births is underestimated.

⁵¹ These birth cost estimates use the same source data and only vary by which months were used for analysis. This was the most recent data available at the time and these costs may change (increase or decrease) when the data that matches each Waiver Year become available.

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Process Indicators: Performance Indicators and Quality Improvement

The Family Planning Waiver has established a standard set of quality of care indicators which are required deliverables in the contracts with local agencies, and are also used as the basis for periodic monitoring. These same standards will be applied in measuring the effectiveness of the delivery system, as well as the quality of care under the Waiver. The measures on the following pages represent these process indicators.

Navigant Consulting reviewed the types of providers who were serving Waiver participants. We found the most common provider specialties were health departments, hospitals and the physician specialties of obstetrics and gynecology and general family practice. Appendix E.1 provides a summary of the number and location of provider specialties that provided services to Family Planning Waiver participants during the first four months of Waiver Year Five. Appendix E.2 provides a summary of the number of visits to those provider specialties during the first four months Waiver Year Five.

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Objective D.1: Process Indicator – Increase awareness of availability of Waiver services.

Measure Definition: Percentage of clients indicating that they heard about the Waiver from at least two sources.

Hypothesis: Increased percentages of enrollees will indicate that they heard about Waiver services from at least two sources.

Data Sources: Survey of a sample of enrollees; focus groups.

Calculation: A periodic survey (no less than once per year) of a statewide sample of enrollees will be given at intake to determine how they heard about the Waiver and whether they heard about the Waiver from more than one source and/or through a specific outreach or recruitment activity.

Annual Results: The following table reports the results of the measure.

Table D.1: Percentage of Enrollees Who Heard About the Waiver from Multiple Sources by Waiver Year

	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Waiver Year 5
Percentage			20%	21%	

Discussion: Waiver Year Five survey results were not available at the time of this report; however, the results for Waiver Year Five will be presented in the final report.

Waiver Year Four was the second year that DHHS surveyed enrollees to inquire how they heard about the Waiver. DHHS distributed this survey to new enrollees with the new enrollee letter.⁵²

DHHS mailed 2,722 surveys to enrollees in May 2009. Of the enrollees who received the survey, approximately 16 percent responded (436).

⁵² The survey is included as Appendix F.

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Twenty-one percent (91) of respondents received information regarding Waiver services from more than one source. Approximately 73 percent of this group (66) received information from two sources, and the remaining 27 percent (25) received information from three or more sources.

For this sample, outreach and recruitment activities were less common sources of information for Waiver services: four percent of respondents (17) recalled learning about services through the new enrollee letter and two percent (10) recalled receiving information from a brochure, poster or other publicity. The most common sources of information for Waiver services were personal referrals or recommendations, either from a case manager (38 percent; 164), Health Department staff (11 percent; 47), family or friend (seven percent; 31) or healthcare provider (five percent; 20). The second most common source was when applying for Medicaid for themselves or their children (24 percent; 106).

Evaluation:

This was the second year of the DHHS survey and the results did not change significantly. There was a slight increase in the percentage of respondents who heard about the Waiver from more than one source, 21 percent in Waiver Year Four compared with 20 percent in Waiver Year Three. The findings from Waiver Year Four are consistent with Waiver Year Three: most respondents surveyed hear about the Waiver through word of mouth, e.g., family, friends, case managers, County Health Department staff and health care providers.

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Objective D.2: Process Indicator – Increase the number of Waiver participants referred to a source of primary care.

Measure Definition: Reports of problems obtaining and following up for primary care referrals, including specific barriers encountered.

Hypothesis: Increased proportion of Waiver participants lacking a source of primary care at the time of their enrollment in the Waiver will be referred to an appropriate source of primary care.

Data Sources: Survey of a sample of female and male participants⁵³

Calculation: Navigant Consulting divided the number of Waiver participants indicating they were referred to a source of primary care by the total number of survey respondents.

Annual Results: The following table shows the measure results for all focus group participants who indicated they received a primary care referral during Waiver Year Four.

Table D.2: Percentage of Participants Who Had No Difficulties Obtaining a Primary Care Referral by Waiver Year

Age Range	Waiver Year 1	Waiver Year 2	Waiver Year 3	Waiver Year 4	Waiver Year 5
19 – 55	58%	14%	35%	48%	

Discussion: For the final five-year evaluation report, Navigant Consulting will present the results of the Waiver Year Five survey analysis of participants that will be conducted later in 2010. At this time, Waiver Year Four provides the most current data to analyze. To evaluate the extent of participants’ follow-up on primary care referrals received from their family planning providers, Navigant Consulting conducted a survey of a sample of females who had participated during Waiver Year Four to assess their experience with primary care referrals.⁵⁴ The survey response rate was 33 percent (413 females).

⁵³ We selected the eligible survey sample population from MMIS Claims data.

⁵⁴ There were 12,412 females who had participated in Waiver Year Four at the time the sample was drawn.

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In addition, Navigant Consulting conducted a survey of all males who had participated during Waiver Year Four to assess their experience with primary care referrals.⁵⁵ The survey response rate was 44 percent (20 males). This first female survey and the third male survey yielded some valuable information about the individual and collective experiences of Be Smart participants.

Female and male survey findings include:

- Forty-eight percent of female focus group participants (51) received a primary care referral. Twenty-five of the female participants who received referrals sought primary care services outside the scope of the waiver program.
- Many female participants had access to free or affordable primary care even without a referral (20 percent; 22 women). Of the 85 female participants who did not have access to primary care, 37 received a referral (44 percent).
- Only one male respondent stated that he had a medical condition or issue that should be taken care of outside of the Waiver. Further, he reported that he has access to free or affordable care from his health care provider.

Evaluation:

Navigant Consulting cannot determine whether the differences in the experiences of survey respondents from Waiver Year Four and focus group participants from Waiver Years One through Three are a result of a trend in knowledge of or access to primary care referrals or whether other differences might affect participants' experiences. For example, one County Health Department we visited in Waiver Year Three provides free or affordable care. This makes a referral unnecessary, but means no participants in that county report that they received a referral (which affects our comparison statistics). This was also true for the survey results where 21 percent of females and 100 percent of males who responded to the question had existing sources of primary care. The sample of individuals who were asked to respond to the survey was chosen at random and was representative of the entire universe of Waiver participants. This information suggests that

⁵⁵ There were 45 males who had participated in Waiver Year Four at the time the sample was drawn.

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the availability of primary care services to this population is greater than originally determined.

Other states in the region have set targets between 25 and 65 percent of participants who received a primary care referral. North Carolina's target for the percent of participants who received a primary care referral is 45 percent. The results for North Carolina have varied in part because the approach to gathering data has varied. Participants who complete the survey must remember whether a referral was needed and obtained; therefore, there are limitations on how reliable the number of referrals can be measured.

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Objective D.3: Process Indicator – Assess or evaluate reasons for non-participation in the Waiver.

Measure Definition: Reasons for non-participation.

Hypothesis: Increase understanding about reasons for non-participation.

Data Sources: An annual survey, by mail, of a statewide sample of non-participants

Calculation: Data collected from the survey was analyzed for any trends of non-participation.

Annual Results: The discussion that follows provides reasons for non-participation in the Waiver.

Discussion: Non-participants are defined as those enrolled in the program but not receiving services within 12 months of their enrollment. The sample size for the survey was 1,000 non-participants. The objective of the survey is to determine the reasons for non-participation, the circumstances surrounding their decisions and their likelihood of participating in the future.

For the final five-year evaluation report, we will present the results of the Waiver Year Five non-participant surveys that will be collected in the Summer of 2010. Through our Waiver Year Four analysis of survey responses from non-participating enrollees, Navigant Consulting observed the following:

- The response rate for the survey was 22 percent. Navigant Consulting received 216 surveys from individuals who met the criteria of a non-participant.⁵⁶
- A majority of respondents reported they either were unaware of the services that were offered under the Be Smart program (46 percent; 87) or did not know where to access the services (22 percent; 42).
- Forty-four percent of respondents who did not use services in Waiver Year Four indicated they planned to use Be Smart services in Waiver Year Five, with 31

⁵⁶ This response rate includes fifteen surveys that we excluded from the analysis as invalid responses.

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percent reporting they did not expect to use services and 21 percent were unsure. The survey did not ask about the reasons for participating. Given the large number of individuals who had not heard about the program and the high rate of expected Waiver Year Five participation, it is likely that receiving information about the program through the survey and the brochure included along with the survey led to some of the decisions to participate.

- Of the individuals who reported they did not plan to use services in the upcoming year, the most common reasons were they were no longer eligible for services (33 percent; 35 respondents) and that they did not use birth control (22 percent; 23 respondents).
- Non-participants who reported either that they could not find a provider who offered family planning services, did not have transportation to get to appointment or were unsure why they did not use services in the prior year, were more likely to report they would use Be Smart services in the upcoming year.
- Fifty percent of the non-participants who reported they did not want to use family planning services did not expect to use the Be Smart program in the upcoming year; 17 percent expected to use the program and 17 percent were unsure.
- Respondents who reported they did not need family planning services were more likely to not expect to use services in the next 12 months: 74 percent reported they would not use services in the upcoming year, 15 percent reported they would use services and 11 percent were unsure.

Evaluation: As in Waiver Year Three, survey responses continued to indicate a lack of knowledge about the program and criteria for eligibility for the program. Further, despite being provided with a list of covered services, twenty-one percent of respondents identified services that were actually covered by the program when they

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were asked about additional services they would like the program to cover. Therefore, it appears that outreach and education about the program may improve participation. Increasing the awareness of the Be Smart program, including its services, among this group is likely to increase participation; this was evident by the number of survey respondents who indicated that they plan to participate in Be Smart family planning in the upcoming 12 months. When we looked back to determine whether any of the non-participants from Waiver Year Three who received a survey actually participated, we found that 10 percent had participated since receiving the survey.

DMA had previously been issuing a letter of introduction to the FPW program to newly enrolled individuals and we recommend this should continue, with a follow-up letter explaining the FPW program. Although individuals will decide for themselves whether they want to use the services offered by the program, providing a clear description should help to improve the number of enrollees who understand the FPW program. Outreach efforts and materials should continue to be used to promote the program.

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Objective D.4: Process Indicator – Increase the number of men and women receiving family planning services through Title X or Title XIX (includes Family Planning Waiver).

Measure Definition: Number of reproductive age women and men receiving either Title X or Title XIX funded family planning services.

Hypothesis: Funds available through the Waiver will not supplement or substitute for Title X funds that could also be used for providing family planning services to low-income populations.

Data Sources: MMIS Claims; HSIS Data

Calculation: Number of men and women who received a Family Planning service at a Title X clinic under Title X and Title XIX; number of men and women who received a family planning service under the Family Planning Waiver at a Title X clinic and number of men and women who received a family planning service under the Family Planning Waiver at a location other than a Title X clinic.

Annual Results: The following table shows results of the measure for men and women of all ages.

Table D.4.1: Count of Men and Women Receiving Family Planning Services in North Carolina⁵⁷

Measure	Waiver Year 1	Waiver Year 2	Waiver Year 3	Preliminary Waiver Year 4	Preliminary Waiver Year 5
Family Planning Waiver Participants	10,133	16,796	19,530	25,813	26,874
Title X and Title XIX (excluding Waiver participants)	132,317	123,913	123,420	121,939	121,364
All Title X, Title XIX and Waiver Participants	142,450	140,709	142,950	147,752	148,331

⁵⁷ The Title X and Title XIX participant counts include individuals of some ages who are not eligible for the Waiver, i.e., age 18 and over 55 (females) or over 60 (males); however, these counts exclude ages under 18. These counts also include individuals who do not meet the income criteria of the Waiver.

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Discussion: Navigant Consulting identified Family Planning Waiver participants who had a claim at a clinic at a Health Department for this measure.⁵⁸ The unduplicated count of men and women using family planning services through Title X and Title XIX, including Family Planning Waiver services, is the basis for this measure. In Table D.4.2, we provide a summary of family planning participants in North Carolina, which include family planning services through the Family Planning Waiver, Title XIX and Title X.

Table D.4.2: Count of All Men and Women Who Received a Family Planning Service at a Title X Clinic From Either Title X or Medicaid and Count of Family Planning Waiver Participants by Location⁵⁹

Sex	Waiver Year 5 Family Planning Waiver Recipients <u>Not</u> at Title X Clinics	Waiver Year 5 Family Planning Waiver Recipients at Title X Clinics	Waiver Year 5 Title X and Title XIX (excluding Waiver Participants) Family Planning Recipients at Title X Clinics ⁶⁰	Number of Title X, Title XIX and Waiver Participants Receiving Family Planning Services in North Carolina
	A	B	C	D=A+B+C
Women	18,006	8,868	121,181	148,055
Men	84	9	183	276
Total	18,090	8,877	121,364	148,331

Evaluation: The number of individuals receiving family planning services in the State has increased each State fiscal year from 2006 to 2009. This increase was mostly attributable to women since there was a 40 percent decrease in the number of men (excluding Waiver participants) who received services at a Title X clinic (from 273 to 164). This increase also appears to be attributable to the Waiver since the number of non-Waiver participants has decreased while Waiver participant counts have increased.

⁵⁸ We used the MMIS provider specialty value of '060' to identify Health Department clinics.

⁵⁹ Waiver Year Five data are preliminary.

⁶⁰ The Division of Public Health provided the North Carolina Health Services Information System Family Planning Patient Characteristics Report for the period July 2008 through June 2009.

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SECTION 4: CLINICAL INNOVATION

The clinical innovation that DHHS chose to implement and evaluate as part of its Family Planning Waiver provides enhanced clinical counseling services over a two-year period within selected health departments. The enhanced family planning counseling services included in the Pilot are specifically targeted messages, contingency planning with a prescription for emergency contraception and telephone contraception counseling provided to a subset of recipients.

DHHS established agreements with six counties to participate in the Pilot, three as intervention counties and three as control counties. The participants who enrolled in the Pilot in the intervention counties received enhanced family planning counseling services while the women enrolled in the control counties received no additional counseling. Women were eligible to enroll in the Pilot if they were enrolled in the Be Smart Family Planning Waiver or planned to enroll; by definition, this requires that the women be between the ages of 19 and 55, not pregnant or sterilized, be residents of North Carolina and be U.S. citizens. Since the Pilot involved telephone questionnaires, the women must also speak English and have access to a telephone. The three intervention counties are Wake, Catawba and Sampson Counties; the three control counties are Gaston, Cleveland and Union Counties.

DHHS began intervention telephone counseling in May 2008. A nurse, contracted with DHHS, provided the enhanced family planning counseling services. She conducted telephone interviews with women enrolled in the intervention group at specified intervals, that is, she administered a baseline questionnaire, a questionnaire two months after the baseline, a questionnaire six months after the baseline and a questionnaire 12 months after the baseline. Each questionnaire was designed to capture information about the contraception choices and habits of the women. The women enrolled in the control counties, received a baseline questionnaire to complete upon enrollment and the nurse counselor follows up with the women 12 months after enrollment in the Pilot to complete a second questionnaire documenting the contraception choices and habits of these women.

The evaluation plan established seven hypotheses to be tested during the Pilot to measure the effectiveness of the intervention compared to the control group. At this time, we are unable to present findings comparing the intervention and control groups to address the evaluation hypotheses because the control group

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data were not complete at the time of the analysis. The results of the Pilot will be summarized in the final report for the demonstration.

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SECTION 5: CONCLUSIONS

Based on the analyses and findings related to the North Carolina Family Planning Waiver Program, Navigant Consulting has drawn the following conclusions:

- Although the results for Waiver Year Five are preliminary at this point, the Be Smart Family Planning Waiver is budget neutral over the five years of the demonstration.
- The demonstration has been successful in enrolling men and women from the target population and encouraging enrollees to use services, which resulted in averted births that offset the cost of the demonstration. The number of enrollees and participants has increased since the start of the demonstration and the use of contraception and occurrence of annual visits has likewise increased.
- There remains a number of enrollees who are not participating, though enrolled in the Waiver program. However, surveys of a sample of these individuals have shown that some enrollees simply chose not to participate despite being aware of their eligibility. Other enrollees were not aware of the program at the time of the survey; approximately 10 percent of individuals surveyed were found to use the program after receiving the survey.
- Based upon qualitative information gathered from focus groups of participants, women who participated in the demonstration were pleased to have access to the services and for many of them, the Family Planning Waiver program was their primary source of health care services.
- Participants seem to be choosing more effective methods of contraception as the demonstration continues, as evidenced by the continued year-to-year increases in the number of men and women choosing sterilizations.

There are several areas we recommend for targeted improvements:

- Although the actual number of enrollees and participants is increasing each year, the proportion of enrollees to the eligible population (14 percent for females) and the proportion of participants to enrollees (38 percent for females) has remained steady since the first Waiver Year. The State should identify some targeted efforts to try to increase these proportions to 20 percent and 50 percent, respectively. It is unclear whether increased outreach efforts would improve these rates, but comparing outreach approaches with

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other states might provide some useful insights. The State also needs to assess whether the Waiver is already meeting the demand of this population.

- The Waiver has a high rate of participants who return for additional services, including prescriptions for contraception (76 percent). However, the rate of participants who return for annual exams is just 26 percent. Many County Health Departments in the State and perhaps many doctors' offices provide women with reminder mailings when it is time for an annual exam. The State may want to consider its own outreach efforts if it wants to improve its return rates. Based on the eligibility spans for enrollees, many women remain eligible after a year on the program and often for several years, but outreach would be difficult for women whose eligibility is sporadic.
- The rate of effective contraception has improved over the course of the demonstration and should continue to improve with the addition of Implanon as a qualified service. For contraception to be effective, the user must continually use the method, which has been a challenge under the Waiver program. Based on the paid claims data for the program, less than a quarter of contraception users were continually using a method of contraception each month they were enrolled in the Waiver. The gaps in use of contraception put a woman at risk for an unplanned pregnancy. Encouraging and promoting the use of more effective methods will greatly improve the rate of continuous users of contraception and will likely be less costly in the long-term because devices like IUDs have higher fixed costs initially, but lower on-going costs.

APPENDIX A
BACKGROUND ON THE BE SMART FAMILY
PLANNING WAIVER

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Overview of the Waiver

Beginning October 1, 2005, DHHS began enrolling women and men into the “Be Smart” Family Planning Waiver. The Be Smart Family Planning Waiver will operate from October 1, 2005 through September 30, 2010 under a Demonstration Waiver awarded by CMS. The overall goal of the Waiver is to reduce unintended pregnancies and improve the health and well-being of children and families in North Carolina. The Waiver is designed to expand eligibility for family planning services and increase the number of low-income persons receiving family planning services throughout North Carolina.

The Be Smart Family Planning Waiver makes family planning services available to men ages 19 to 60 and women ages 19 to 55, who have incomes at or below 185 percent of the Federal Poverty Level (FPL).

Prior to the implementation of Be Smart, North Carolina offered family planning services through Medicaid for women at or below 45 percent of the FPL. Women who did not qualify for Medicaid could obtain family planning services through publicly-supported family planning clinics.¹

When a woman whose income is up to 185 percent of the FPL becomes pregnant, she can receive comprehensive care related to the pregnancy through the Medicaid program. After the end of the month in which the 60th postpartum day occurs, a North Carolina woman is no longer eligible for Medicaid if her income is above 45 percent of the FPL. This population of women between 45 percent and 185 percent of the FPL was of particular concern to the Division of Medical Assistance (DMA) because these women are only temporarily eligible for Medicaid due to their pregnancy status and the majority lose their eligibility after the postpartum period. The Be Smart Family Planning Waiver is intended to cover this population of women.

According to academic studies, lack of availability of family planning services for women with and without a previous pregnancy has caused an increase of inadequately spaced, unwanted and unintended pregnancies.² These types of pregnancies contribute to an increased fertility rate in a state, and also result in higher costs to Medicaid for deliveries and care for the child through the first year of life.

Men ages 19 to 60 with income below 185 percent of the FPL are also included in this demonstration, since North Carolina has had limited resources in the past to provide vasectomies or other family planning services to men. By extending the Family Planning

¹ North Carolina Family Planning Waiver Proposal, 1115(a) Demonstration Waiver Application, April 2000.

² Forrest, JD and Frost, J. “The Family Planning Attitudes and Experiences of Low-Income Women,” *Family Planning Perspectives*, 36(6):246-277, November/December 1996.

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Waiver services to include men, DMA expects that an increase of vasectomies will also lead to fewer unwanted, unintended and inadequately spaced pregnancies. This in turn should lead to a lower fertility rate, and thus, fewer Medicaid dollars spent for the births and care of these children.

Waiver Objectives

The Waiver objectives developed by North Carolina DMA are as follows:

1. Increase the number of reproductive age women and men receiving either Family Planning Waiver or Title X funded family planning services by improving access to and use of Medicaid family planning services.
2. Reduce the number of inadequately spaced pregnancies by women in the target group, thus improving birth outcomes and health of these women.
3. Reduce the number of unintended and unwanted pregnancies among women eligible for Medicaid.
4. Impact positively the utilization of and “continuation rates” for contraceptive use among the target population.
5. Increase the use of more effective methods of contraception (such as Depo-Provera, Intrauterine Device (IUD) and sterilization) in the target population.
6. Decrease the number of Medicaid-paid deliveries, which will reduce annual expenditures for prenatal, delivery, newborn and infant care.
7. Estimate the overall savings in Medicaid spending attributable to providing family planning services to women and men through this demonstration project.

Covered Services Under the Waiver

To address the goals of the Waiver, the Be Smart Family Planning Program covers the following services for enrollees when provided as part of a family planning visit:

- Annual and periodic office visits (including counseling, patient education, and treatment)
- Specific laboratory procedures (e.g., pap smears, pregnancy tests)

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- Food and Drug Administration-approved and Medicaid-covered birth control methods, procedures, pharmaceutical supplies and devices
- Screening for Human Immunodeficiency Virus (HIV)
- Screening and limited treatment for specific Sexually Transmitted Infections (STIs)
- Voluntary sterilization (in accordance with Federal sterilization guidelines)

The Family Planning Waiver also provides men and women with referrals for other health concerns that are not covered under the Waiver.

Effective in Waiver Year Three, North Carolina began a second component to the Waiver, the Clinical Innovation Project, which provides enhanced family planning services to a demonstration group of Waiver participants. These enhanced family planning services include:

- Targeted messages built upon an “Explore, Share, Promote” (ESP) framework
 - Explore any discrepancies between pregnancy intention and contraceptive use
 - Share information on contraception and method use
 - Promote behaviors that reduce risk of unintended pregnancy
- Contingency planning, including a prescription for emergency contraception (EC)
- Streamlined telephone access to local health departments for women with questions or concerns about their contraceptive method
- For consenting individuals, telephone support for use of method to include at least four calls from the Telephone Support and Data Center

DHHS expects that the Clinical Innovation might have a positive effect on increases in the utilization of and “continuation rates” for contraceptive use among the target population (Objective 4 of the Waiver) and increase the use of more effective methods of contraception in the target population (Objective 5 of the Waiver). DHHS initiated the Clinical Innovation project in Quarter Two of calendar year 2008.

North Carolina Family Planning Waiver Program Waiver Year Five Annual Report

Waiver Hypotheses

DMA, through its Waiver application for the Be Smart Family Planning Waiver, has hypothesized that:³

- Putting in place a system by which women and men in North Carolina can more easily access family planning services will reduce the number of inadequately spaced pregnancies.
- Reducing the number of inadequately spaced pregnancies should lead to reductions in the number of adverse pregnancy outcomes and lead to a net savings in Medicaid spending.
- Reducing unintended pregnancies through increased access to and utilization of family planning services will contribute to a reduction of low birth weight as a factor contributing to infant mortality.
- Increasing family planning visits for this population (both men and women) will also improve public health, as early detection and treatment during family planning visits is predicted to result in a decrease in the rate of sexually transmitted infections.
- Supporting women in meeting their healthcare needs will put them in a better position to exercise their right to make informed choices regarding the spacing and number of their children and to increase the interval between pregnancies. Likewise, as a result of routine screening and examination, women and men will be able to maintain good health status, all of which will have tremendous value from a cost benefit standpoint as well as from the view of the individual and her/his family.

DMA also expects the Clinical Innovation Project will positively influence all of the study objectives, and may have the most effect on contraceptive utilization and “continuation rates” and increase the use of more effective methods of contraception in the target population.

³ North Carolina Family Planning Waiver Program Proposal, 1115(a) Demonstration Waiver Program Application, April 2000.

APPENDIX B
SUMMARY OF WAIVER PROGRAM MEASURES
AND DATA SOURCES

North Carolina Family Planning Waiver Program
 Waiver Year Five Annual Report
 Appendix B: Summary of Waiver Program Measures and Data Sources

Hypothesis Number	Hypothesis	Measure	Data Source	Approach to Analysis
C.1.1	Increased proportions of eligible women and men will be enrolled in the Waiver each year.	Unduplicated count of clients enrolled divided by unduplicated count of eligible clients.	<i>Numerator:</i> MMIS Eligibility file <i>Denominator:</i> ACS population data	Calculate the ratio of unduplicated clients enrolled in the Waiver to the eligible population in North Carolina. Compare this ratio across the five years of the Waiver to determine if there are an increased proportion of eligibles enrolling in the Waiver over the life of the Waiver.
C.1.2	More low-income women who are enrolled in the Waiver will receive family planning services.	Unduplicated count of enrollees receiving services in the last 12 months (participants).	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS Eligibility file	Calculate the ratio of unduplicated female Waiver enrollees who received at least one paid family planning service in the Waiver year to the total number of female Waiver enrollees who could have received a service. Compare this ratio across the five years of the Waiver to determine if there are an increased proportion of enrollees obtaining family planning services.
C.1.3	More low-income men who are enrolled in the Waiver will receive family planning services.	Unduplicated count of enrollees, participants and vasectomies.	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS Eligibility file	Calculate the ratio of unduplicated male Waiver enrollees who received at least one paid family planning service in the Waiver year to the total number of male Waiver enrollees who could have received a service. Compare this ratio across the five years of the Waiver to determine if there are an increased proportion of male enrollees obtaining family planning services.

North Carolina Family Planning Waiver Program
 Waiver Year Five Annual Report
 Appendix B: Summary of Waiver Program Measures and Data Sources

Hypothesis Number	Hypothesis	Measure	Data Source	Approach to Analysis
C.1.4	Participant women will be less likely to be lost to follow-up.	Participant return to clinic for annual visit and reason for visit.	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS paid claims	Calculate the ratio of female participants who received a follow-up annual exam within a 12 – 15 month time period to all females from the prior Waiver year who received a well woman exam. Beginning with Waiver Year Two, compare this ratio across the five years of the Waiver to determine if there is an increased proportion of female participants returning for services.
C.1.5	Participant women will be more likely to report continuous use of a contraceptive method.	Continuous use of contraception during the year.	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS paid claims	Calculate the ratio of unduplicated female participants with continuous use of a contraceptive method to all female participants who had a contraceptive claim in the Waiver year. Consistent claims data for a method of contraception over the course of each study year will represent consistent use of contraception over the year's time period. Less consistent claims data will signify less consistent use. Beginning with Waiver Year Two, compare this ratio across the five years of the Waiver to determine if there is an increased proportion of female participants who continuously use a contraceptive method.
C.1.6	Participant women will be more likely to report use of a highly effective method of contraception.	Types of methods used over the course of the year.	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS paid claims	Calculate the weighted average of female Waiver participants' continuous use of contraception methods indicated in claims data and the estimated percent of women <u>not</u> experiencing an unintended pregnancy within the first year of use to develop an average effectiveness score for the Waiver year. Beginning with Waiver Year Two, compare the average effectiveness score across the five years of the Waiver to determine if there is an increased proportion of female participants who use a highly effective method of contraception.

North Carolina Family Planning Waiver Program
 Waiver Year Five Annual Report
 Appendix B: Summary of Waiver Program Measures and Data Sources

Hypothesis Number	Hypothesis	Measure	Data Source	Approach to Analysis
C.2.1	Participant women will be less likely to have inadequately spaced pregnancies.	Percent of Waiver enrollees with inter-pregnancy interval of at least 12 months.	<ul style="list-style-type: none"> MMIS paid claims 	Calculate the ratio of female participants with inadequately spaced pregnancies to all female participants who became pregnant during the Waiver year.
C.2.2	Lower rates of unintended and unwanted pregnancy among Waiver participants.	Rate of unintended pregnancy among low-income women and among Waiver enrollees.	<i>Numerator:</i> PRAMS <i>Denominator:</i> MMIS paid claims	Use trend and other statistical analyses to track, from year to year, the number of unintended births occurring to women participating in the Waiver.
C.3.1	Fewer Medicaid paid deliveries and lower annual costs for prenatal, delivery, newborn, and infant care.	Age-adjusted births averted rate and births averted.	<i>Numerator:</i> MMIS paid claims <i>Denominator:</i> MMIS paid claims	Calculate the annual results for this measure in three steps. First, calculate the Waiver year's fertility rate by age category. Second, calculate the Waiver year's births averted rate by age category. Third, calculate the Waiver year's births averted.
C.3.2	The program achieves cost savings and is budget neutral.	Averted Medicaid Costs, Overall Medicaid Cost Savings, and Budget Neutrality.	<ul style="list-style-type: none"> MMIS paid claims ACS population data 	Calculate the averted Medicaid costs and then calculate the overall Medicaid cost savings for the Waiver year. Assess budget neutrality for the Waiver year and assess cumulative budget neutrality across Waiver years.
D.1	Increased percentages of enrollees will indicate that they heard about Waiver services from at least two sources.	Percentage of clients indicating that they heard about the Waiver from at least two sources.	Survey conducted at intake	Beginning in Waiver Year Three, report the percentage of intake survey respondents who heard about the Waiver from more than one source. Compare this percentage across the remaining years of the Waiver.

North Carolina Family Planning Waiver Program
 Waiver Year Five Annual Report
 Appendix B: Summary of Waiver Program Measures and Data Sources

Hypothesis Number	Hypothesis	Measure	Data Source	Approach to Analysis
D.2	Increased proportion of Waiver participants lacking a source of primary care at the time of their enrollment in the Waiver will be referred to an appropriate source of primary care.	Reports of problems obtaining and following up for primary care referrals, including specific barriers encountered.	<i>Numerator:</i> Survey results <i>Denominator:</i> Survey results	Divide the number of Waiver participants indicating they were referred to a source of primary care by the total number of focus group participants. Compare this ratio across the five years of the Waiver to determine if there are increases in proportions of participants obtaining a primary care referral over the life of the Waiver.
D.3	Increase understanding about reasons for non-participation.	Reasons for non participation.	Non-participant survey	Beginning with Waiver Year Two, to assess why enrolled individuals do not participate in the Waiver program, we will annually survey, by mail, a statewide sample of non-participants. Non-participants are defined as those enrolled in the program but not receiving services within 12 months of their enrollment. The sample size for the survey will be based on the number of non-participants in any given 12 months but will not exceed 1,000 non-participants in any one survey. Our aim will be to determine the reasons non-participants choose not to participate, the circumstances surrounding their decisions and their likelihood of participating in the future.
D.4	Funds available through the Waiver will not supplement or substitute for Title X funds that could also be used for providing family planning services to low-income populations.	Number of reproductive age women and men receiving either Title X or Title XIX funded family planning services.	MMIS paid claims and HSIS reports	Count the unduplicated number of men and women who received family planning services through Title X and Title XIX.

APPENDIX C DATA SOURCES

North Carolina Family Planning Waiver Waiver Year Five Interim Annual Report

The following data sources were proposed in the evaluation plan as potential sources to use to develop the measures to test the Waiver hypotheses. Navigant Consulting has used these data sources, as proposed, in our analyses, as shown in Exhibit 1 at the end of the Annual Report.

Medical Management Information System (MMIS) Claims and Eligibility Files

MMIS provides a database of clients served through the Family Planning Waiver, the “enrollment database” and the procedures paid for by the Waiver (including preventive services and sterilizations), the “claims database.” Navigant Consulting will use the claims database to analyze the frequency of continuity of visits for clients who received services through the Family Planning Waiver. We will use the enrollment data to count the number of enrollees in a Waiver year and to make comparisons to paid claims data to identify participants, i.e., enrollees who received at least one Family Planning Waiver service during that Waiver year.

Since Waiver Year Five is currently underway the data available for analysis is not yet complete. Therefore, for Waiver Year Five, Navigant Consulting reviewed paid MMIS claims data from the Family Planning Waiver with dates of service from October 1, 2009 through January 30, 2010. For certain analyses, we also included claims from Waiver Years One through Four in our analyses. We counted enrollees from the enrollment file as having enrollment in the Waiver at any time between October 1, 2009 and September 30, 2010. We counted participants as those Waiver Year Five enrollees with at least one Family Planning Waiver service.

Health Services Information System (HSIS) Reports

The DHHS, Division of Public Health, Office of Women's Preventive Health tracks clients using family planning services at public health clinics in North Carolina for both Title X and Medicaid (Family Planning Waiver) funding.

Vital Statistics Data (Baby Love)

North Carolina's State Center for Health Statistics (SCHS) maintains a database of Medicaid claims linked with birth certificates. This provides information about birth spacing and birth outcomes for women whose delivery was paid by Medicaid. Since the population who qualify for Medicaid when pregnant (at or below 185 percent of FPL) is the same as the eligible population for the Family Planning Waiver, this will be used to monitor birth outcomes and birth spacing for the Family Planning Waiver eligible population. This data is linked to DMA claims, which will provide the costs associated with a pregnancy, birth, and infant care through the child's first year of life. These data, known as “Baby Love,” are readily available through the North Carolina Center for Health Statistics.

North Carolina Family Planning Waiver Waiver Year Five Interim Annual Report

For Waiver Year Five, Navigant Consulting used calendar year 2007 Baby Love data to estimate infant care through the child's first year of life because data associated with the Waiver year were not available at the time of analysis.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS is an ongoing, population-based surveillance system that was designed to identify and monitor selected self-reported maternal behaviors and experiences that occur before, during and after pregnancy among women who deliver live-born infants. To obtain adequate information about poor birth outcomes, the sample of mothers surveyed in North Carolina is weighted to contain a larger portion of low birth weight babies. Every month, a stratified systematic sample of 200 new mothers is selected from a sampling frame of eligible birth certificates.

The PRAMS measure for intendedness of pregnancy is used in evaluating the Family Planning Waiver objective of decreasing unintended pregnancies in the State. The Center for Disease Control (CDC) collects the PRAMS data by means of a random survey of women who have delivered babies. The random survey is collected up to three months after a women's delivery, and the data is released on an annual basis after the random survey is collected, analyzed, and the data set is weighted to represent all pregnancies in North Carolina. This data for the State is maintained by and is available through the North Carolina State Center for Health Statistics.

The PRAMS survey identifies a proportion of the women who were eligible for Family Planning Waiver services by their use of Medicaid during pregnancy. There is a question on the survey that allows respondents to identify Medicaid as their source of payment for delivery.

American Community Survey (ACS)

The ACS is a new survey conducted by the U.S. Census Bureau. This survey uses a series of monthly samples to produce annually updated data for the same small areas (census tracts and block groups) that the decennial census long-form sample formerly surveyed. The most recent data available is from calendar year 2007.

Navigant Consulting used the ACS data to identify population figures for North Carolina for the eligibles reported in measure C.1.1. We identified eligibles by sex for those individuals between 45 percent and 185 percent of the FPL who indicated they were U.S. citizens. This is the best estimate of the population of men and women in North Carolina who may be eligible for the Family Planning Waiver. This estimate of the eligible population includes women who are pregnant and women who cannot become pregnant, thus overstating the estimate of eligible women in North Carolina.

North Carolina Family Planning Waiver Waiver Year Five Interim Annual Report

A Pocket Guide to Managing Contraception¹

The Bridging the Gap Foundation publishes *A Pocket Guide to Managing Contraception*. The mission of the Bridging the Gap Foundation is to improve reproductive health and contraceptive decision-making for women and men by providing up-to-date educational resources to the physicians, nurses and public health leaders.

Navigant Consulting used *A Pocket Guide to Managing Contraception* 2007 – 2009 edition as the source for contraception failure rates used for measure C.1.6.

Baseline Fertility Rate Calculations

Budget neutrality is determined by a formula that compares the reduced costs for healthcare services associated with a reduced fertility rate among Waiver participants, relative to a baseline fertility rate prior to the Waiver, against the increased costs for family planning services provided to Waiver participants.

The baseline fertility rate for potential Waiver participants in the budget neutrality formula must be calculated from public survey data about women in North Carolina and from the State's MMIS claims data for all Medicaid participants.² The baseline fertility rate cannot be calculated from data about the specific women who would have been potentially eligible, enrolled or participated in the Waiver during the baseline year, as these women cannot be identified prior to the year that the Waiver began.

The baseline fertility rate is calculated as the estimated number of births per 1,000 women who would have participated in the Waiver Program in North Carolina if the Waiver Program had been operating during calendar year 2003:

$$\text{Baseline fertility rate} = \frac{\text{Number of births to "participating women" in NC in 2003} * 1,000}{\text{Number of "participating women" in NC in 2003}}$$

Navigant Consulting calculated the baseline fertility rate for all women below 185 percent of the FPL. Table 3 shows the results of the baseline fertility rate calculation. As required in the evaluation plan for the Waiver, we present the fertility rates in age groups.

¹ Hatcher RA, Ziemann M, et al. "A Pocket Guide to Managing Contraception." Tiger, Georgia: Bridging the Gap Foundation, 2007, p. 40.

² An example of public survey data is the decennial census. We use other public survey data from the U.S. Bureau of the Census that are from sample surveys conducted in the years between the censuses.

North Carolina Family Planning Waiver Waiver Year Five Interim Annual Report

Table 3: Baseline Fertility Rate

Measure	Ages 19 – 24	Ages 25 – 29	Ages 30 – 34	Ages 35 – 39	Ages 40 – 55	Ages 19 – 55
Baseline Fertility Rate	155	158	62	31	3	78

The baseline fertility rate for the 19 – 55 age group means that approximately seventy eight women out of every one thousand women in this age group, and below 185 percent of the FPL, had a live birth in 2003. Women in younger age groups tend to have a higher fertility rate.

The Baseline Fertility Report is available on-line at
<http://www.ncdhhs.gov/dma/MFPW/MFPWprovider.htm>

Primary Care Surveys

Primary care surveys have not yet been distributed for Waiver Year Five. For Waiver Year Four, DHHS replaced the use of focus groups with a mail survey to gather information about participants' experiences in obtaining primary care referrals from their family planning providers, their success in following up on the referrals, barriers they may have encountered and their satisfaction with the referral process.

Navigant Consulting conducted two mail surveys of male and female participants in July 2009 to assess primary care referrals under Waiver Year Four (October 1, 2008 – September 30, 2009) of the Family Planning Waiver. The response rate for the female survey was 33 percent (413 female respondents) and the response rate for the male survey was 44 percent (20 male respondents).

The primary care referral report is available on-line at
<http://www.ncdhhs.gov/dma/MFPW/MFPWprovider.htm>.

Non-Participant Survey

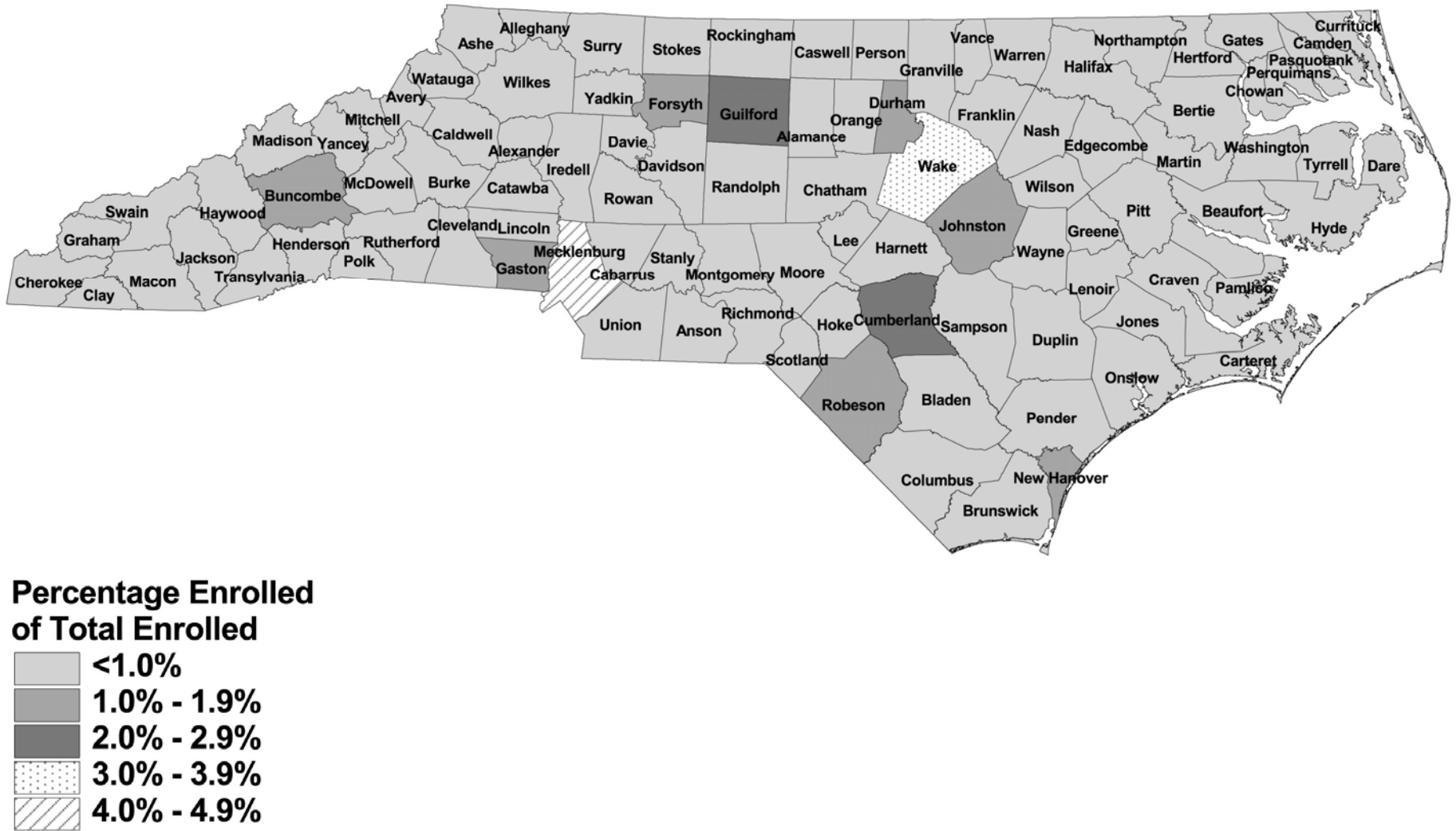
The Waiver Evaluation Plan specified a survey of non-participants to determine the reasons non-participants choose not to participate, the circumstances surrounding their decisions and their likelihood of participating in the future. Non-participants are defined as those enrolled in the program, but not receiving services within 12 months of their enrollment. The sample size for the survey for Waiver Year Four was 1,000 non-participants, with a response rate of 22 percent.

The Non-Participant Survey report is available on-line at
<http://www.ncdhhs.gov/dma/MFPW/MFPWprovider.htm>

APPENDIX D
MAPS OF ENROLLMENT AND
PARTICIPATION

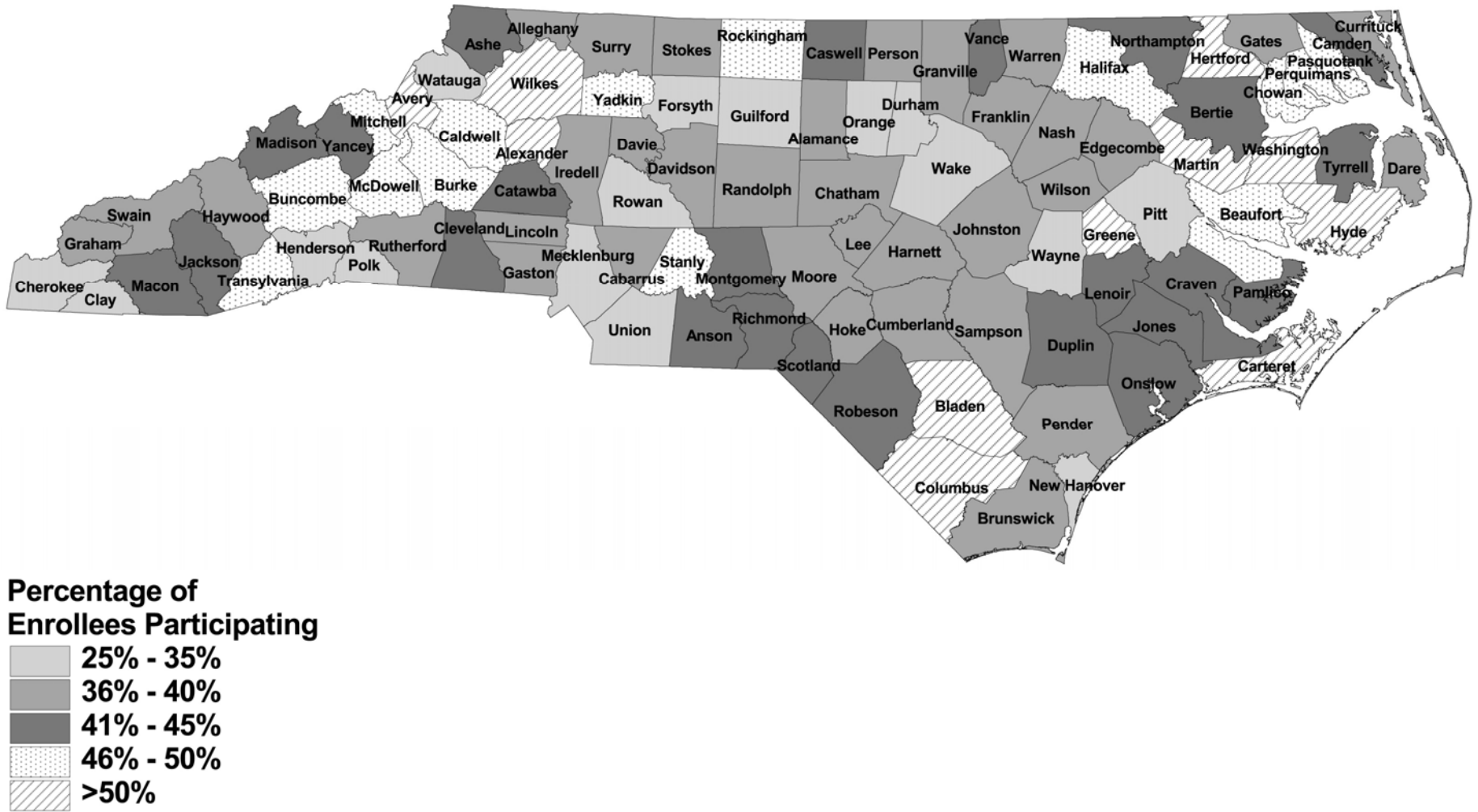
North Carolina Family Planning Waiver
 Waiver Year Five Annual Report

Figure D.1: Distribution of Female Waiver Enrollees, by County



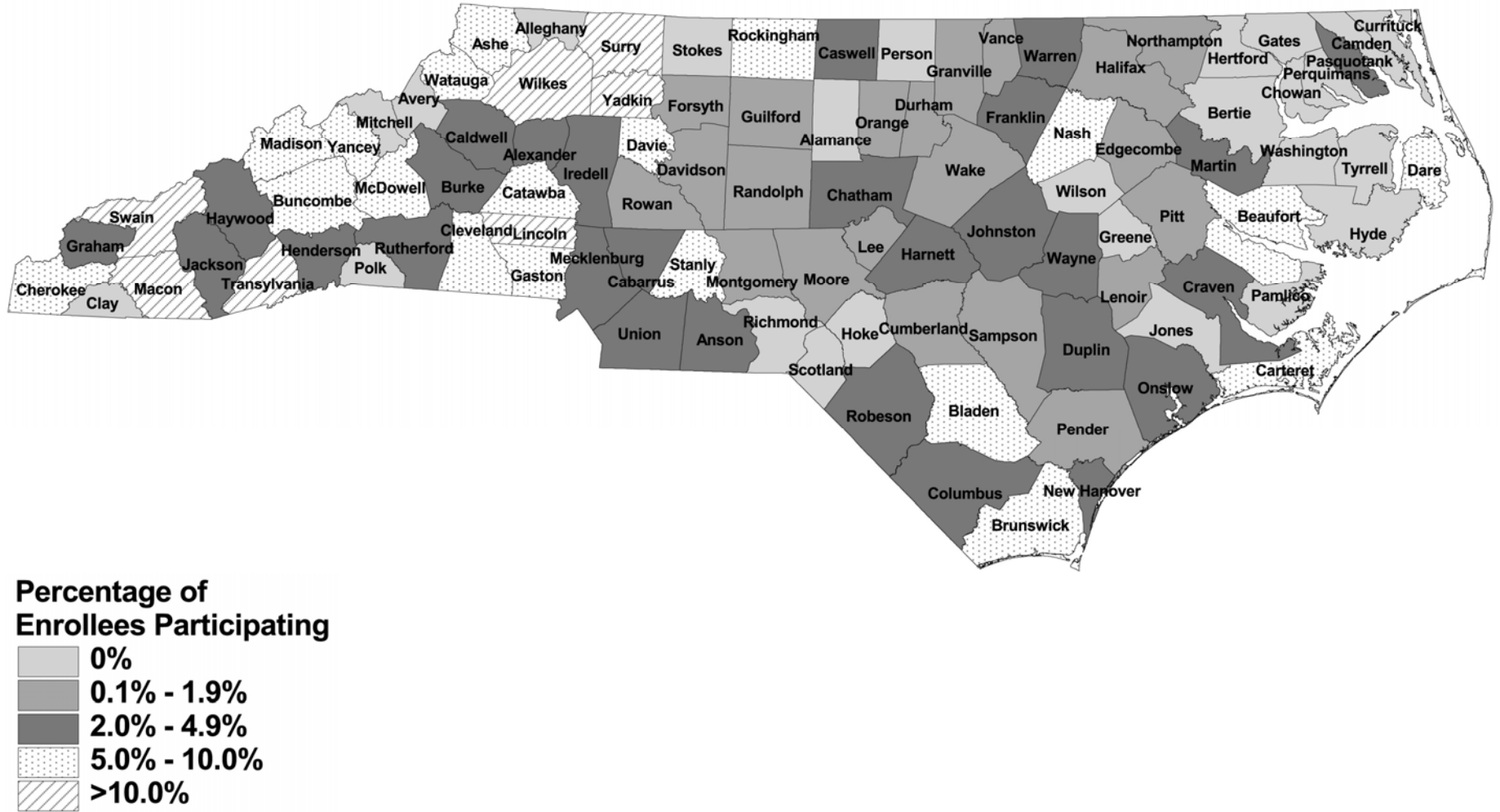
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Figure D.3: Rate of Female Waiver Participation, by County



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Figure D.4: Rate of Male Waiver Participation, by County



Appendix E.1
Count and Location of Provider Specialties
Providing Services to Waiver Year Four
Participants, by County

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
ALAMANCE							181	
ALEXANDER							32	
ALLEGHANY							27	
ANSON							55	
ASHE	2						36	
AVERY							44	
BEAUFORT		1					123	
BERTIE							17	
BLADEN							46	
BRUNSWICK	1						291	
BUNCOMBE					2		451	
BURKE							100	
CABARRUS				19			536	
CALDWELL		1					192	
CAMDEN								
CARTERET		3					235	
CASWELL								
CATAWBA			1			2	217	
CHATHAM							45	
CHEROKEE							18	
CHOWAN							41	
CLAY							7	
CLEVELAND			2			1	151	
COLUMBUS							207	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
CRAVEN			3			1	160	
CUMBERLAND					61	2	849	1
CURRITUCK							22	
DARE	1						105	
DAVIDSON	2						258	
DAVIE							40	
DUPLIN						1	85	
DURHAM					15		459	
EDGECOMBE							95	
FORSYTH					55		738	
FRANKLIN							106	
GASTON					2		300	
GATES								
GRAHAM							36	
GRANVILLE	4					2	113	
GREENE							8	
GUILFORD				9		2	975	
HALIFAX							195	
HARNETT							119	
HAYWOOD							52	
HENDERSON			3			2	57	
HERTFORD							100	
HOKE							21	
HYDE								

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
IREDELL		2				1	417	
JACKSON	4					1	44	
JOHNSTON		4					405	
JONES							4	
LEE		2					117	
LENOIR							146	
LINCOLN	1						120	
MACON							26	
MADISON							27	
MARTIN							61	
MCDOWELL	1						108	
MECKLENBURG					116		1455	
MITCHELL							44	
MONTGOMERY							84	
MOORE			2			2	78	2
NASH			1			1	239	
NEW HANOVER				50			598	
NORTHAMPTON								
ONslow		3				4	240	
ORANGE					1		107	
OUT-OF-STATE <= 40 MILES							25	
OUT-OF-STATE > 40 MILES								
PAMLICO							9	
PASQUOTANK			1				128	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
PENDER							68	
PERQUIMANS								
PERSON							38	
PITT							360	
POLK							21	
RANDOLPH							148	
RICHMOND						1	128	
ROBESON			15				584	
ROCKINGHAM						1	162	
ROWAN							282	
RUTHERFORD		2				1	90	
SAMPSON							102	
SCOTLAND							143	
STANLY		2				1	210	
STOKES							44	
SURRY	1					2	131	
SWAIN	2						10	
TRANSYLVANIA							8	
TYRRELL								
UNION		1					328	
VANCE							179	
WAKE					5	2	1576	
WARREN							35	
WASHINGTON							70	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
WATAUGA							40	
WAYNE							262	
WILKES							74	
WILSON							175	
YADKIN							37	
YANCEY							51	
TOTAL	19	21	28	78	257	30	17783	3

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTEROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY
ALAMANCE	25		1		88	
ALEXANDER					21	
ALLEGHANY			3			
ANSON			2		20	
ASHE			4	2	6	
AVERY			2			
BEAUFORT			1		29	
BERTIE					17	
BLADEN			1		32	
BRUNSWICK			6		25	
BUNCOMBE			14		184	
BURKE					27	
CABARRUS			8		57	
CALDWELL					68	
CAMDEN					4	
CARTERET					21	
CASWELL	10				19	
CATAWBA		1	2		95	2
CHATHAM	22		6		7	
CHEROKEE					2	
CHOWAN					13	
CLAY					2	
CLEVELAND					82	
COLUMBUS			8		38	4

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTEROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY
CRAVEN					49	
CUMBERLAND	1		6		30	
CURRITUCK						
DARE					1	
DAVIDSON			3		88	
DAVIE			4		15	
DUPLIN	7				14	
DURHAM			2		71	
EDGECOMBE					55	
FORSYTH			20		70	
FRANKLIN			1		49	
GASTON			17		214	
GATES					2	
GRAHAM						
GRANVILLE			1		23	
GREENE	1				2	
GUILFORD					215	193
HALIFAX					55	
HARNETT	7		19		27	
HAYWOOD			1		29	
HENDERSON	1		4		9	
HERTFORD	2		1		19	
HOKE			11		3	
HYDE					1	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTEROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY
IREDELL					61	
JACKSON					15	
JOHNSTON			7		47	
JONES					7	
LEE			11		8	
LENOIR	31				29	
LINCOLN					10	
MACON					5	
MADISON					3	
MARTIN					16	
MCDOWELL			1		28	
MECKLENBURG	48		45		89	15
MITCHELL					7	
MONTGOMERY					27	
MOORE			3		22	
NASH					56	
NEW HANOVER	15		60		22	3
NORTHAMPTON	2				32	
ONSLOW			1		14	
ORANGE	11		1		17	
OUT-OF-STATE <= 40 MILES			2			25
OUT-OF-STATE > 40 MILES						58
PAMLICO					3	
PASQUOTANK			1		36	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTEROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY
PENDER			3		34	
PERQUIMANS					8	
PERSON					19	
PITT			11		9	
POLK					2	
RANDOLPH			2		17	
RICHMOND					33	
ROBESON	33		3		48	
ROCKINGHAM			1		18	
ROWAN			13		33	
RUTHERFORD					31	
SAMPSON			1		67	
SCOTLAND			1		31	
STANLY			3		41	
STOKES			1			
SURRY					34	
SWAIN					1	
TRANSYLVANIA					1	
TYRRELL					10	
UNION			30		49	
VANCE			7		29	
WAKE	15		12		244	
WARREN					13	
WASHINGTON					24	

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTEROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY
WATAUGA					4	
WAYNE			4		31	
WILKES					2	
WILSON	12				41	
YADKIN					6	
YANCEY			1		10	
TOTAL	243	1	373	2	3342	300

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	INSTITUTION PHARMACY (TCC)	INTERNAL MEDICINE	MULTI-SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF-STATE PHARMACY (TCC)
ALAMANCE						20		
ALEXANDER								
ALLEGHANY								
ANSON								
ASHE					2			
AVERY		1						
BEAUFORT		2	18			10		
BERTIE								
BLADEN								
BRUNSWICK						37		
BUNCOMBE				6	3	87		
BURKE						8		
CABARRUS			3			75		
CALDWELL						13		
CAMDEN								
CARTERET	8				1	92		
CASWELL					2			
CATAWBA						9		
CHATHAM								
CHEROKEE								
CHOWAN						20		
CLAY								
CLEVELAND						7		
COLUMBUS		2				41		

North Carolina Division of Medical Assistance

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Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	INSTITUTION PHARMACY (TCC)	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF-STATE PHARMACY (TCC)
CRAVEN		1			1	31		
CUMBERLAND		7	14			206		
CURRITUCK								
DARE			1		1	2		
DAVIDSON						12		
DAVIE								
DUPLIN						9		
DURHAM	6					50		
EDGECOMBE								
FORSYTH	1		1		1	39		
FRANKLIN								
GASTON		1			1	2		
GATES								
GRAHAM								
GRANVILLE						44		
GREENE								
GUILFORD	2	1	1		2	84		
HALIFAX						65		
HARNETT						25		
HAYWOOD			1					
HENDERSON					2	2		
HERTFORD						17		
HOKE						2		
HYDE								

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	INSTITUTION PHARMACY (TCC)	INTERNAL MEDICINE	MULTI-SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF-STATE PHARMACY (TCC)
IREDELL						27		
JACKSON					1	10		
JOHNSTON						94		
JONES			1					
LEE						18		
LENOIR						10		
LINCOLN						20		
MACON								
MADISON								
MARTIN						59		
MCDOWELL						14		
MECKLENBURG	15	22	21			120		2
MITCHELL								
MONTGOMERY								
MOORE			23		2	23		
NASH			7			36		
NEW HANOVER		2			2	59		
NORTHAMPTON								
ONSLOW		2	4			66		
ORANGE			19			22		
OUT-OF-STATE <= 40 MILES						9	1	25
OUT-OF-STATE > 40 MILES								
PAMLICO								
PASQUOTANK					3	57		

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	INSTITUTION PHARMACY (TCC)	INTERNAL MEDICINE	MULTI-SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF-STATE PHARMACY (TCC)
PENDER								
PERQUIMANS								
PERSON								
PITT		5	25	3		1		
POLK								
RANDOLPH						22		
RICHMOND						27		
ROBESON					1	16		
ROCKINGHAM						52		
ROWAN					9	1		
RUTHERFORD					2	9		
SAMPSON								
SCOTLAND						34		
STANLY		3		7		57		
STOKES								
SURRY						11		
SWAIN	9							
TRANSYLVANIA								
TYRRELL								
UNION						23		
VANCE						2		
WAKE	5	4	4		2	72		
WARREN								
WASHINGTON								

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	INSTITUTION PHARMACY (TCC)	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF-STATE PHARMACY (TCC)
WATAUGA						2		
WAYNE						1		
WILKES			1			18		
WILSON						60		
YADKIN								
YANCEY								
TOTAL	46	53	144	16	38	2061	1	27

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
ALAMANCE			21	1	
ALEXANDER			58	1	
ALLEGHANY			3		
ANSON			18		
ASHE			7		
AVERY			20		
BEAUFORT			75		1
BERTIE			23		
BLADEN			58	18	
BRUNSWICK			70		
BUNCOMBE			82		
BURKE			39		
CABARRUS			26		
CALDWELL			50		2
CAMDEN					
CARTERET			69		
CASWELL			51		
CATAWBA			67		1
CHATHAM			10		
CHEROKEE			6		
CHOWAN			16		
CLAY			2		
CLEVELAND			10		
COLUMBUS			124	1	

North Carolina Division of Medical Assistance

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Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
CRAVEN		2	53	5	
CUMBERLAND			81		
CURRITUCK			34		
DARE			25		
DAVIDSON			36		
DAVIE			50		
DUPLIN			23	1	
DURHAM		1	5		
EDGECOMBE			45		
FORSYTH			36		
FRANKLIN			6		
GASTON			56		
GATES			24		
GRAHAM					
GRANVILLE				1	
GREENE			10		
GUILFORD	2		56		1
HALIFAX			151		
HARNETT			95		
HAYWOOD			29		
HENDERSON			9		1
HERTFORD			86		
HOKE			48		
HYDE					

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Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
IREDELL			37		
JACKSON			30		
JOHNSTON			26		
JONES					
LEE			61		
LENOIR			46		
LINCOLN			36		
MACON			13		
MADISON			14		
MARTIN			43		
MCDOWELL			38		
MECKLENBURG		2	60		
MITCHELL			8		
MONTGOMERY			56		
MOORE			56		
NASH			25		1
NEW HANOVER			15		
NORTHAMPTON			20		
ONslow			69		
ORANGE					
OUT-OF-STATE <= 40 MILES	3				
OUT-OF-STATE > 40 MILES					
PAMLICO			6		
PASQUOTANK			70		

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
PENDER			34		
PERQUIMANS			23		
PERSON			5		
PITT	55	5	29		
POLK			2		
RANDOLPH			47		
RICHMOND			84		
ROBESON	50		207	9	
ROCKINGHAM			113		
ROWAN	1		14		
RUTHERFORD			40		
SAMPSON			99		
SCOTLAND		2	57		
STANLY			97		
STOKES			12		
SURRY			17		1
SWAIN			33		
TRANSYLVANIA			4		
TYRRELL			9		
UNION			10		
VANCE			57	22	
WAKE		19	45		
WARREN			3		
WASHINGTON			17		

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.1: Count and Location of Provider Specialties Providing Services To Waiver Year Five Participants, by County

COUNTY	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
WATAUGA	14		17		
WAYNE		2	64		1
WILKES		1	18		
WILSON			6		
YADKIN			5		
YANCEY					
TOTAL	125	34	3760	59	9

Appendix E.2
Count of Waiver Year Four Participant Visits
by Provider Specialty, by County

North Carolina Division of Medical Assistance

Family Planning Waiver

Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
ALAMANCE							1	
ALEXANDER							1	
ALLEGHANY							1	
ANSON							1	
ASHE	1						1	
AVERY							1	
BEAUFORT		1					1	
BERTIE							1	
BLADEN							1	
BRUNSWICK	1						1	
BUNCOMBE					1		1	
BURKE							1	
CABARRUS				1			1	
CALDWELL		1					1	
CAMDEN								
CARTERET		1					1	
CASWELL								
CATAWBA			1			1	1	
CHATHAM							1	
CHEROKEE							1	
CHOWAN							1	
CLAY							1	
CLEVELAND			1			1	1	
COLUMBUS							1	
CRAVEN			1			1	1	
CUMBERLAND					1	1	1	1
CURRITUCK							1	
DARE	1						1	
DAVIDSON	1						1	
DAVIE							1	
DUPLIN						1	1	
DURHAM					1		1	

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
EDGECOMBE							1	
FORSYTH					1		1	
FRANKLIN							1	
GASTON					1		1	
GATES								
GRAHAM							1	
GRANVILLE	1					1	1	
GREENE							1	
GUILFORD				1		1	1	
HALIFAX							1	
HARNETT							1	
HAYWOOD							1	
HENDERSON			1			1	1	
HERTFORD							1	
HOKE							1	
HYDE								
IREDELL		1				1	1	
JACKSON	1					1	1	
JOHNSTON		1					1	
JONES							1	
LEE		1					1	
LENOIR							1	
LINCOLN	1						1	
MACON							1	
MADISON							1	
MARTIN							1	
MCDOWELL	1						1	
MECKLENBURG					1		1	
MITCHELL							1	
MONTGOMERY							1	
MOORE			1			1	1	1
NASH			1			1	1	

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
NEW HANOVER				1			1	
NORTHAMPTON								
ONSLOW		1				1	1	
ORANGE					1			1
OUT-OF-STATE <= 40 MILES								1
OUT-OF-STATE > 40 MILES								
PAMLICO								1
PASQUOTANK			1					1
PENDER								1
PERQUIMANS								
PERSON								1
PITT								1
POLK								1
RANDOLPH								1
RICHMOND						1		1
ROBESON			1					1
ROCKINGHAM						1		1
ROWAN								1
RUTHERFORD		1				1		1
SAMPSON								1
SCOTLAND								1
STANLY		1				1		1
STOKES								1
SURRY	1					1		1
SWAIN	1							1
TRANSYLVANIA								1
TYRRELL								
UNION		1						1
VANCE								1
WAKE					1	1		1
WARREN								1
WASHINGTON								1

North Carolina Division of Medical Assistance

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	1-100 BEDS NC HOSPITAL	101-200 BEDS NC HOSPITAL	201-300 BEDS NC HOSPITAL	301-474 BEDS NC HOSPITAL	475 UP BEDS NC HOSPITAL	ANESTHESIOLOGY	CHAIN PHARMACY (TCC)	CLINIC - AMBULATORY SURGERY OR BIRTHING CENTER
WATAUGA							1	
WAYNE							1	
WILKES							1	
WILSON							1	
YADKIN							1	
YANCEY							1	
TOTAL	10	10	8	3	8	19	94	2

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY	INSTITUTION PHARMACY (TCC)
ALAMANCE	2		1		1		
ALEXANDER					1		
ALLEGHANY			1				
ANSON			1		1		
ASHE			1	1	1		
AVERY			1				
BEAUFORT			1		1		
BERTIE					1		
BLADEN			1		1		
BRUNSWICK			2		1		
BUNCOMBE			1		1		
BURKE					1		
CABARRUS			1		1		
CALDWELL					1		
CAMDEN					1		
CARTERET					1		1
CASWELL	2				1		
CATAWBA		1	1		1	1	
CHATHAM	2		1		1		
CHEROKEE					1		
CHOWAN					1		
CLAY					1		
CLEVELAND					1		
COLUMBUS			2		1	1	
CRAVEN					1		
CUMBERLAND	1		1		1		
CURRITUCK							
DARE					1		
DAVIDSON			1		1		
DAVIE			1		1		
DUPLIN	1				1		
DURHAM			1		1		1

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY	INSTITUTION PHARMACY (TCC)
EDGECOMBE					1		
FORSYTH			1		1		1
FRANKLIN			1		1		
GASTON			1		1		
GATES					1		
GRAHAM							
GRANVILLE			1		1		
GREENE	1				1		
GUILFORD					1	1	1
HALIFAX					1		
HARNETT	2		2		1		
HAYWOOD			1		1		
HENDERSON	1		1		1		
HERTFORD	1		1		1		
HOKE			2		1		
HYDE					1		
IREDELL					1		
JACKSON					1		
JOHNSTON			2		1		
JONES					1		
LEE			2		1		
LENOIR	1				1		
LINCOLN					1		
MACON					1		
MADISON					1		
MARTIN					1		
MCDOWELL			1		1		
MECKLENBURG	1		2		1	1	1
MITCHELL					1		
MONTGOMERY					1		
MOORE			1		1		
NASH					1		

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY	INSTITUTION PHARMACY (TCC)
NEW HANOVER	2		2		1	1	
NORTHAMPTON	1				1		
ONslow			1		1		
ORANGE	2		1		1		
OUT-OF-STATE <= 40 MILES			1				1
OUT-OF-STATE > 40 MILES							1
PAMLICO					1		
PASQUOTANK			1		1		
PENDER			2		1		
PERQUIMANS					1		
PERSON					1		
PITT			1		1		
POLK					1		
RANDOLPH			1		1		
RICHMOND					1		
ROBESON	1		1		1		
ROCKINGHAM			1		1		
ROWAN			1		1		
RUTHERFORD					1		
SAMPSON			1		1		
SCOTLAND			1		1		
STANLY			1		1		
STOKES			1				
SURRY					1		
SWAIN					1		1
TRANSYLVANIA					1		
TYRRELL					1		
UNION			1		1		
VANCE			1		1		
WAKE	1		2		1		1
WARREN					1		
WASHINGTON					1		

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	FEDERALLY QUALIFIED HEALTH CLINIC (FQHC)	GASTROENTROLOGY	GENERAL FAMILY PRACTICE	GENERAL THORACIC SURGERY, PROCTOLOGY	HEALTH DEPARTMENT	INDEPENDENT LABORATORY	INSTITUTION PHARMACY (TCC)
WATAUGA					1		
WAYNE			2		1		
WILKES					1		
WILSON	2				1		
YADKIN					1		
YANCEY			1		1		
TOTAL	24	1	62	1	95	7	7

North Carolina Division of Medical Assistance

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF- STATE PHARMACY (TCC)
ALAMANCE					2		
ALEXANDER							
ALLEGHANY							
ANSON							
ASHE				2			
AVERY	1						
BEAUFORT	1	1			1		
BERTIE							
BLADEN							
BRUNSWICK					1		
BUNCOMBE			1	1	2		
BURKE					2		
CABARRUS		1			1		
CALDWELL					2		
CAMDEN							
CARTERET				1	2		
CASWELL				1			
CATAWBA					1		
CHATHAM							
CHEROKEE							
CHOWAN					1		
CLAY							
CLEVELAND					1		
COLUMBUS	2				1		
CRAVEN	1			1	1		
CUMBERLAND	2	1			1		
CURRITUCK							
DARE		1		1	1		
DAVIDSON					1		
DAVIE							
DUPLIN					1		
DURHAM					1		

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF- STATE PHARMACY (TCC)
EDGECOMBE							
FORSYTH		1		1	2		
FRANKLIN							
GASTON	1			1	1		
GATES							
GRAHAM							
GRANVILLE					1		
GREENE							
GUILFORD	1	1		1	2		
HALIFAX					1		
HARNETT					1		
HAYWOOD		1					
HENDERSON				1	1		
HERTFORD					1		
HOKE					2		
HYDE							
IREDELL					2		
JACKSON				1	1		
JOHNSTON					1		
JONES		1					
LEE					2		
LENOIR					2		
LINCOLN					1		
MACON							
MADISON							
MARTIN					1		
MCDOWELL					2		
MECKLENBURG	2	1			2		1
MITCHELL							
MONTGOMERY							
MOORE		1		1	1		
NASH		1			1		

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF- STATE PHARMACY (TCC)
NEW HANOVER	1			1	2		
NORTHAMPTON							
ONSLow	1	1			2		
ORANGE		1				1	
OUT-OF-STATE <= 40 MILES					2	1	1
OUT-OF-STATE > 40 MILES							
PAMLICO							
PASQUOTANK				1	2		
PENDER							
PERQUIMANS							
PERSON							
PITT	1	2	1		1		
POLK							
RANDOLPH						1	
RICHMOND						2	
ROBESON				1	1		
ROCKINGHAM						1	
ROWAN				1	1		
RUTHERFORD				1	1		
SAMPSON							
SCOTLAND						1	
STANLY	1		1		1		
STOKES							
SURRY						1	
SWAIN							
TRANSYLVANIA							
TYRRELL							
UNION						1	
VANCE						1	
WAKE	2	1		2	2		
WARREN							
WASHINGTON							

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Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	INTERNAL MEDICINE	MULTI- SPECIALTY	NURSE MIDWIFE	NURSE PRACTITIONER OR CRNA	OBSTETRICS GYNECOLOGY	OUT-OF-STATE HOSPITAL	OUT-OF- STATE PHARMACY (TCC)
WATAUGA					1		
WAYNE					1		
WILKES		1			1		
WILSON					1		
YADKIN							
YANCEY							
TOTAL	17	17	3	20	79	1	2

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Family Planning Waiver

Appendix E.2: Count of Waiver Year Five Participant Visits by Provider Specialty, by County

	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
ALAMANCE			1	1	
ALEXANDER			1	1	
ALLEGHANY			1		
ANSON			1		
ASHE			1		
AVERY			1		
BEAUFORT			1		1
BERTIE			1		
BLADEN			1	1	
BRUNSWICK			1		
BUNCOMBE			1		
BURKE			1		
CABARRUS			1		
CALDWELL			1		1
CAMDEN					
CARTERET			1		
CASWELL			1		
CATAWBA			1		1
CHATHAM			1		
CHEROKEE			1		
CHOWAN			1		
CLAY			1		
CLEVELAND			1		
COLUMBUS			1	1	
CRAVEN		1	1	1	
CUMBERLAND			1		
CURRITUCK			1		
DARE			1		
DAVIDSON			1		
DAVIE			1		
DUPLIN			1	1	
DURHAM		1	1		

North Carolina Division of Medical Assistance

Family Planning Waiver

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	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
EDGECOMBE			1		
FORSYTH			1		
FRANKLIN			1		
GASTON			1		
GATES			1		
GRAHAM					
GRANVILLE				1	
GREENE			1		
GUILFORD	1		1		1
HALIFAX			1		
HARNETT			1		
HAYWOOD			1		
HENDERSON			1		1
HERTFORD			1		
HOKE			1		
HYDE					
IREDELL			1		
JACKSON			1		
JOHNSTON			1		
JONES					
LEE			1		
LENOIR			1		
LINCOLN			1		
MACON			1		
MADISON			1		
MARTIN			1		
MCDOWELL			1		
MECKLENBURG		1	1		
MITCHELL			1		
MONTGOMERY			1		
MOORE			1		
NASH			1		1

North Carolina Division of Medical Assistance

Family Planning Waiver

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	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
NEW HANOVER			1		
NORTHAMPTON			1		
ONslow			1		
ORANGE					
OUT-OF-STATE <= 40 MILES	1				
OUT-OF-STATE > 40 MILES					
PAMLICO			1		
PASQUOTANK			1		
PENDER			1		
PERQUIMANS			1		
PERSON			1		
PITT	1	1	1		
POLK			1		
RANDOLPH			1		
RICHMOND			1		
ROBESON	1		1	1	
ROCKINGHAM			1		
ROWAN	1		1		
RUTHERFORD			1		
SAMPSON			1		
SCOTLAND		1	1		
STANLY			1		
STOKES			1		
SURRY			1		1
SWAIN			1		
TRANSYLVANIA			1		
TYRRELL			1		
UNION			1		
VANCE			1	1	
WAKE		1	1		
WARREN			1		
WASHINGTON			1		

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Family Planning Waiver

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	PATHOLOGY	PEDIATRICS	PRIVATELY OWNED PHARMACY	RURAL HEALTH CLINIC (RHC)	UROLOGY
WATAUGA	1		1		
WAYNE		1	1		1
WILKES		1	1		
WILSON			1		
YADKIN			1		
YANCEY					
TOTAL	6	8	93	9	8

APPENDIX F

NEW ENROLLEE SURVEY

North Carolina
Be Smart.
Family Planning

We would like to know how you learned about the “Be Smart” Family Planning Program. Please take a moment to complete the question below and place the questionnaire in the postage-paid envelope so that the return address (see reverse side) shows through the window of the envelope. Then, mail the envelope to the Division of Medical Assistance. Thank you for your cooperation.

How did you find out about the “Be Smart” Family Planning Program? If you heard about the program from more than one source, please check all that apply.

- Health Care Provider
 - Health Department Staff
 - Family or friends
 - Case manager
 - Brochure or poster
 - New Enrollee Letter
 - Don't remember
 - Other _____
-

Quisiéramos saber cómo se enteró del programa “Póngase Listo” de Planificación Familiar. Por favor, tome un momento para contestar la pregunta de abajo, y ponga el cuestionario en el sobre con costo de envío pagado asegurándose que la dirección (vea la parte de atrás) se vea en al ventana del sobre. Envíelo por correo a la División de Asistencia Médica. Gracias por su cooperación.

¿Cómo se enteró del programa “Póngase Listo” de Planificación Familiar? Si escuchó hablar del programa de más de una fuente, por favor marque todas las apliquen.

- Proveedor de cuidado médico / doctor
- Departamento de Salud - personal
- Familia o amigos
- Trabajador del caso
- Folleto o póster
- Carta para el nuevo beneficiario
- No me acuerdo
- Otro _____